**Comprehensive Long-Term Environmental Action Navy**

**CLEAN**

**Contract No. N62742-90-D-0019**

**CTO No. 136**

# REMEDIAL INVESTIGATION (RI) REPORT
# (DRAFT)
# FOR
# NAVAL AIR FACILITY (NAF)
# MIDWAY ISLAND

## VOLUME II: APPENDICES

**Prepared for:**

**Pacific Division**
**Naval Facilities Engineering Command**
**Pearl Harbor, Hawaii 96860**

**Prepared by:**

**Ogden Environmental and Energy Services Co., Inc.**
**680 Iwilei Road, Suite 660**
**Honolulu, Hawaii 96817**

**March 1997**

# Appendix A

OGDEN

# Field Log of Trench

Project Name:
CTO 0136 NAF Midway Island RI

Sheet: 1 of 1

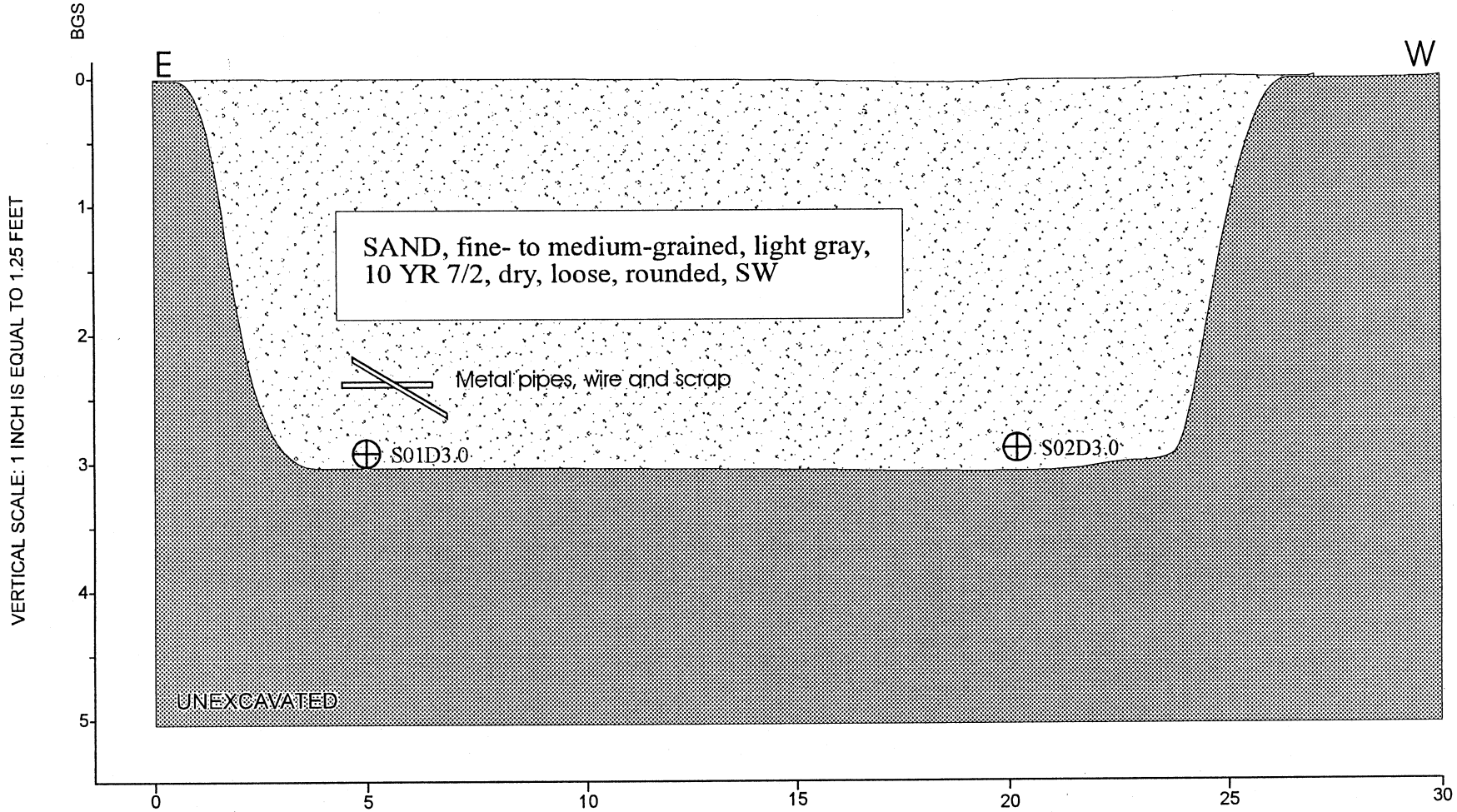
| Trench Number: | Project Number: | Elevation and Datum: | Location: |
|---|---|---|---|
| M01TS01 | 110190136 | TBD | Bulky Waste Landfill |
| **Equipment Supplier:** | **Operator:** | **Date and Time Started:** | **Date and Time Completed:** |
| PMC | Ranjith Ranasinghe | 6/24/96 (0805) | 6/24/96 (0900) |
| **Equipment Type:** | **Trench Orientation:** | **Total Depth:** | **Total Number of Samples:** |
| Case W14 | East to West | 3.0' | 4 (2-onsite and 2-offsite) |

| Bucket Width: | Trench Length: | Trench Width: | No. of Samples | Bulk: | Grab: | Drive: | Hand Auger: |
|---|---|---|---|---|---|---|---|
| 1.5' | 25' | 3.0' | | | 4 | | |

| Geologist or Hydrogeologist/Date: | Checked by/Date: |
|---|---|
| Brian House 6/24/96 | |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | Coral Sand, fine-grained, light grey, 10YR 7/2, dry, loose, rounded, SW | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| | | | | | | |
| 12 | | | | | | |
| | | | | | | |
| 24 | | | | | | metal pipes, metal debris, |
| | SAME AS ABOVE | | | | | cable, wires |
| 36 | S01D3.0 (0815), HS= 0.0 ppm (1-offsite/1-onsite)<br>S02D3.0 (0845), HS=0.0 ppm (1-offsite/1-onsite) | SW | 0 | 90 | 10 | |
| | | | | | | |
| | Trench completed at 0900 on 6/24/96 | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |




**Legend**

⊕ Subsurface Soil Sample

OGDEN

**Trench M01TS01, 6-24-96**
**Bulky Waste Landfill**
**Sand Island, Midway**

FIGURE

**1**

OGDEN

# Field Log of Trench

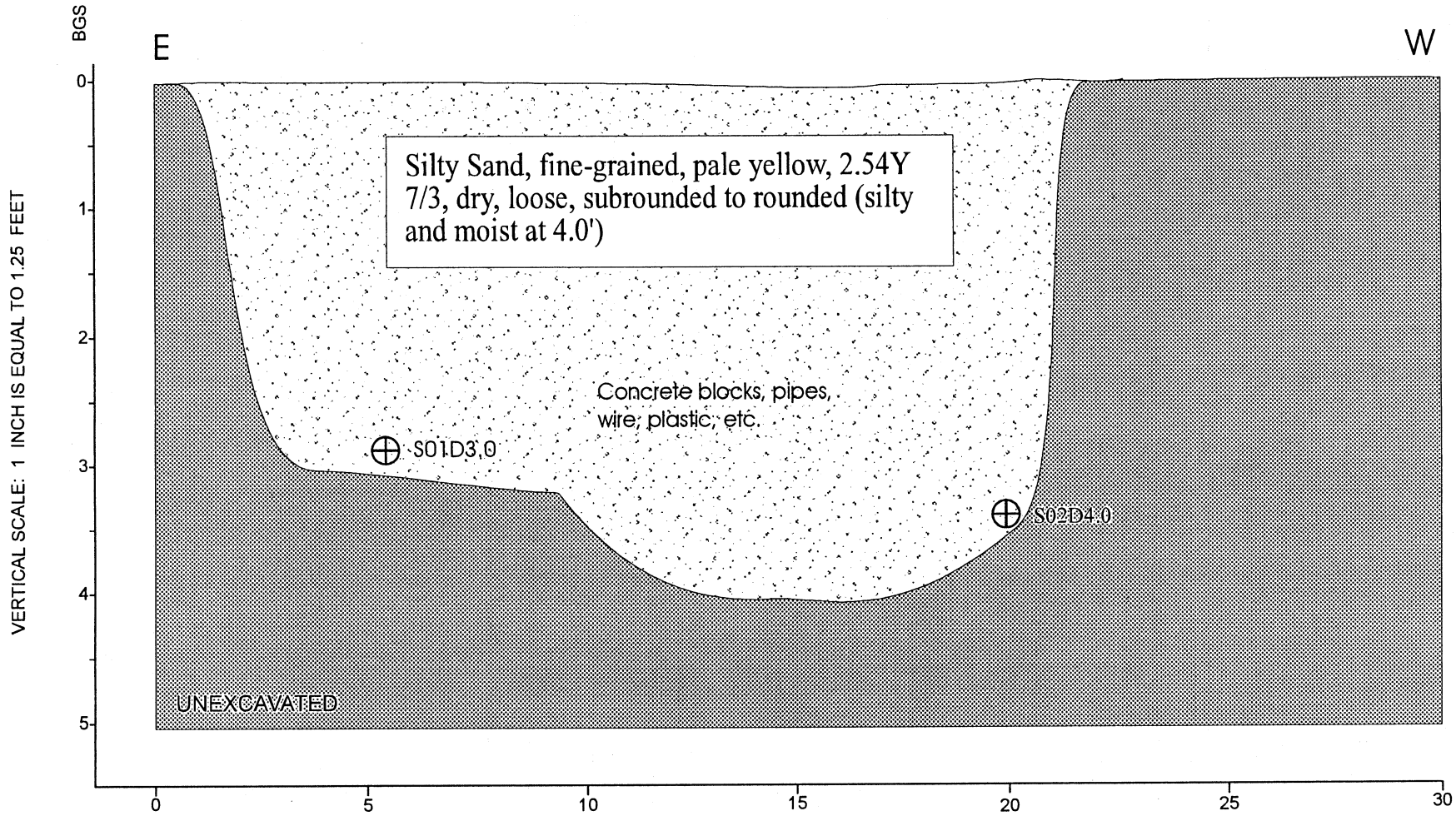
| | | | |
|---|---|---|---|
| Project Name<br>CTO 0136 NAF Midway Island RI | | | Sheet 1 of 1 |
| Trench Number<br>M01TS02 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6/24/96 (0940) | Date and Time Completed<br>6/24/96 (1015) |
| Equipment Type<br>Case W14 | Trench Orientation<br>EW | Total Depth<br>4.0' | Total Number of Samples<br>4 (2-onsite and 2 offsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 25' | 3.0' | | | 4 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/24/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | Silty Sand, fine grained, pale yellow. 2.54Y 7/3, dry, loose, subrounded to rounded, silty at 4.0' | SW | 0 | 90 | 10 | grass and roots to 0.5 |
| 12 | | | | | | |
| | | | | | | |
| 24 | | | | | | |
| | SAME AS ABOVE | SW | 0 | 90 | 10 | |
| 36 | S01D3.0/TK01D3.0 (0950) HS=0.0 ppm | | | | | concrete blocks, pipes, |
| | | | | | | wire, plastic, etc. |
| 48 | S02D4.0/TK02D4.0 (1015) HS=0.0 ppm | SW | 0 | 90 | 10 | Silty moist soil |




**Legend**

⊕ Subsurface Soil Sample

OGDEN

**Trench M01TS02, 6-24-96**
**Bulky Waste Landfill**
**Sand Island, Midway**

FIGURE

**2**

OGDEN

# Field Log of Trench

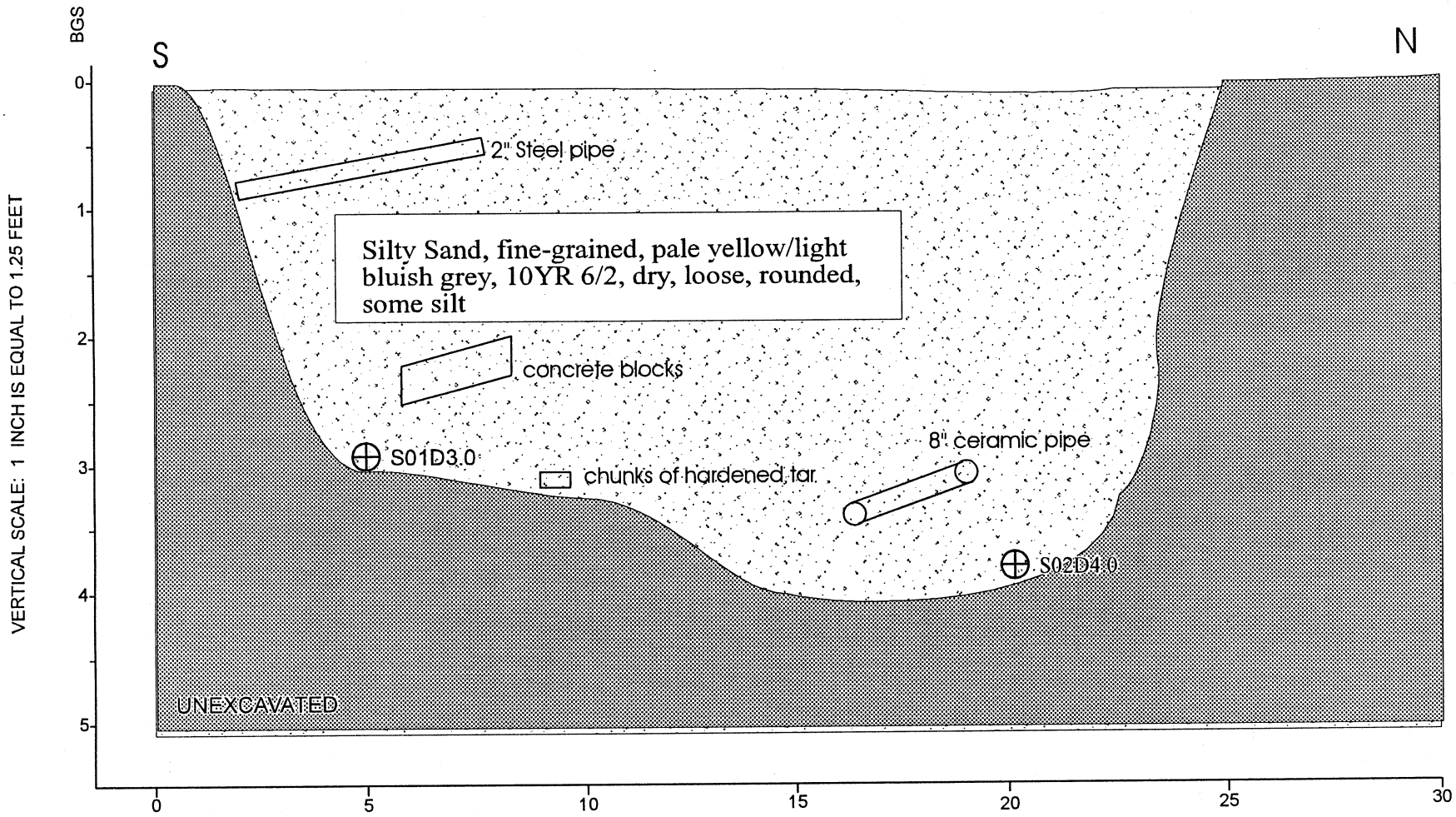
| | | | |
|---|---|---|---|
| Project Name<br>CTO 0136 NAF Midway Island RI | | | Sheet 1 of 1 |
| Trench Number<br>M01TS03 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6/24/96 (1030) | Date and Time Completed<br>6/24/96 (1115) |
| Equipment Type<br>Case W14 | Trench Orientation<br>South to North | Total Depth<br>4.0' | Total Number of Samples<br>4 (2-onsite and 2-offsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 25.0' | 3.0' | | | 4 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/24/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | Silty Sand, fine-grained, pale yellow/light bluish grey, 10YR 6/2 dry, loose, rounded, some silt, SW | SW | 0 | 80 | 20 | grass and roots to 0.5' |
| 12 | | | | | | |
| | | | | | | |
| 24 | | | | | | |
| | | | | | | steel pipe |
| 36 | SAME AS ABOVE | | | | | |
| | S01D3.0/TK01D3.0) (1045) HS=0.0ppm | SW | 0 | 80 | 20 | |
| 48 | SAME AS ABOVE | | | | | chunks of hardened tar |
| | S02D04/TK02D4.0 (1100) HS=0.0ppm | SW | 0 | 80 | 20 | ceramic pipe |
| | | | | | | |
| | Trench completed at 1115 on 6/24/96 total depth = 4.0 feet | | | | | |




**Legend**

⊕ Subsurface Soil Sample

OGDEN

**Trench M01TS03, 6-24-96**
**Bulky Waste Landfill**
**Sand Island, Midway**

FIGURE

**3**

OGDEN

# Field Log of Trench

Project Name
CTO 0136 NAF Midway Island RI



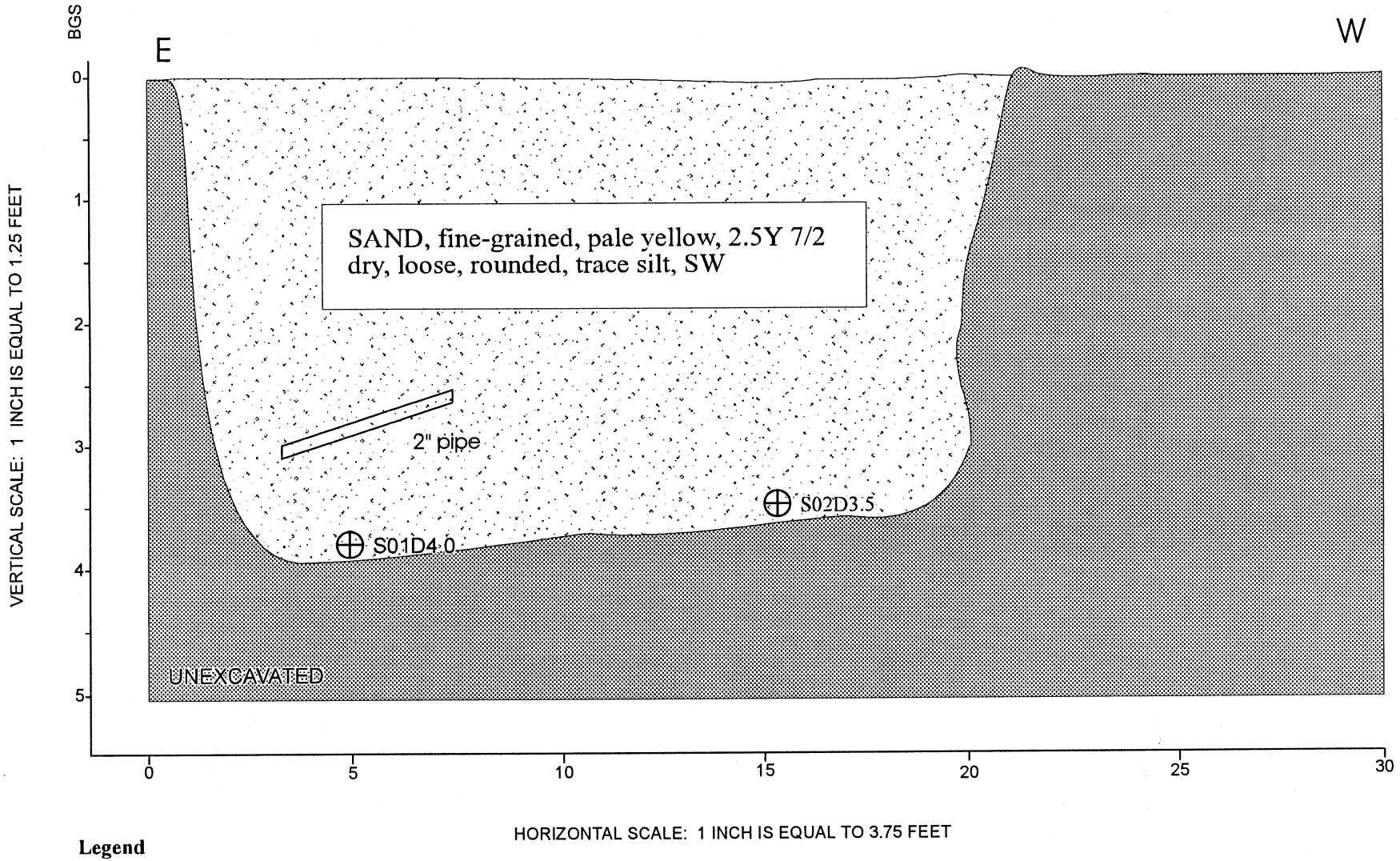
| | | | |
|---|---|---|---|
| Trench Number<br>M01TS04 | Project Number<br>110191036 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6/24/96 (1300) | Date and Time Completed<br>6/24/96 (1330) |
| Equipment Type<br>Case W14 | Trench Orientation<br>EW | Total Depth<br>4.0' | Total Number of Samples<br>4 (2-onsite and 2 offsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 20.0' | 3.0' | | | 4 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/24/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | Sand, fine-grained, pale yellow, 2.5Y 7/2, dry. loose, rounded, trace silt | SW | 0 | 85 | 15 | grass and roots to 0.5' |
| 12 | | | | | | |
| | | | | | | |
| 24 | | | | | | |
| | SAME AS ABOVE | SW | 0 | 85 | 15 | 2" pipe |
| 36 | S02D3.5/TK02D3.5 (1325) HS=0.0 ppm | | | | | |
| | S01D4.0/TK01D4.0 (1310) HS=0.0 ppm | SW | 0 | 85 | 15 | |
| 48 | | | | | | |
| | Trench completed at 1330 on 6/24/96 | | | | | |




**Legend**

⊕ Subsurface Soil Sample

OGDEN

**Trench M01TS04, 6-24-96**
**Bulky Waste Landfill**
**Sand Island, Midway**

FIGURE

**4**

OGDEN

# Field Log of Trench

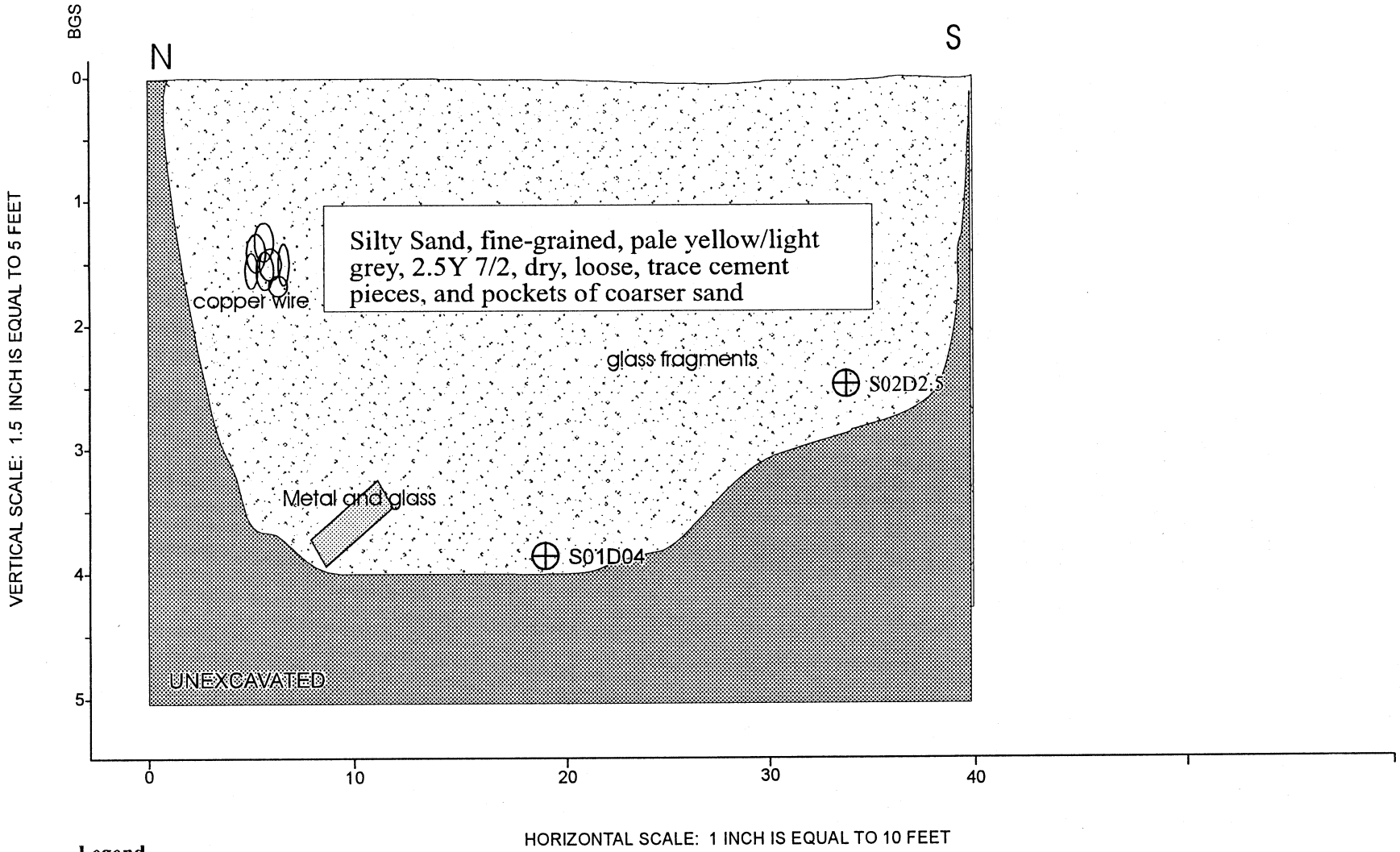
| | | | |
|---|---|---|---|
| Project Name<br>CTO 0136 NAF Midway Island RI | | | Sheet 1of 1 |
| Trench Number<br>M01TS05 | Project Number<br>110191036 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6/24/96 (1400) | Date and Time Completed<br>6/24/96 (1445) |
| Equipment Type<br>Case W14 | Trench Orientation<br>North to South | Total Depth<br>4.0' | Total Number of Samples<br>5 (2-onsite and 3-offsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 40.0' | 3.0' | | | 5 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/24/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | Silty Sand, fine-grained, pale yellow/light grey, 2.5Y 7/2,dry, loose, trace cement chunks and pockets of coarser sand | SW | 0 | 85 | 15 | grass and roots to 0.5' |
| 12 | | | | | | |
| | SAME AS ABOVE | | | | | |
| 24 | S02D2.5TK02D2.5 (1430) HS=0.0, some decomposed metal fragments in sample | SW | 0 | 90 | 10 | glass fragments, copper |
| | | | | | | wire, metal pipeing |
| 36 | | SW | 0 | 90 | 10 | |
| | SAME AS ABOVE | | | | | |
| 48 | S01D4.0/TK01D4.0/D01D4.0 (1400), HS=0.0, | SW | 0 | 90 | 10 | metal and glass |
| | | | | | | no FTK done on duplicate |
| | Trench completed 1445 on 6/24/96 | | | | | |




**Legend**

⊕ Subsurface Soil Sample

OGDEN

**Trench M01TS05, 6-24-96**
**Bulky Waste Landfill**
**Sand Island, Midway**

FIGURE

**5**

OGDEN

# Field Log of Trench

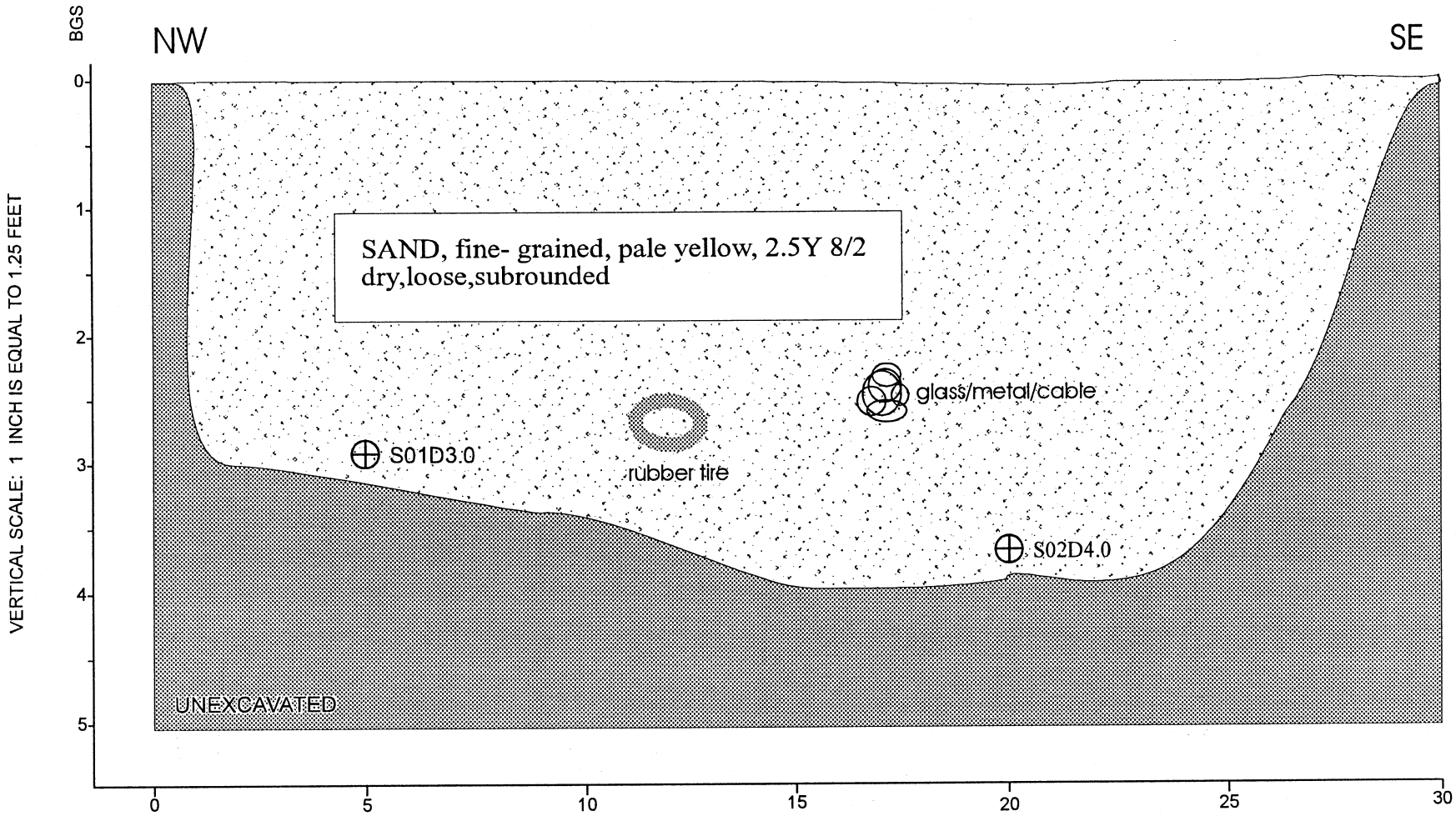
| | | | |
|---|---|---|---|
| Project Name<br>CTO 0136 NAF Midway Island RI | | | Sheet 1 of 1 |
| Trench Number<br>M01TS06 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6/25/96 (0750) | Date and Time Completed<br>6/25/96 (0840) |
| Equipment Type<br>Case W14 | Trench Orientation<br>NW/SE | Total Depth<br>4.0' | Total Number of Samples<br>4 (2-onsite and 2-offsite |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 30.0' | 3.0' | | | 4 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/25/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, Fine-grained, pale yellow, 2.5Y 8/2, dry. loose, subrounded | SW | 0 | 95 | 5 | grass and roots to 0.5' |
| 12 | | | | | | |
| | 2.5Y 5/2, grayish brown-1.5' | SW | 0 | 85 | 15 | |
| 24 | SAME AS ABOVE | | | | | glass/metal/cable-2.0' |
| | S01D3.0/TK01D3.0 (0800) HS=0.0ppm | | 0 | 85 | 15 | rubber tire-2.5' |
| 36 | SAME AS ABOVE | | | | | |
| | S02D4.0TK02D4.0 (0830) HS=0.0ppm | SW | 0 | 85 | 15 | |
| 48 | | | | | | |
| | Trench completed at 0840 on 6/25/96 | | | | | |




**Legend**

⊕ Subsurface Soil Sample

OGDEN

**Trench M01TS06, 6-24-96**
**Bulky Waste Landfill**
**Sand Island, Midway**

FIGURE

**6**

OGDEN

# Field Log of Trench

Project Name
CTO 0136 NAF Midway Island RI



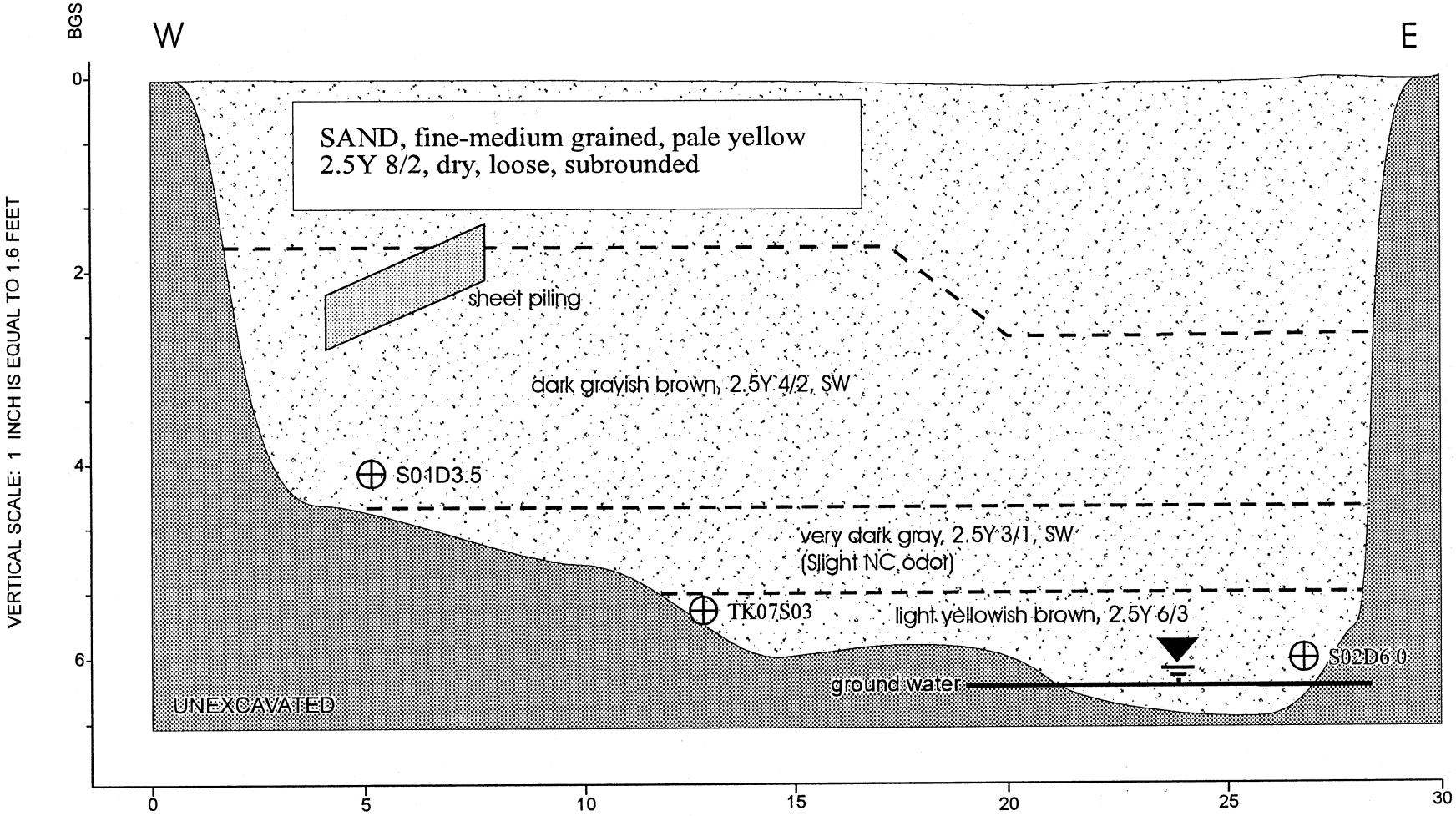
| | | | |
|---|---|---|---|
| Trench Number<br>M01TS07 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6/25/96 (0845) | Date and Time Completed<br>6/25/96 (0955) |
| Equipment Type<br>Case W14 | Trench Orientation<br>West to East | Total Depth<br>6.0' | Total Number of Samples<br>5 (3-onsite and 2-offsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 35' | 3.0' | | | 5 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/25/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine-medium grained, pale yellow, 2.5Y 8/2, dry, loose, subrounded | SW | 0 | 95 | 5 | grass and roots to 0.5' |
| 12 | | | | | | |
| | | | | | | |
| 24 | 2.5Y 4/2, dark grayish brown | | | | | sheet piling/coral cobble |
| | | | | | | and pipe- 1.5'-2.5' |
| 36 | S01D3.5/TK01D3.5 (0855) HS=0.0ppm | SW | 0 | 95 | 5 | |
| | | | | | | |
| 48 | | | | | | |
| | 2.5Y 3/1, very dark grey, slight HC odor | SW | 0 | 95 | 5 | |
| 60 | TK07S03 (0915) HS=13.7ppm | | | | | |
| | 2.5Y 6/3, light yellowish brown | SW | 0 | 95 | 5 | |
| 72 | S02D6.0/TK02D6.0 (-0930) HS=15ppm | | | | | ground water |
| | | | | | | |
| | Trench completed at 0955 on 6/25/96 | | | | | |




**Legend**

⊕ Subsurface Soil Sample

OGDEN

**Trench M01TS07, 6-24-96**
**Bulky Waste Landfill**
**Sand Island, Midway**

FIGURE

**7**

OGDEN

# Field Log of Trench

Project Name
CTO 0136 NAF Midway Island RI



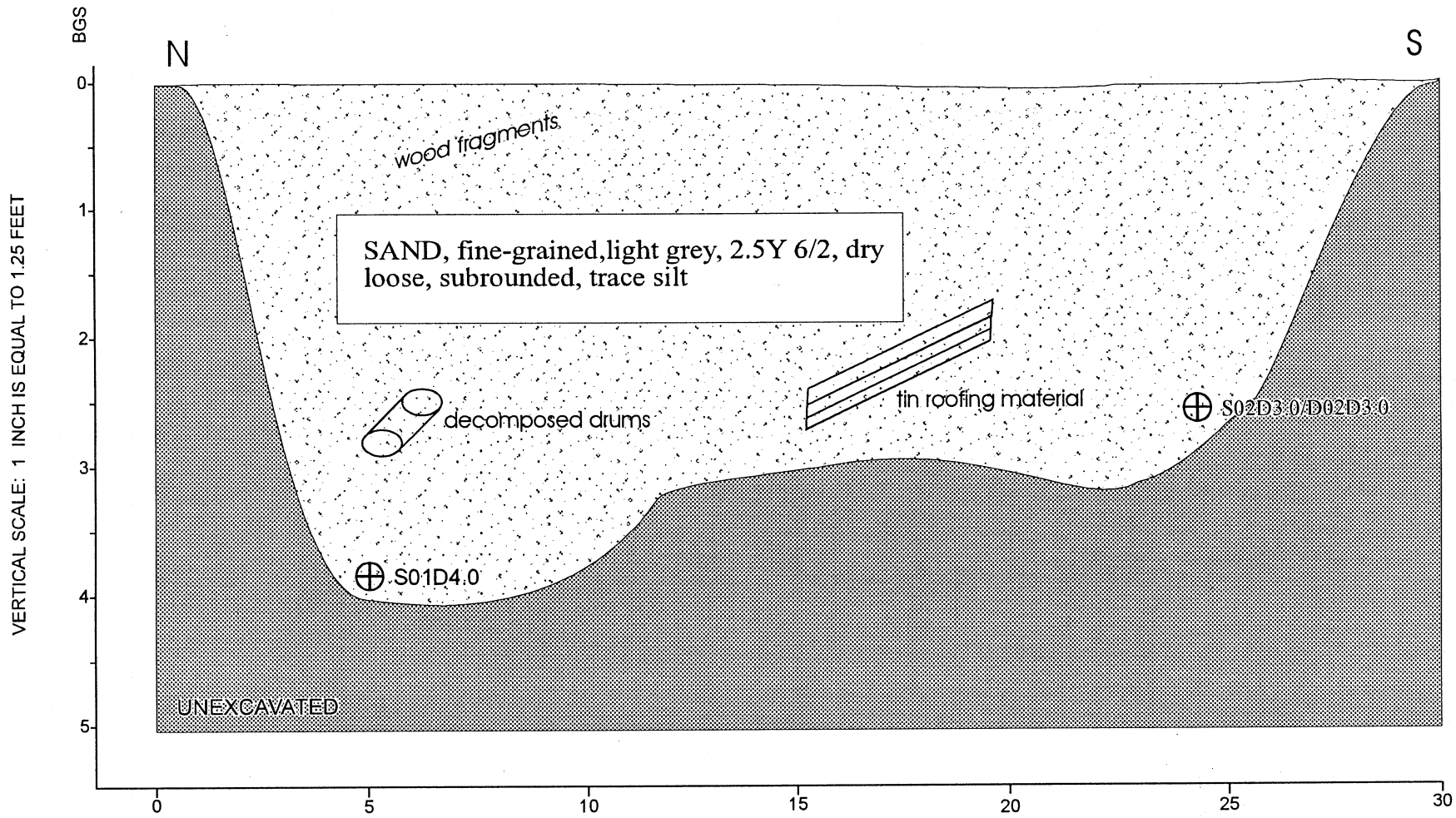
| Trench Number | Project Number | Elevation and Datum | Location |
|---|---|---|---|
| M01TS08 | 110190136 | TBD | Bulky Waste Landfill |
| **Equipment Supplier** | **Operator** | **Date and Time Started** | **Date and Time Completed** |
| PMC | Ranjith Ranasinghe | 6/25/96 (1000) | 6/25/96 (1100) |
| **Equipment Type** | **Trench Orientation** | **Total Depth** | **Total Number of Samples** |
| Case W14 | North to South | 4.0' | 6 (3-onsite and 3-offsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 35' | 3.0' | | | 6 | | |

| Geologist or Hydrogeologist/Date | Checked by/Date |
|---|---|
| Brian House 6/25/96 | |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, light grey, 2.5Y 6/2, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| | | | | | | |
| 24 | | | | | | wood and metal at1.0' |
| | | | | | | decomposed drums/ |
| 36 | S02D3.0/D02D3.0/TK02D3.0/TKD02D3.0 (1040) HS=0.0 ppm | SW | 0 | 90 | 10 | metal roofing/pipes-2.5' |
| | | | | | | wood pole and fragment |
| 48 | S01D4.0TK01D4.0 (1020) HS=0.0 ppm | SW | 0 | 90 | 10 | at 2.5'-3.0' |
| | | | | | | |
| | Trench completed at 1100 on 6/25/96 | | | | | |




**Legend**

⊕ Subsurface Soil Sample

OGDEN

**Trench M01TS08, 6-24-96**
**Bulky Waste Landfill**
**Sand Island, Midway**

FIGURE

**8**

OGDEN

# Field Log of Trench

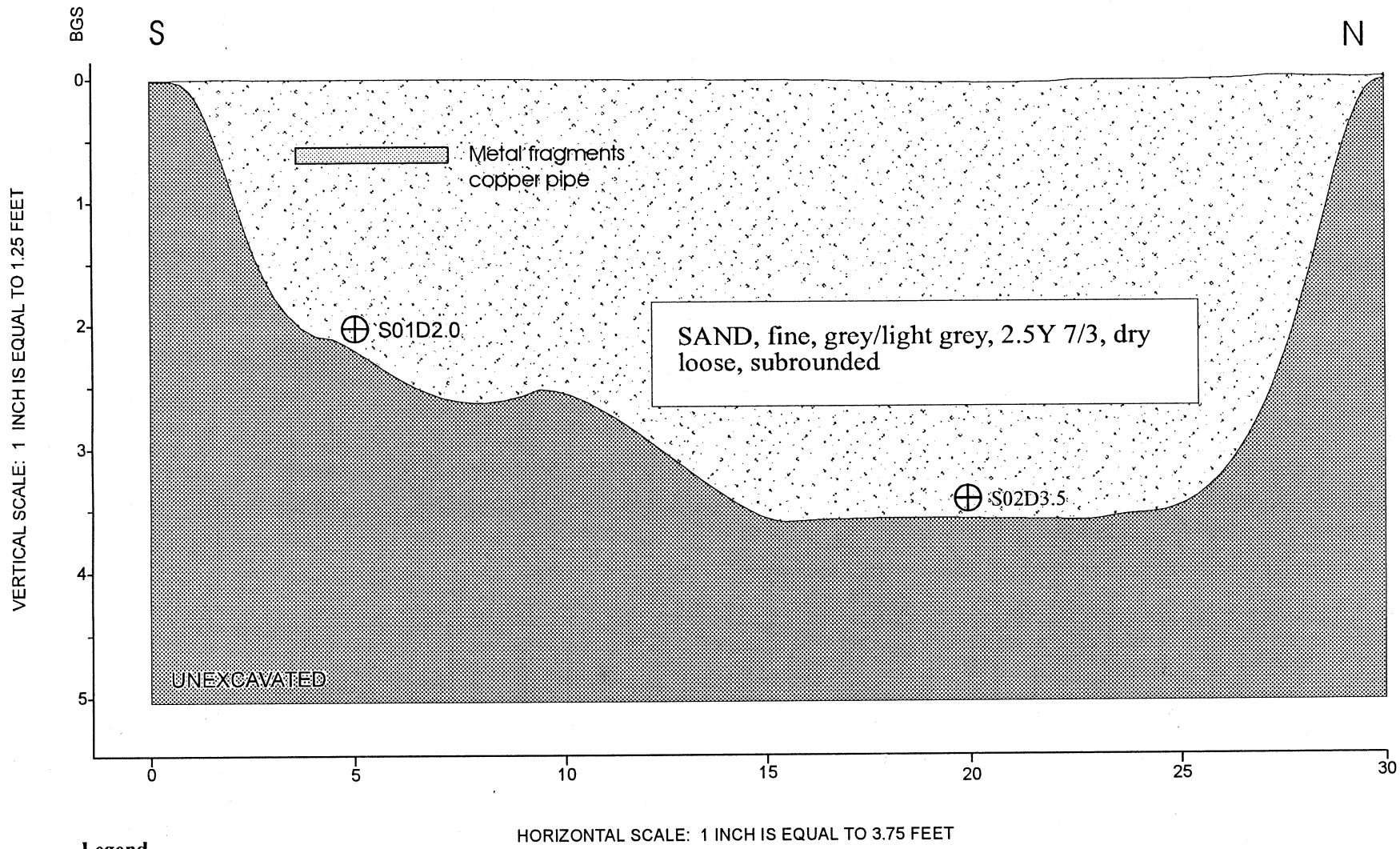
| | | | |
|---|---|---|---|
| Project Name<br>CTO 0136 NAF Midway Island RI | | | Sheet 1 of 1 |
| Trench Number<br>M01TS09 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6/25/96 (1240) | Date and Time Completed<br>6/25/96 (1330) |
| Equipment Type<br>Case W14 | Trench Orientation<br>South to North | Total Depth<br>3.5' | Total Number of Samples<br>4 (2-onsite and 2-offsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 30' | 3.0' | | | 4 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/25/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grey, light grey, 2.5Y 7/3, dry, loose, subrounded | SW | 0 | 95 | 5 | grass and roots to 0.5' |
| 12 | | | | | | |
| | | | | | | |
| 24 | S01D2.0TK01D2.0 (1255) HS=0.0 ppm | SW | 0 | 95 | 5 | metal pipe/fragments/ |
| | | | | | | 4"copper pipe- 1.5' |
| 36 | | | | | | |
| | S02D3.5TK02D3.5 (1325) HS=0.0 ppm | SW | 0 | 95 | 5 | |
| | | | | | | |
| | Trench completed at 1330 on 6/25/96 | | | | | |




**Legend**

⊕ Subsurface Soil Sample

OGDEN

**Trench M01TS09, 6-24-96**
**Bulky Waste Landfill**
**Sand Island, Midway**

FIGURE

**9**

OGDEN

# Field Log of Trench

| | | | |
|---|---|---|---|
| Project Name<br>CTO 0136 NAF Midway Island RI | | | Sheet 1 of 1 |
| Trench Number<br>M01TS10 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6/25/96 (1350) | Date and Time Completed<br>6/25/96 (1435) |
| Equipment Type<br>Case W14 | Trench Orientation<br>East to West | Total Depth<br>5.0' | Total Number of Samples<br>4 (2-onsite and 2-offsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 25' | 3.0' | | | 4 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/25/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow, 2.5Y 8/2, dry, loose, subrounded, trace silt | SW | 0 | 95 | 5 | grass and roots to 0.5' |
| 12 | | | | | | |
| | | | | | | |
| 24 | color change - dark brown/dark grey, 2.5Y 4/1 | SW | 0 | 95 | 5 | |
| | | | | | | |
| 36 | | | | | | |
| | | | | | | |
| 48 | SAME AS ABOVE | | | | | metal "I" beam/metal |
| | S01D4.5/TK01D4.5 (1405) HS=0.0 ppm | | | | | fragments- 4.0' |
| 60 | S02D5.0/TK02D5.0 (1425) HS=0.0 ppm | SW | 0 | 95 | 5 | ash and burnt wood |
| | | | | | | fragments- 4.5' |
| | | | | | | |
| | | | | | | |
| | | | | | | |
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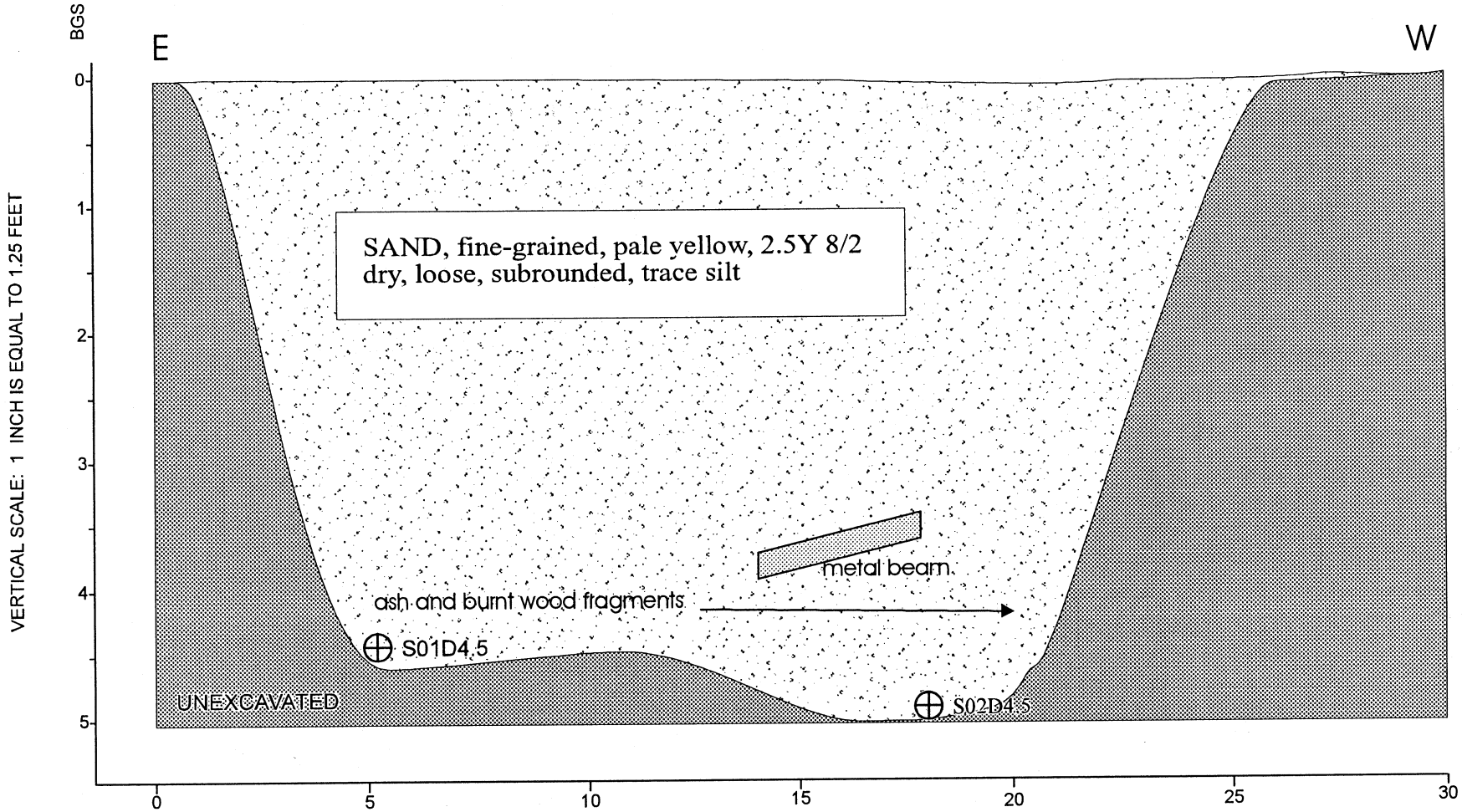



**Legend**

⊕ Subsurface Soil Sample

OGDEN

**Trench M01TS10, 6-24-96**
**Bulky Waste Landfill**
**Sand Island, Midway**

FIGURE

**10**

OGDEN

# Field Log of Trench

Project Name
CTO 0136 NAF Midway Island RI



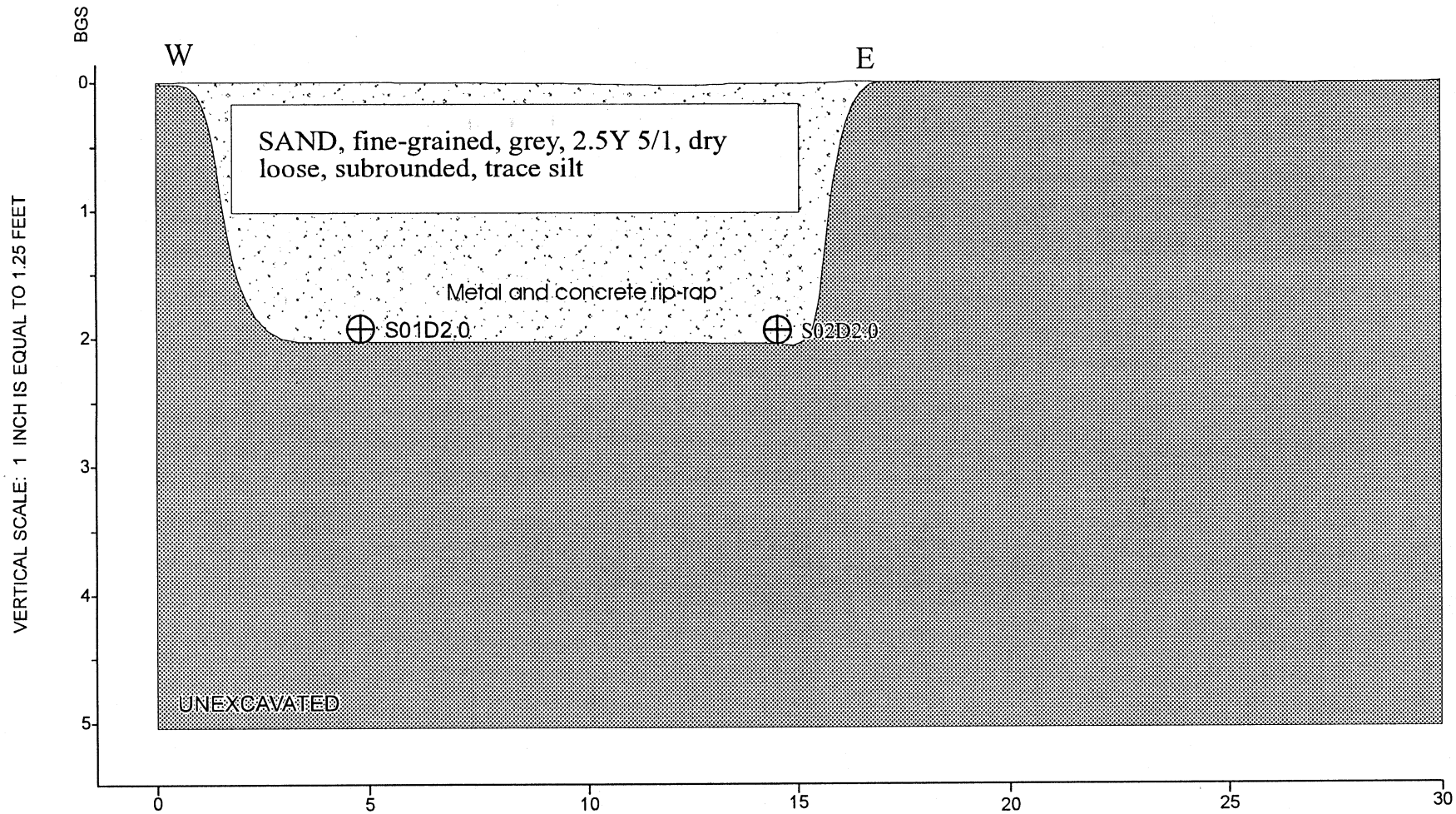
| Trench Number | Project Number | Elevation and Datum | Location |
|---|---|---|---|
| M01TS11 | 110190136 | TBD | Bulky Waste Landfill |
| **Equipment Supplier** | **Operator** | **Date and Time Started** | **Date and Time Completed** |
| PMC | Ranjith Ranasinghe | 6/25/96 (1445) | 6/25/96 (1520) |
| **Equipment Type** | **Trench Orientation** | **Total Depth** | **Total Number of Samples** |
| Case W14 | West to East | 2.0' | 4 (2-onsite and 2-offsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 15' | 3.0' | | | 4 | | |

| Geologist or Hydrogeologist/Date | Checked by/Date |
|---|---|
| Brian House 6/25/96 | |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, gray, 2.5Y 5/1, dry, loose, subrounded, trace silt | SW | 0 | 95 | 5 | grass and roots to 0.5' |
| 12 | | | | | | |
| | | | | | | |
| 24 | S01D2.0/TK01D2.0 (1455) HS=0.; S02D2.0/TK02D2.0 (1510) HS=0.0 ppm | SW | 0 | 95 | 5 | Metal and concrete rip- |
| | | | | | | rap at 2.0' |
| | Trench Completed at 1520 on 6/25/96 | | | | | |




**Legend**

⊕ Subsurface Soil Sample

OGDEN

**Trench M01TS11, 6-24-96**
**Bulky Waste Landfill**
**Sand Island, Midway**

FIGURE

**11**

OGDEN

# Field Log of Trench

Project Name
CTO 0136 NAF Midway Island RI



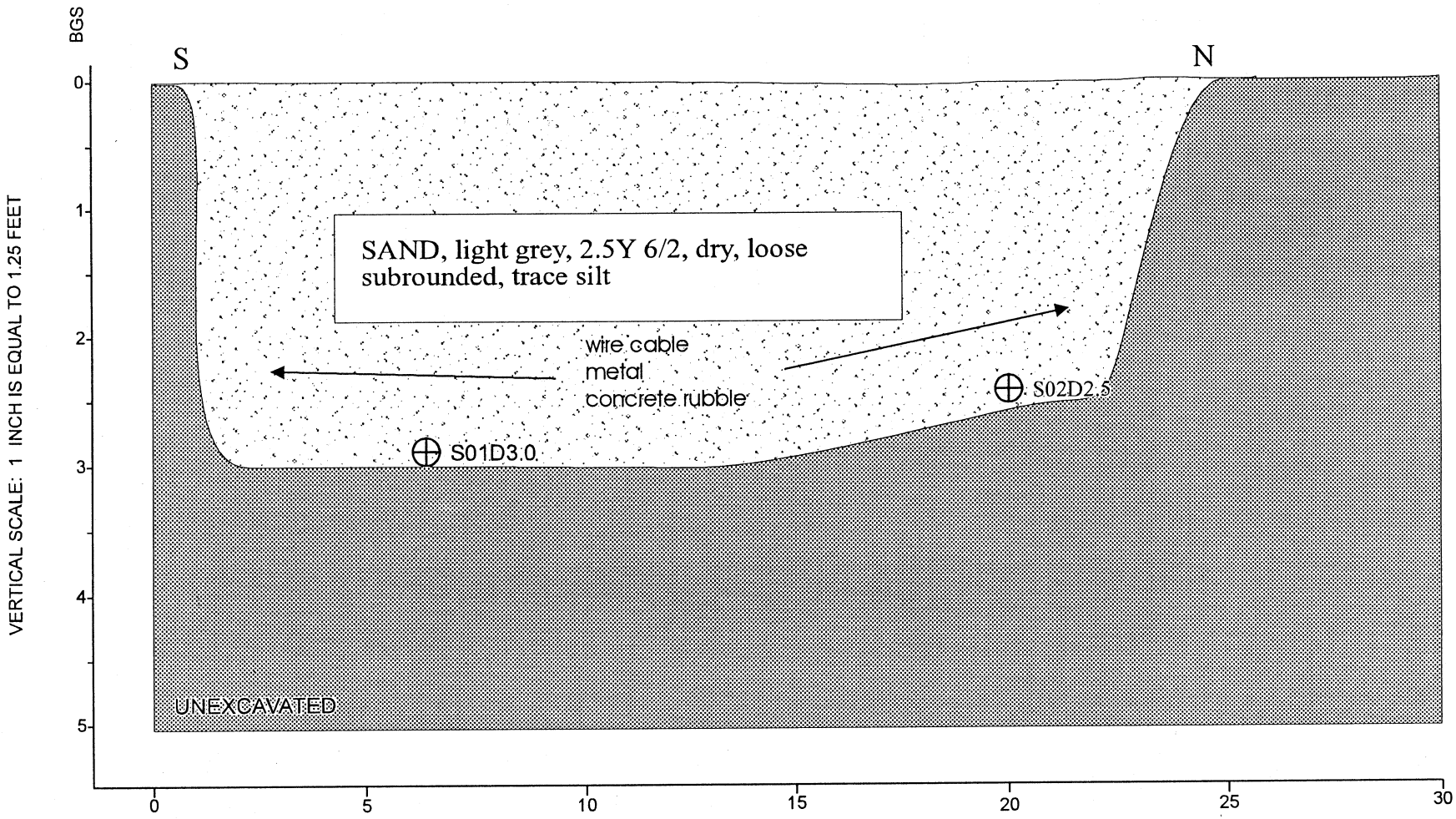
| | | | |
|---|---|---|---|
| Trench Number<br>M01TS12 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6/26/96 (0805) | Date and Time Completed<br>6/26/96 (0900) |
| Equipment Type<br>Case W14 | Trench Orientation<br>South to North | Total Depth<br>3.0' | Total Number of Samples<br>4 (2-onsite and 2-offsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 28' | 3.0' | | | 4 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/26/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, light grey, 2.5Y 6/2, dry, loose, subrounded, trace silt | SW | 0 | 95 | 5 | grass and roots to 0.5' |
| 12 | | | | | | |
| | | | | | | |
| 24 | SAME AS ABOVE | | | | | Wire/metal/concrete to |
| | S02D2.5/TK02D2.5 (0845) HS=0.0 ppm | SW | 0 | 95 | 5 | 2.0' |
| 36 | S01D3.0/TK01D3.0 (0825) HS=0.0 ppm | | | | | |
| | | | | | | |
| | Trench completed at 0990 on 6/26/96 | | | | | |




**Legend**

⊕ Subsurface Soil Sample

OGDEN

**Trench M01TS12, 6-24-96**
**Bulky Waste Landfill**
**Sand Island, Midway**

FIGURE

**12**

OGDEN

# Field Log of Trench

Project Name
CTO 0136 NAF Midway Island RI



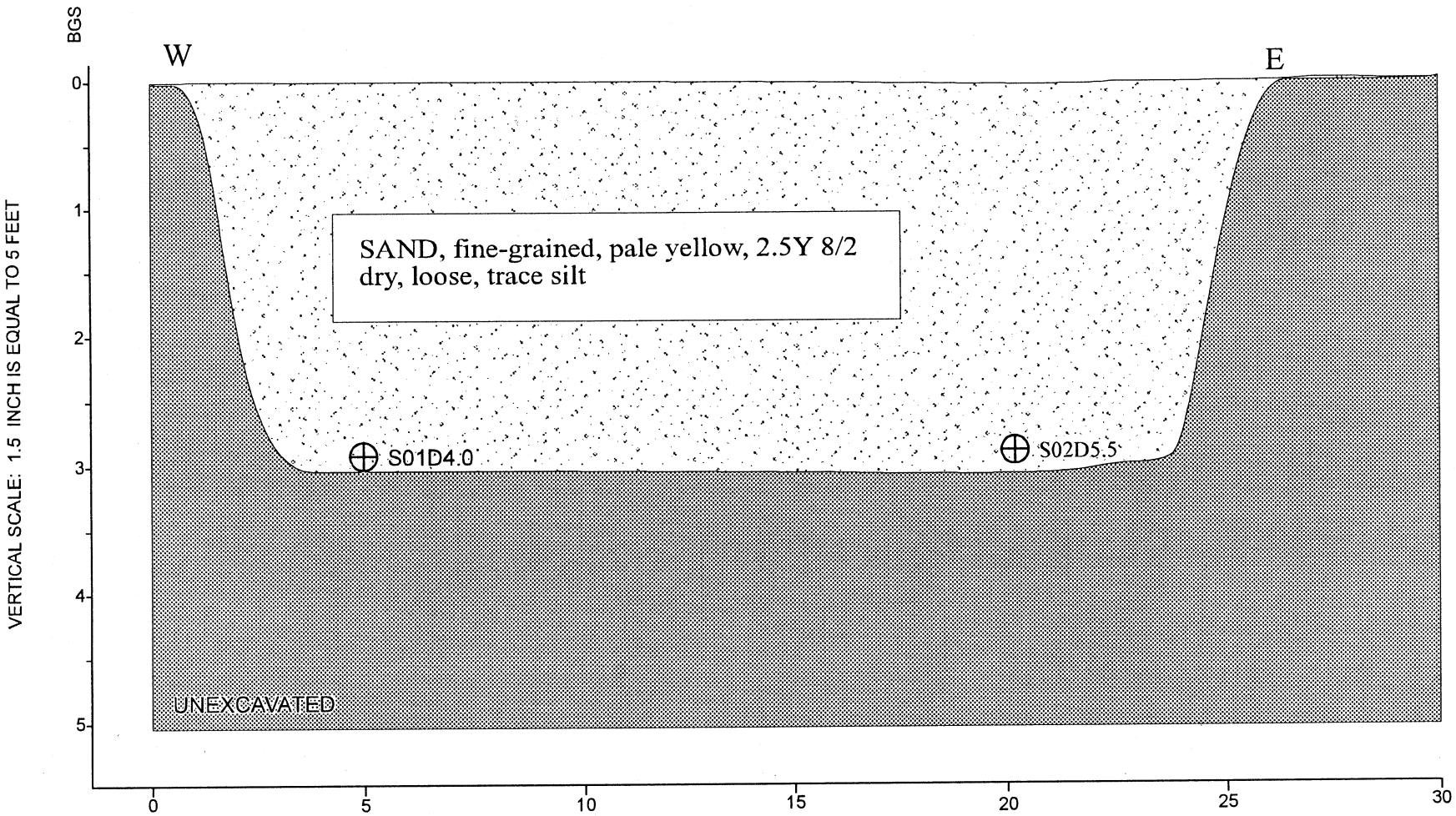
| | | | |
|---|---|---|---|
| Trench Number<br>M01TS13 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment SupplierPMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6/26/96 (0915) | Date and Time Completed<br>6/26/96 (1015) |
| Equipment Type<br>Case W14 | Trench Orientation<br>West to East | Total Depth<br>5.5' | Total Number of Samples<br>4 (2-onsite and 2-offsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 28' | 3.0' | | | 4 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/26/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine-grained, pale yellow, 2.5Y 8/2, dry, loose, subrounded | SW | 0 | 95 | 5 | grass and roots to 0.5' |
| 12 | gray, 2.5Y 6/2, trace silt | SW | 0 | 90 | 10 | |
| | | | | | | |
| 24 | | | | | | |
| | | | | | | |
| 36 | | | | | | wood fragments-3.0' |
| | SAME AS ABOVE | | | | | |
| 48 | S01D4.0/TK01D4.0 (0930) HS=0.0 ppm; D01D4.0 (0930) | SW | 0 | 90 | 10 | |
| | | | | | | |
| 60 | SAME AS ABOVE | | | | | |
| | S02D5.5/TK02D5.5 (0955) HS=0.0 ppm | SW | 0 | 90 | 10 | |




**Legend**

⊕ Subsurface Soil Sample

OGDEN

**Trench M01TS13, 6-24-96**
**Bulky Waste Landfill**
**Sand Island, Midway**

FIGURE

**13**

OGDEN

# Field Log of Trench

Project Name
CTO 0136 NAF Midway Island RI



| | | | |
|---|---|---|---|
| Trench Number<br>M01TS14 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6/26/96 (103f0) | Date and Time Completed<br>6/26/96 (1330) |
| Equipment Type<br>Case W14 | Trench Orientation<br>South to North | Total Depth<br>5.0' | Total Number of Samples<br>4 (2-onsite and 2-offsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 35' | 3.0' | | | 2 | | |

| | |
|---|---|
| Brian House 6/26/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine-medium grained, pale yellow, 2.5Y 7/3, dry, loose, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| | | | | | | |
| 24 | | | | | | Large metal debris, carpet, and |
| | | | | | | car parts - 1.0'-4.0' |
| 36 | | | | | | |
| | | | | | | concrete |
| 48 | SAME AS ABOVE except dark colored SAND | | | | | |
| | S01D4.5/TK01D4.5 (1100) | | | | | |
| 60 | S02D4.5/TK02D4.5 (1315) HS=0.0 ppm | SW | 0 | 90 | 10 | Refusal at 4.5'-5.0' due |
| | | | | | | to large metal debris |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
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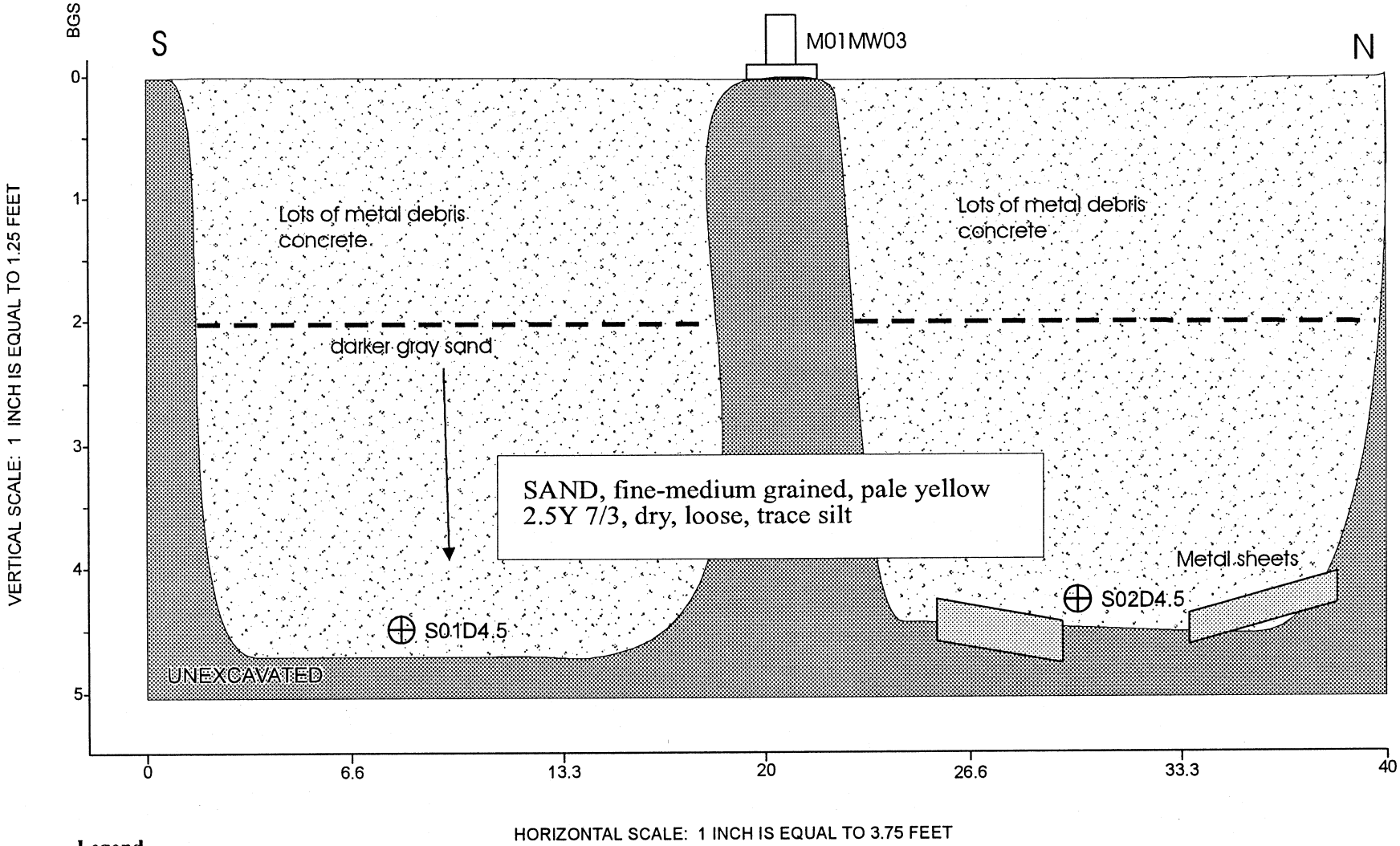



**Legend**

⊕ Subsurface Soil Sample

OGDEN

**Trench M01TS14, 6-24-96**
**Bulky Waste Landfill**
**Sand Island, Midway**

FIGURE

**14**

OGDEN

# Field Log of Trench

Project Name
CTO 0136 NAF Midway Island RI



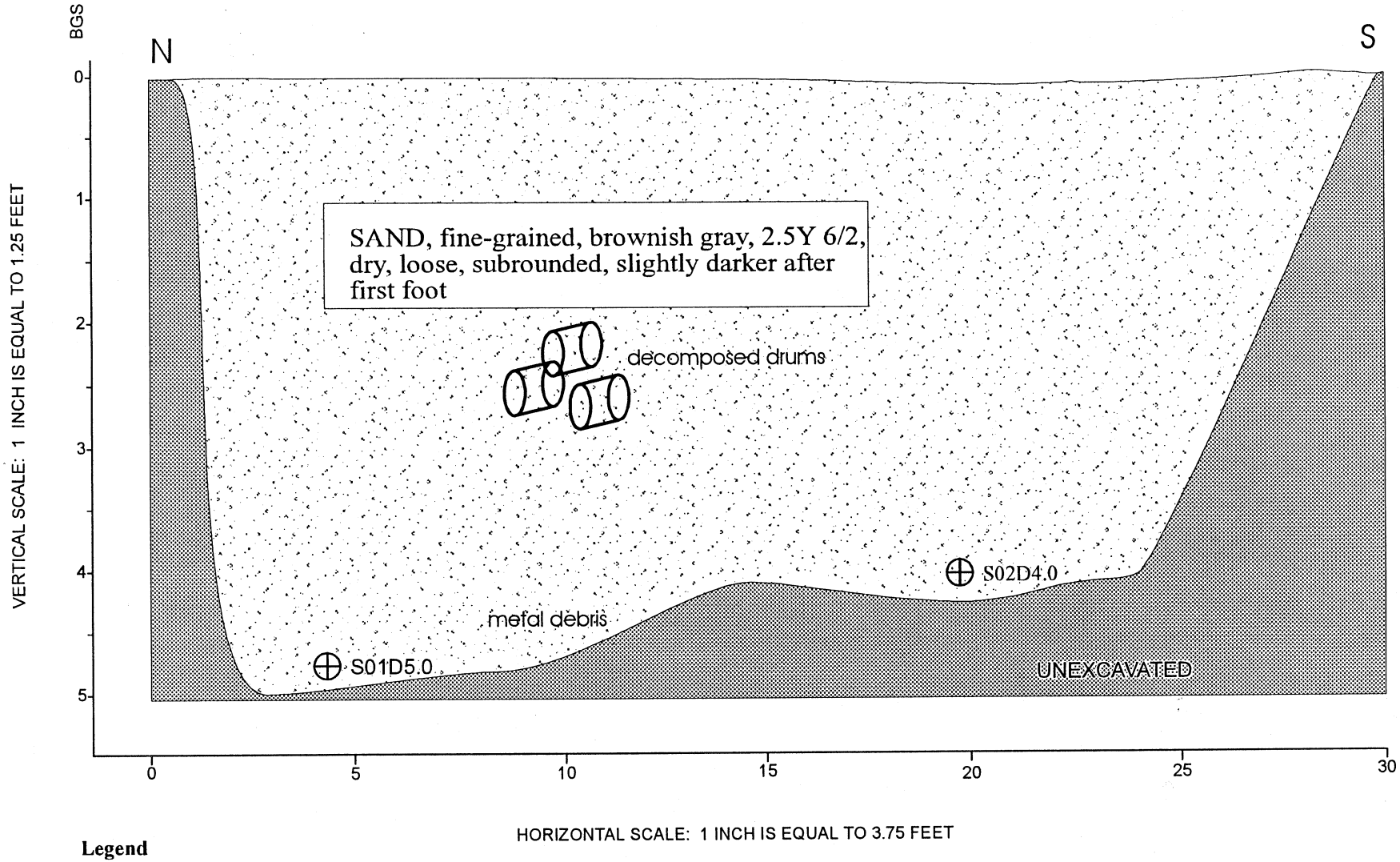
| | | | |
|---|---|---|---|
| Trench Number<br>M01TS15 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6/27/96 (0750) | Date and Time Completed<br>6/27/96 (0900) |
| Equipment Type<br>Case W14 | Trench Orientation<br>South to North | Total Depth<br>5.0' | Total Number of Samples<br>2 |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 25' | 3.0' | | | 2 | | |

| | |
|---|---|
| Brian House 6/27/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine-medium grained, brownish gray, 2.5Y 6/2, dry, loose, rounded | SW | 0 | 90 | 10 | |
| 12 | | | | | | |
| | | | | | | grass and roots to 0.5' |
| 24 | | | | | | |
| | | | | | | decomposed drums at 3' |
| 36 | | | | | | |
| | SAME AS ABOVE | | | | | Large metal debris |
| 48 | S02D4.0' (0825) HS=0.0 ppm | SW | 0 | 90 | 10 | from 4.0'-5.0' |
| | SAME AS ABOVE | | | | | |
| 60 | S01D5.0 (0810) HS=0.0 ppm | SW | 0 | 90 | 10 | Refusal at 4.5'-5.0' due |
| | | | | | | to metal sheeting |




**Legend**

⊕ Subsurface Soil Sample

OGDEN

**Trench M01TS15, 6-27-96**
**Bulky Waste Landfill**
**Sand Island, Midway**

FIGURE

**15**

OGDEN

# Field Log of Trench

Project Name
CTO 0136 NAF Midway Island RI



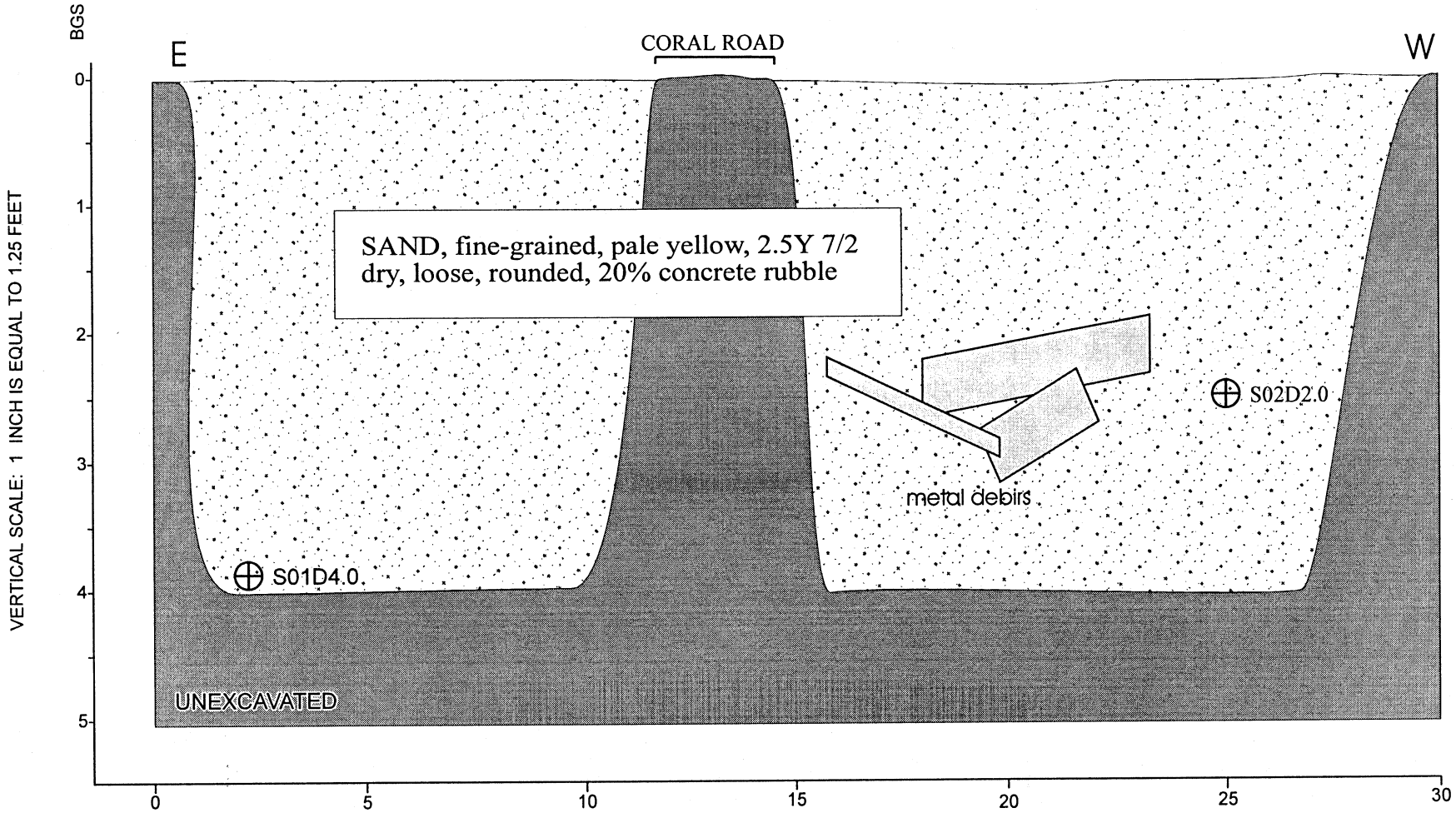
| | | | |
|---|---|---|---|
| Trench Number<br>M01 TS16 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6/28/96 (0815) | Date and Time Completed<br>6/28/96 (0920) |
| Equipment Type<br>Case W14 | Trench Orientation<br>East to West | Total Depth<br>4.0' | Total Number of Samples<br>4 (2-onsite and 2-offsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 30' | 3.0' | | | 4 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/28/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine-grained, pale yellow, 2.5Y 7/2, dry, loose, rounded, 20% concrete rubble | SW | 0 | 90 | 10 | Description taken __ feet |
| 12 | | | | | | from ____ end of trench. |
| | SAME AS ABOVE | | | | | grass and roots to 0.5' |
| 24 | S02D2.0/TK02D2.0 (0905) HS=0.0 ppm | SW | 0 | 90 | 10 | concrete blocks/copper |
| | | | | | | wire/many metal debris |
| 36 | | | | | | at 1.0'[-4.0' |
| | SAME AS ABOVE | | | | | |
| 48 | S01D4.0/TK01D4.0 (0835) HS=0.0 ppm | SW | 0 | 90 | 10 | |




**Legend**

⊕ Subsurface Soil Sample

OGDEN

**Trench M01TS16, 6-24-96**
**Bulky Waste Landfill**
**Sand Island, Midway**

FIGURE

**16**

OGDEN

# Field Log of Trench

| | | | |
|---|---|---|---|
| P Name<br>C 36 NAF Midway Island RI | | | Sheet 1 OF 1 |
| Trench Number<br>M01TS17 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6/28/96 (0935) | Date and Time Completed<br>6/28/96 (1030) |
| Equipment Type<br>Case W14 | Trench Orientation<br>West to East | Total Depth<br>6.0' | Total Number of Samples<br>4 (2-onsite and 2-offsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 25' | 3.0' | | | 4 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/28/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine-grained, brown/grey,2.5Y 5/2, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | Verbecina and roots to 0.5' |
| 12 | Pale yellow-0.5'-1.5' | | | | | |
| | | | | | | |
| 24 | | | | | | some wood debris and |
| | | | | | | charcoal staining-3.0' |
| 36 | | | | | | metal debris-4.0 |
| | | | | | | |
| 48 | moist , dark brown sand-4.0' | | | | | |
| | SAME AS ABOVE | | | | | |
| 60 | S02D5.0/TK02D5.0 (1010) HS=0.0 | SW | 0 | 90 | 10 | decomposed drum-5.0' |
| | wet sand with charcoal pieces-5.5' | | | | | |
| 72 | S01D6.0/TK01D6.0 (0950) HS=0.0 | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
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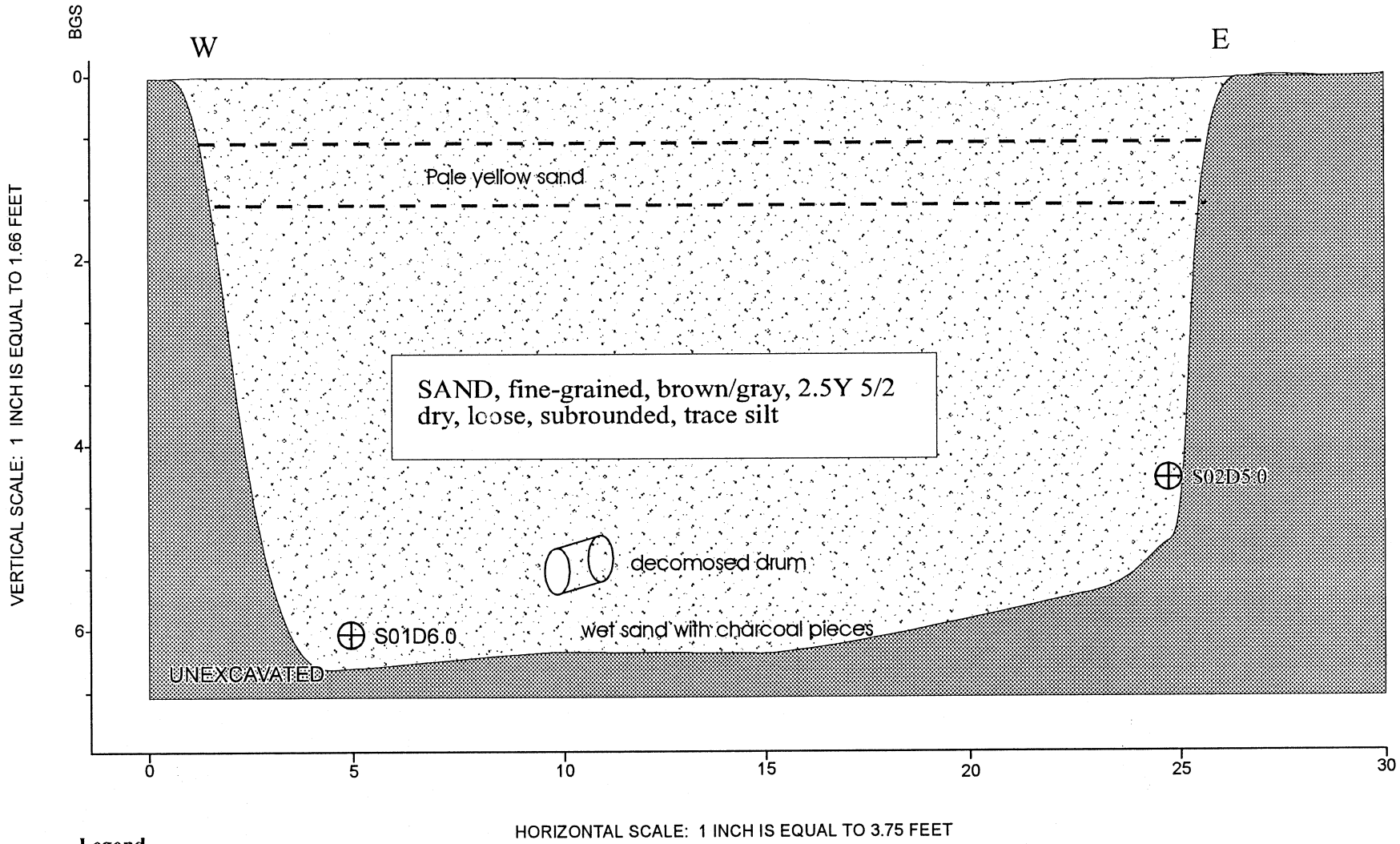



**Legend**

⊕ Subsurface Soil Sample

OGDEN

**Trench M01TS17, 6-24-96**
**Bulky Waste Landfill**
**Sand Island, Midway**

FIGURE

**17**

OGDEN

# Field Log of Trench

Project Name
CTO 0136 NAF Midway Island RI



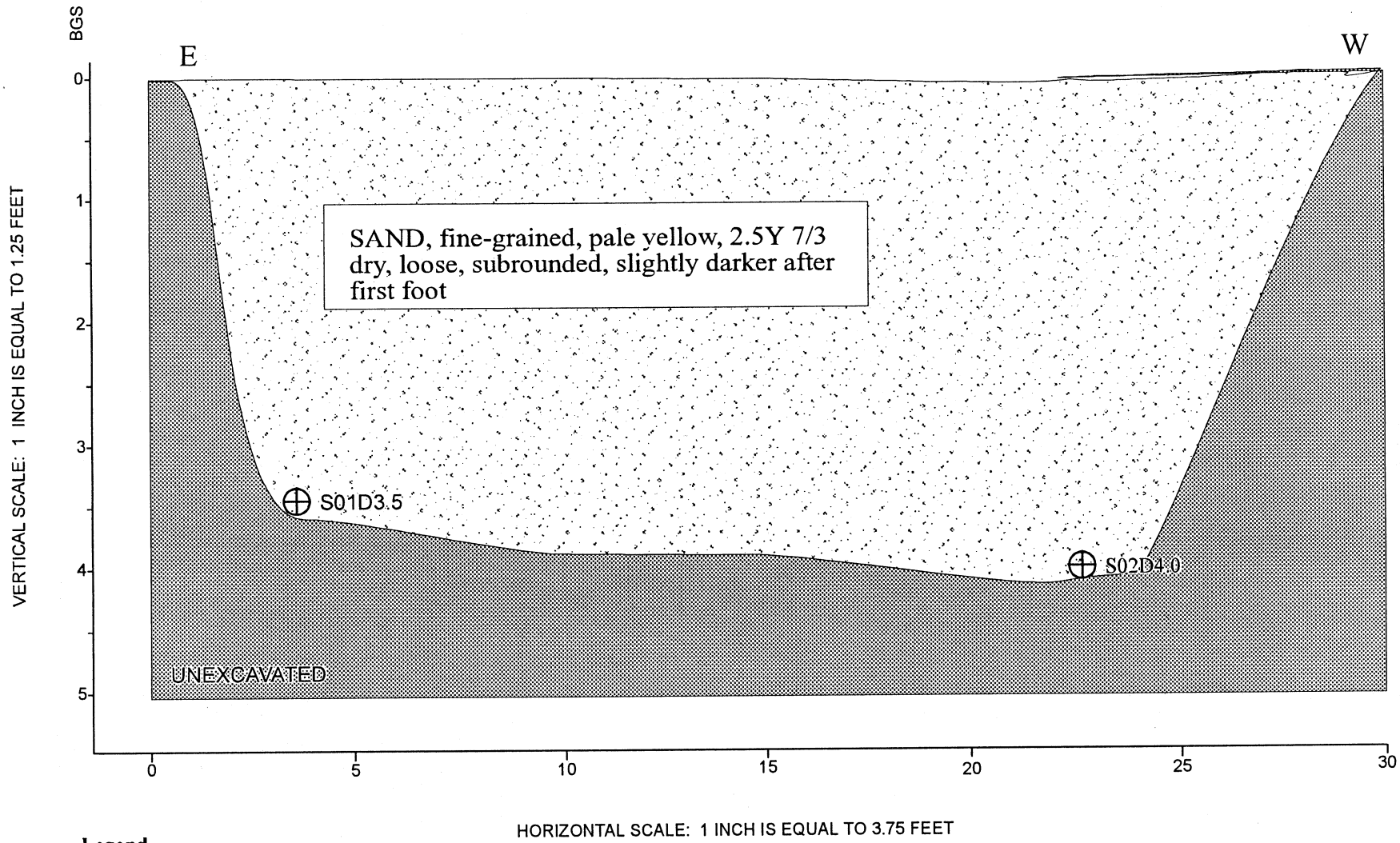
| Trench Number | Project Number | Elevation and Datum | Location |
|---|---|---|---|
| M01TS18 | 110190136 | TBD | Bulky Waste Landfill |
| **Equipment Supplier** | **Operator** | **Date and Time Started** | **Date and Time Completed** |
| PMC | Ranjith Ranasinghe | 6/28/96 (1040) | 6/28/96 (1120) |
| **Equipment Type** | **Trench Orientation** | **Total Depth** | **Total Number of Samples** |
| Case W14 | East to West | 4.0' | 4 (2-onsite and 2-offsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 22' | 3.0' | | | 4 | | |

| Geologist or Hydrogeologist/Date | Checked by/Date |
|---|---|
| Brian House 6/28/96 | |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow, 2.5Y 7/3, dry, loose, subrounded, slightly darker after first foot. | SW | 0 | 95 | 5 | grass and roots to 0.5' |
| 12 | | | | | | |
| | | | | | | |
| 24 | | | | | | |
| | | | | | | debris at 2.0' |
| 36 | SAME AS ABOVE | | | | | |
| | S01D3.5/TK01D3.5 (1050) HS=0.0 ppm | SW | 0 | 95 | 5 | |
| 48 | S02D4.0/TK02D4.0 (1110) HS=0.0 ppm | SW | 0 | 95 | 5 | |




**Legend**

⊕ Subsurface Soil Sample

OGDEN

**Trench M01TS18, 6-24-96**
**Bulky Waste Landfill**
**Sand Island, Midway**

FIGURE

**18**

OGDEN

# Field Log of Trench

Project Name
TO 0136 NAF Midway Island RI



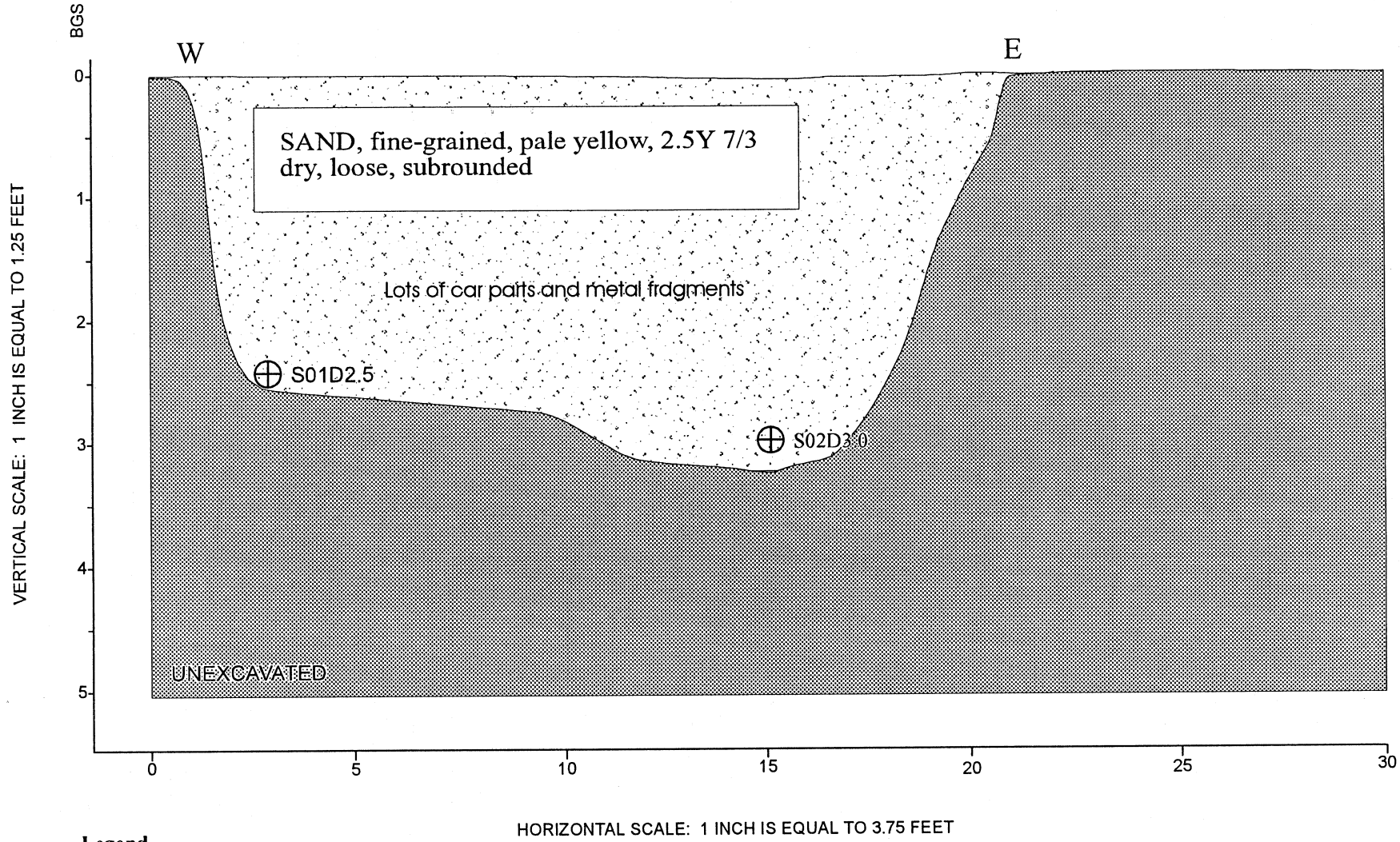
| | | | |
|---|---|---|---|
| Trench Number<br>M01TS19 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6/28/96 (1315) | Date and Time Completed<br>6/28/96 (1355) |
| Equipment Type<br>Case W14 | Trench Orientation<br>West to East | Total Depth<br>3.0' | Total Number of Samples<br>4 (2-onsite and 2-offsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 20' | 3.0' | | | 4 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/28/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | Sand, fine-grained, pale yellow, 2.5Y 7/3, dry, loose, subrounded, | SW | 0 | 95 | 5 | grass and roots to 0.5' |
| 12 | | | | | | |
| | | | | | | |
| 24 | silght HC odor -2.0' to 2.5' | | | | | |
| | S01D2.5/TK01D2.5 (1325) HS=0.0 ppm SAME AS ABOVE | SW | 0 | 95 | 5 | car parts/metal/piping/ |
| 36 | S02D3.0/TK02D3.0 (1345) HS=0.0 ppm | SW | 0 | 95 | 5 | debris -1.0' to 3.0' |




**Legend**

⊕ Subsurface Soil Sample

OGDEN

**Trench M01TS19, 6-24-96**
**Bulky Waste Landfill**
**Sand Island, Midway**

FIGURE

**19**

OGDEN

# Field Log of Trench

Project Name
CTO 0136 NAF Midway Island RI



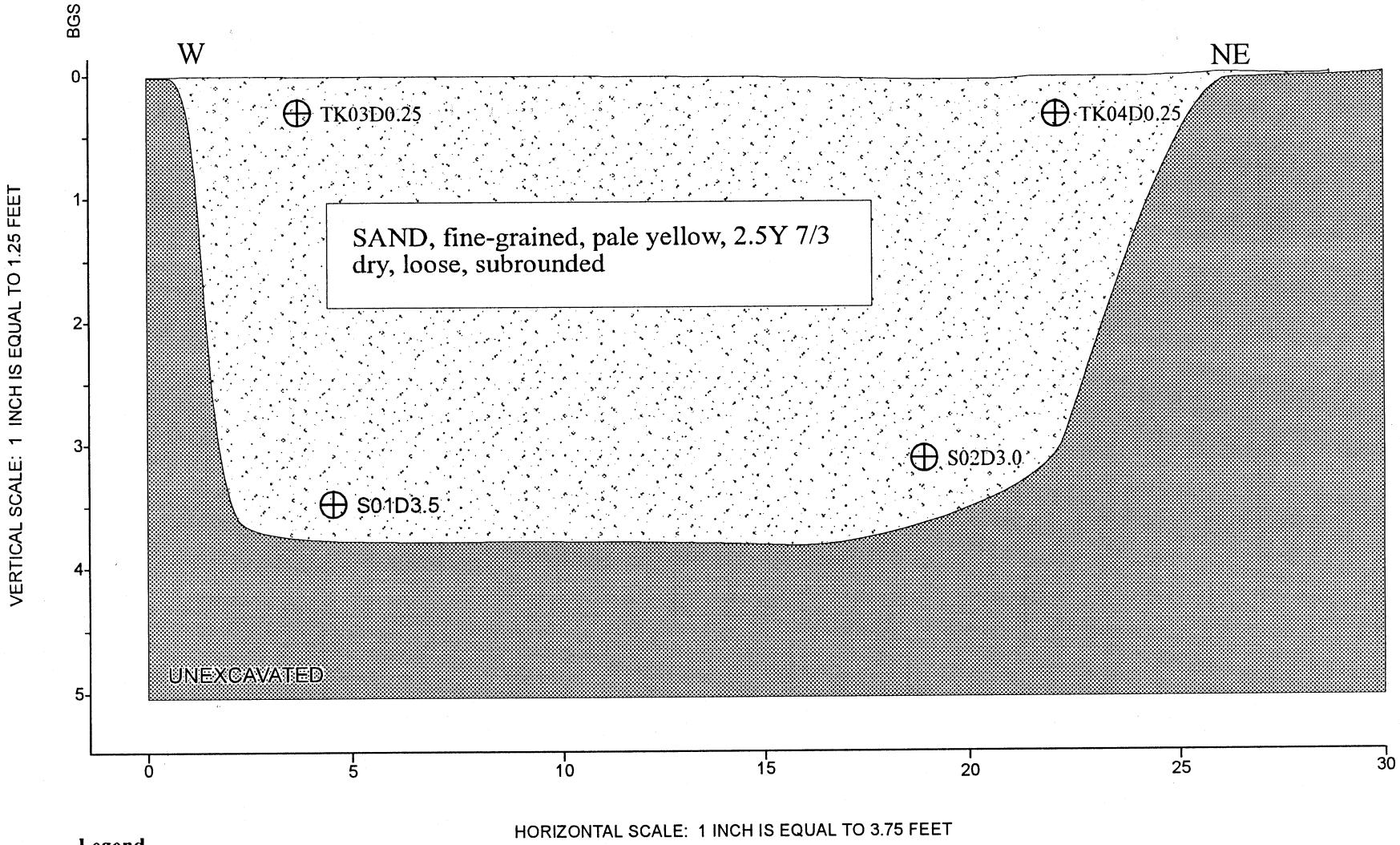
| | | | |
|---|---|---|---|
| Trench Number<br>M01TS20 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6/28/96 (1425) | Date and Time Completed<br>6/28/96 (1515) |
| Equipment Type<br>Case W14 | Trench Orientation<br>West to East/South to North | Total Depth<br>3.5' | Total Number of Samples<br>6 (3-onsite and 3-offsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 20' | 3.0' | | | 6 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/28/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | Sand, fine-grained, pale yellow, 2.5Y 7/3, dry, loose, subrounded, | SW | 0 | 95 | 5 | |
| 12 | | | | | | |
| | | | | | | |
| 24 | | | | | | |
| | SAME AS ABOVE | | | | | |
| 36 | S02D3.0/TK02D3.0 (1505) HS=0.0 ppm D02D3.0 /TKD02D3.0 (1505) | SW | 0 | 95 | 5 | |
| | S01D3.5/TK01D3.5 (1445) HS=0.0 ppm | | | | | |
| 48 | | | | | | |




**Legend**

⊕ Subsurface Soil Sample

OGDEN

**Trench M01TS20, 6-24-96**
**Bulky Waste Landfill**
**Sand Island, Midway**

FIGURE

**20**

OGDEN

# Field Log of Trench / TEST PIT

Project Name
CTO 0136 Midway Island RI

Sheet 1 of 1

| | | | |
|---|---|---|---|
| Trench Number M01TP 01 | Project Number 110190136 | Elevation and Datum TBD | Location Bulky Waste Landfill |
| Equipment Supplier PMC | Operator Ranjith Ranasinghe | Date and Time Started 6/26/97 (1345) | Date and Time Completed 6/26/96 (1355) |
| Equipment Type Case W14 | Trench Orientation East to West | Total Depth 3.0' | Total Number of Samples 1 (onsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 10' | 3.0' | | | 1 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date Brian House 6/26/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow.2.5Y 7/3, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| 24 | | | | | | |
| | SAME AS ABOVE | | | | | |
| 36 | TPS01D3.0 (1350) HS = 0.0 ppm | SW | 0 | 90 | 10 | |

OGDEN

# Field Log of Trench / TEST PIT

Project Name
CTO 0136 Midway Island RI

Sheet 1 of 1

| | | | |
|---|---|---|---|
| Trench Number<br>M01TP 02 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started | Date and Time Completed |
| Equipment Type<br>Case W14 | Trench Orientation<br>East to West | Total Depth | Total Number of Samples<br>1 (onsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | | 3.0' | | | 1 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/26/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow.2.5Y 7/3, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| | | | | | | |
| 24 | | | | | | |
| | SAME AS ABOVE | SW | 0 | 90 | 10 | |
| 36 | TP501 D3.0' (1415) HS = 0 ppm | | | | | |

OGDEN

# Field Log of Trench / TEST PIT

| | | | |
|---|---|---|---|
| ect Name<br>, 0136 Midway Island RI | | | Sheet 1 of 1 |
| Trench Number<br>M01TP 03 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6-27-96 (1230) | Date and Time Completed<br>6-27-96 (1250) |
| Equipment Type<br>Case W14 | Trench Orientation<br>East to West | Total Depth<br>4.0 - feet | Total Number of Samples<br>2 (onsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 10.0' | 3.0' | | | 2 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/26/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow.2.5Y 7/3, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| | SAND, dark grayish brown, 2.5Y 4/2, | | | | | |
| 24 | with rubble | | | | | |
| | TP03501 D1.5' (1230) HS=0 ppm | | | | | |
| 36 | | | | | | |
| | | | | | | metal debris |
| | SAME AS ABOVE | SW | 0 | 90 | 10 | slight HC odor |
| 48 | TP03502 D3.5' (1240) | | | | | |

OGDEN

# Field Log of Trench / TEST PIT

Project Name
CTO 0136 Midway Island RI

Sheet 1 of 1

| | | | |
|---|---|---|---|
| Trench Number M01TP 04 | Project Number 110190136 | Elevation and Datum TBD | Location Bulky Waste Landfill |
| Equipment Supplier PMC | Operator Ranjith Ranasinghe | Date and Time Started 2·27·96 (1300) | Date and Time Completed 2·27·96 (1330) |
| Equipment Type Case W14 | Trench Orientation East to West | Total Depth 3.0' | Total Number of Samples 2 (onsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 12' | 3.0' | | | 2 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date Brian House 6/26/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow.2.5Y 7/3, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| 24 | TP04S01D1.5' (1315) HS = 0 ppm | | | | | 4" steel pipe |
| 36 | SAME AS ABOVE | | | | | metal debis & |
| | TP04S02D3.0' (1320) HS = 0 ppm | SW | 0 | 80 | 20 | concrete |

OGDEN

# Field Log of Trench / TEST PIT

Project Name
O 0136 Midway Island RI

Sheet 1 of 1

| | | | |
|---|---|---|---|
| Trench Number<br>M01TP 05 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6.27.96 (1340) | Date and Time Completed<br>6.27.96 (1400) |
| Equipment Type<br>Case W14 | Trench Orientation<br>East to West | Total Depth<br>2.0' | Total Number of Samples<br>1 (onsite) |
| Bucket Width 1.5' / Trench Length 10' | Trench Width<br>3.0' | No. of Samples: Bulk / Grab 1 / Drive / Hand Auger | |
| Geologist or Hydrogeologist/Date<br>Brian House 6/26/96 | | Checked by/Date | |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow.2.5Y 7/3, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| | TP05S01D 1.5' (1345) HS = 0.0 ppm | SW | 0 | 90 | 10 | |
| 24 | | | | | | |
| | TD = 2.0' | | | | | |
| 36 | | | | | | |

OGDEN

# Field Log of Trench / TEST PIT

Project Name
CTO 0136 Midway Island RI

Sheet 1 of 1

| | | | |
|---|---|---|---|
| Trench Number M01TP 0 6 | Project Number 110190136 | Elevation and Datum TBD | Location Bulky Waste Landfill |
| Equipment Supplier PMC | Operator Ranjith Ranasinghe | Date and Time Started 6·27·96 (1415) | Date and Time Completed 6·27·96 (1440) |
| Equipment Type Case W14 | Trench Orientation East to West | Total Depth 5.0' | Total Number of Samples 2 (onsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 15.0' | 3.0' | | | 2 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date Brian House 6/26/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow.2.5Y 7/3, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| 24 | | | | | | |
| 36 | TP06501D 3.0' (1420) | | | | | |
| 48 | SAME AS ABOVE | | | | | |
| | TP06502 D4.5' (1430) HS = 0 ppm | SW | 0 | 90 | 10 | |
| 60 | TD = 5.0' | | | | | |

OGDEN

# Field Log of Trench / TEST PIT

Project Name
CTO 0136 Midway Island RI

Sheet 1 of 1

| | | | |
|---|---|---|---|
| Trench Number<br>M01TP 07 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6·29·96 (0730) | Date and Time Completed<br>6·29·96 (0750) |
| Equipment Type<br>Case W14 | Trench Orientation<br>East to West | Total Depth<br>3.0' | Total Number of Samples<br>1 (onsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 10.0' | 3.0' | | | 1 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/26/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow.2.5Y 7/3, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| | | | | | | |
| 24 | change of color - gray SAND | | | | | piece of metal |
| | SAME AS ABOVE | | | | | |
| 36 | TP07S01D 3.0' (0745) HS = 0 ppm | SW | 0 | 90 | 10 | |
| | TD = 3.0' | | | | | |

OGDEN

# Field Log of Trench / TEST PIT

Project Name
CTO 0136 Midway Island RI

Sheet 1 of 1

| | | | |
|---|---|---|---|
| Trench Number<br>M01TP __ __ | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6·29·96 (0800) | Date and Time Completed<br>6·29·96 (0810) |
| Equipment Type<br>Case W14 | Trench Orientation<br>East to West | Total Depth<br>4.0' | Total Number of Samples<br>1 (onsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 10' | 3.0' | | | 1 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/26/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow.2.5Y 7/3, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| | | | | | | |
| 24 | | | | | | 4" steel pipe |
| | | | | | | 2-2" steel pipes |
| 36 | SAME AS ABOVE | | | | | |
| | TP08S01D 3.5' (0810) HS=0 ppm | SW | 0 | 90 | 10 | |
| 48 | TD=4.0' | | | | | |

OGDEN

# Field Log of Trench / TEST PIT

Project Name
CTO 0136 Midway Island RI

Sheet 1 of 1

| | | | |
|---|---|---|---|
| Trench Number<br>M01TP 09 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6·29·96 (0820) | Date and Time Completed<br>6·29·96 (0825) |
| Equipment Type<br>Case W14 | Trench Orientation<br>East to West | Total Depth<br>4.0' | Total Number of Samples<br>1 (onsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 10.' | 3.0' | | | 1 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/26/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow.2.5Y 7/3, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| 24 | | | | | | |
| | | | | | | metal debris |
| 36 | SAME AS ABOVE | | | | | |
| | TP09S01D 3.5' (0825) HS = 0 ppm | SW | 0 | 90 | 10 | |
| 48 | TD = 4.0' | | | | | |

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# Field Log of Trench / TEST PIT

Sheet 1 of 1

| | | | |
|---|---|---|---|
| Project Name<br>CTO 0136 Midway Island RI | | | |
| Trench Number<br>M01TP 1 0 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6·29·96 (0830) | Date and Time Completed<br>6·29·96 (0840) |
| Equipment Type<br>Case W14 | Trench Orientation<br>East to West | Total Depth<br>4.0' | Total Number of Samples<br>1 (onsite) |
| Bucket Width 1.5' / Trench Length 10' | Trench Width<br>3.0' | No. of Samples: Bulk / Grab 1 / Drive / Hand Auger | |
| Geologist or Hydrogeologist/Date<br>Brian House 6/26/96 | | Checked by/Date | |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow.2.5Y 7/3, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| 24 | | | | | | |
| | | | | | | peice of metal |
| 36 | SAME AS ABOVE | | | | | ceramic tile |
| | TP 10501D 3.5' (0840) HS = 0 ppm | SW | 0 | 90 | 10 | |
| 48 | TD = 4.0' | | | | | |

OGDEN

# Field Log of Trench / TEST PIT

Project Name
CTO 0136 Midway Island RI

Sheet 1 of 1

| Trench Number | Project Number | Elevation and Datum | Location |
|---|---|---|---|
| M01TP 1 1 | 110190136 | TBD | Bulky Waste Landfill |
| **Equipment Supplier** | **Operator** | **Date and Time Started** | **Date and Time Completed** |
| PMC | Ranjith Ranasinghe | 6·29·96 (0845) | 6·29·96 (0850) |
| **Equipment Type** | **Trench Orientation** | **Total Depth** | **Total Number of Samples** |
| Case W14 | East to West | 3.5' | 1 (onsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 10' | 3.0' | | | 1 | | |

| Geologist or Hydrogeologist/Date | Checked by/Date |
|---|---|
| Brian House 6/26/96 | |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow.2.5Y 7/3, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| 24 | | | | | | 2" steel pipe |
| | SAME AS ABOVE | | | | | |
| 36 | TP 11501 D3.0' (0850) HS = 0 ppm | SW | 0 | 90 | 10 | |
| | TD = 3.5' | | | | | |
| 48 | | | | | | |

OGDEN

# Field Log of Trench / TEST PIT

Project Name
CTO 0136 Midway Island RI

Sheet 1 of 1

| Trench Number | Project Number | Elevation and Datum | Location |
|---|---|---|---|
| M01TP ⊥ ⊥ | 110190136 | TBD | Bulky Waste Landfill |
| **Equipment Supplier** | **Operator** | **Date and Time Started** | **Date and Time Completed** |
| PMC | Ranjith Ranasinghe | 7.1.96 (1300) | 7.1.96 (1320) |
| **Equipment Type** | **Trench Orientation** | **Total Depth** | **Total Number of Samples** |
| Case W14 | East to West | 5.0' | ~~3 (onsite)~~ 2 onsite / 1 offsite |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 10' | 3.0' | | | 3 | | |

| Geologist or Hydrogeologist/Date | Checked by/Date |
|---|---|
| Brian House 6/26/96 | |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow.2.5Y 7/3, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| | | | | | | |
| 24 | TP11503D1.5' (1310) | | | | | |
| | | | | | | |
| 36 | | | | | | |
| | M01TP11502D3.0' (1305) | | | | | |
| | SAME AS ABOVE | | | | | |
| 48 | TP11504D4.5' (1315) HS=0ppm | SW | 0 | 90 | 10 | |
| | | | | | | |
| 60 | TD=5.0' | | | | | |
| | | | | | | |
| | | | | | | |
| | * Re-excavation of test pit #11 | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

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# Field Log of Trench / TEST PIT

Project Name
TO 0136 Midway Island RI

Sheet 1 of 1

| | | | |
|---|---|---|---|
| Trench Number M01TP 1 2 | Project Number 110190136 | Elevation and Datum TBD | Location Bulky Waste Landfill |
| Equipment Supplier PMC | Operator Ranjith Ranasinghe | Date and Time Started 6.29.96 (0910) | Date and Time Completed 6.29.96 (0915) |
| Equipment Type Case W14 | Trench Orientation East to West | Total Depth 3.5' | Total Number of Samples 1 (onsite) |
| Bucket Width 1.5' / Trench Length 10' | Trench Width 3.0' | No. of Samples: Bulk / Grab 1 / Drive / Hand Auger | |
| Geologist or Hydrogeologist/Date Brian House 6/26/96 | | Checked by/Date | |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow.2.5Y 7/3, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| 24 | | | | | | |
| | SAME AS ABOVE | | | | | |
| 36 | TP12S01D3.0' (0915) HS=0 ppm | SW | 0 | 90 | 10 | |
| | TD = 3.5' | | | | | |
| 48 | | | | | | |

OGDEN

# Field Log of Trench / TEST PIT

Project Name
CTO 0136 Midway Island RI

Sheet 1 of 1

| | | | |
|---|---|---|---|
| Trench Number M01TP 1 3 | Project Number 110190136 | Elevation and Datum TBD | Location Bulky Waste Landfill |
| Equipment Supplier PMC | Operator Ranjith Ranasinghe | Date and Time Started 6.29.96 (0925) | Date and Time Completed 6.29.96 (0930) |
| Equipment Type Case W14 | Trench Orientation East to West | Total Depth 4.0' | Total Number of Samples 1 (onsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 10' | 3.0' | | | 1 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date Brian House 6/26/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow.2.5Y 7/3, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| | SAME AS ABOVE except: | | | | | |
| 24 | gray brown SAND and silt | | | | | |
| | ? | | | | | |
| 36 | | | | | | metal debris & |
| | TP13 Soil D 3.5' (0930) HS = 0 ppm | SW | 0 | 90 | 10 | concrete |
| 48 | TD = 4.0' | | | | | |

OGDEN

# Field Log of Trench / TEST PIT

Project Name
CTO 0136 Midway Island RI

Sheet 1 of 1

| Trench Number | Project Number | Elevation and Datum | Location |
|---|---|---|---|
| M01TP 1 4 | 110190136 | TBD | Bulky Waste Landfill |
| **Equipment Supplier** | **Operator** | **Date and Time Started** | **Date and Time Completed** |
| PMC | Ranjith Ranasinghe | 6·29·96 (0940) | 6·29·96 (0945) |
| **Equipment Type** | **Trench Orientation** | **Total Depth** | **Total Number of Samples** |
| Case W14 | East to West | 3.0' | 1 (onsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 8' | 3.0' | | | 1 | | |

| Geologist or Hydrogeologist/Date | Checked by/Date |
|---|---|
| Brian House 6/26/96 | |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow.2.5Y 7/3, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| | SAME AS ABOVE except: | | | | | rebar / 2" steel pipe |
| 24 | - SAND - gray in color | | | | | charcoal fragments |
| | TP14S01D2.5' (0945) HS = 0 ppm | SW | 0 | 90 | 10 | copper wire |
| 36 | | | | | | |
| | TD = 3.0' | | | | | |

OGDEN

# Field Log of Trench / TEST PIT

Project Name
CTO 0136 Midway Island RI

Sheet 1 of 1

| | | | |
|---|---|---|---|
| Trench Number<br>M01TP 1 5 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6.29.96 (0955) | Date and Time Completed<br>6.29.96 (1000) |
| Equipment Type<br>Case W14 | Trench Orientation<br>East to West | Total Depth<br>3.0' | Total Number of Samples<br>1 (onsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 8' | 3.0' | | | 1 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/26/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow.2.5Y 7/3, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| | | | | | | piece of metal |
| 24 | SAME AS ABOVE except: gray color SAND | SW | 0 | 90 | 10 | |
| | TP15501D2.5' (1000) $H_2S$ = 0 ppm | | | | | |
| 36 | | | | | | |
| | TD = 3.0' | | | | | |

OGDEN

# Field Log of Trench / TEST PIT

| | | | |
|---|---|---|---|
| Project Name<br>CTO 0136 Midway Island RI | | | Sheet 1 of 1 |
| Trench Number<br>M01TP 1 6 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6.29.96 (1010) | Date and Time Completed<br>6.29.96 (1020) |
| Equipment Type<br>Case W14 | Trench Orientation<br>East to West | Total Depth<br>3.0' | Total Number of Samples<br>1 (onsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 8' | 3.0' | | | 1 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/26/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow.2.5Y 7/3, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| | | | | | | |
| 24 | SAME AS ABOVE | | | | | metal piping |
| | TP16S01D 2.0' (1020) | SW | 0 | 90 | 10 | |
| 36 | | | | | | |
| | TD = 3.0' | | | | | |

OGDEN

# Field Log of Trench / TEST PIT

Project Name
CTO 0136 Midway Island RI

Sheet 1 of 1

| | | | |
|---|---|---|---|
| Trench Number<br>M01TP 17 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6.29.96 (1030) | Date and Time Completed<br>6.29.96 (1035) |
| Equipment Type<br>Case W14 | Trench Orientation<br>East to West | Total Depth<br>3.0' | Total Number of Samples<br>1 (onsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 8' | 3.0' | | | 1 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/26/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow.2.5Y 7/3, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| | SAME except gray color SAND | | | | | metal cable |
| 24 | TP17S01D2.0' (1035) | SW | 0 | 90 | 10 | |
| 36 | TD = 3.0' | | | | | |

OGDEN

# Field Log of Trench / TEST PIT

Project Name
CTO 0136 Midway Island RI

Sheet 1 of 1

| Trench Number | Project Number | Elevation and Datum | Location |
|---|---|---|---|
| M01TP 1 8 | 110190136 | TBD | Bulky Waste Landfill |
| **Equipment Supplier** | **Operator** | **Date and Time Started** | **Date and Time Completed** |
| PMC | Ranjith Ranasinghe | 6·29·96 (1040) | 6·29·96 (1050) |
| **Equipment Type** | **Trench Orientation** | **Total Depth** | **Total Number of Samples** |
| Case W14 | East to West | 3.0' | 1 (onsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 8' | 3.0' | | | 1 | | |

| Geologist or Hydrogeologist/Date | Checked by/Date |
|---|---|
| Brian House 6/26/96 | |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow.2.5Y 7/3, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| | | | | | | Truck axle |
| 24 | SAME except dark brown colored SAND. | | | | | metal wire |
| | TP18S01D2.0' (1050) HS = 0 ppm | SW | 0 | 90 | 10 | |
| 36 | | | | | | |
| | TD = 3.0' | | | | | |

OGDEN

# Field Log of Trench / TEST PIT

Project Name
CTO 0136 Midway Island RI

Sheet 1 of 1

| | | | |
|---|---|---|---|
| Trench Number<br>M01TP 19 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6·29·96 (1220) | Date and Time Completed<br>6·29·96 (1230) |
| Equipment Type<br>Case W14 | Trench Orientation<br>East to West | Total Depth<br>4.5' | Total Number of Samples<br>1 (onsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 10' | 3.0' | | | 1 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/26/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow.2.5Y 7/3, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| 24 | | | | | | |
| 36 | | | | | | metal debris |
| | SAME AS ABOVE | | | | | |
| | TP19SOID 4.0' (1230) | SW | 0 | 90 | 10 | |
| 48 | | | | | | |
| | TD = 4.5' | | | | | |

OGDEN

# Field Log of Trench / TEST PIT

Project Name
CTO 0136 Midway Island RI

Sheet 1 of 1

| | | | |
|---|---|---|---|
| Trench Number<br>M01TP 2 0 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6.29.96 (1240) | Date and Time Completed<br>6.29.96 (1245) |
| Equipment Type<br>Case W14 | Trench Orientation<br>East to West | Total Depth<br>5.0' | Total Number of Samples<br>1 (onsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 10' | 3.0' | | | 1 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/26/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow.2.5Y 7/3, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| 24 | | | | | | metal debris |
| 36 | | | | | | decomposed drum |
| | SAME AS ABOVE | | | | | |
| 48 | TP20S01D4.5' (1445) HS=0 ppm | SW | 0 | 90 | 10 | |
| 60 | TD=5.0' | | | | | |

OGDEN

# Field Log of Trench / TEST PIT

Project Name
CTO 0136 Midway Island RI

Sheet 1 of 1

| | | | |
|---|---|---|---|
| Trench Number<br>M01TP 21 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6·29·96 (1255) | Date and Time Completed<br>6·29·96 (1310) |
| Equipment Type<br>Case W14 | Trench Orientation<br>East to West | Total Depth<br>7.0' | Total Number of Samples<br>1 (onsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 15' | 3.0' | | | 1 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/26/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow.2.5Y 7/3, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| 24 | | | | | | |
| 36 | | | | | | |
| 48 | | | | | | |
| 60 | SAME AS ABOVE except slight gray color | | | | | |
| | TP21S01D 6.5' (1310) HS = 0 ppm | SW | 0 | 90 | 10 | |
| 72 | | | | | | |
| 84 | TD = 7.0' | | | | | |

OGDEN

# Field Log of Trench / TEST PIT

| | | | |
|---|---|---|---|
| Project Name<br>CTO 0136 Midway Island RI | | | Sheet 1 of 1 |
| Trench Number<br>M01TP 2 2 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>6.29.96 (1235) | Date and Time Completed<br>6.29.96 (1340) |
| Equipment Type<br>Case W14 | Trench Orientation<br>East to West | Total Depth<br>3.0' | Total Number of Samples<br>1 (onsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 8' | 3.0' | | | 1 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/26/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow.2.5Y 7/3, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| | | | | | | |
| 24 | SAME AS ABOVE | | | | | |
| | TP 22501 D 2.0' (1340) HS = 0 ppm | SW | 0 | 90 | 10 | |
| 36 | | | | | | |
| | TD = 3.0' | | | | | |

OGDEN

# Field Log of Trench / TEST PIT

Project Name
CTO 0136 Midway Island RI

Sheet 1 of 1

| | | | |
|---|---|---|---|
| Trench Number<br>M01TP 2 3 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>7.1.96 (0750) | Date and Time Completed<br>7.1.96 (0805) |
| Equipment Type<br>Case W14 | Trench Orientation<br>East to West | Total Depth<br>4.0' | Total Number of Samples<br>1 (onsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 10' | 3.0' | | | 1 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/26/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow.2.5Y 7/3, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| | | | | | | metal cable |
| 24 | | | | | | metal pipe-1" |
| | | | | | | |
| 36 | SAME AS ABOVE except gray colored sand | | | | | |
| | TP23501D3.5' (0800) HS = 0 ppm | SW | 0 | 90 | 10 | |
| | | | | | | |
| 48 | TD=4.0' | | | | | |
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OGDEN

# Field Log of Trench / TEST PIT

Project Name
CTO 0136 Midway Island RI

Sheet 1 of 1

| Trench Number | Project Number | Elevation and Datum | Location |
|---|---|---|---|
| M01TP 2 4 | 110190136 | TBD | Bulky Waste Landfill |
| **Equipment Supplier** | **Operator** | **Date and Time Started** | **Date and Time Completed** |
| PMC | Ranjith Ranasinghe | 7·1·96 (0810) | 7·1·96 (0815) |
| **Equipment Type** | **Trench Orientation** | **Total Depth** | **Total Number of Samples** |
| Case W14 | East to West | 3.0' | 1 (onsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 8' | 3.0' | | | 1 | | |

| Geologist or Hydrogeologist/Date | Checked by/Date |
|---|---|
| Brian House 6/26/96 | |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow.2.5Y 7/3, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| | | | | | | |
| 24 | SAME AS ABOVE | | | | | |
| | TP24S01D2.5' (0815) HS = 0ppm | SW | 0 | 90 | 10 | |
| 36 | | | | | | |
| | TD = 3.0' | | | | | |

OGDEN

# Field Log of Trench / TEST PIT

Project Name
CTO 0136 Midway Island RI

Sheet 1 of 1

| | | | |
|---|---|---|---|
| Trench Number<br>M01TP 2 5 | Project Number<br>110190136 | Elevation and Datum<br>TBD | Location<br>Bulky Waste Landfill |
| Equipment Supplier<br>PMC | Operator<br>Ranjith Ranasinghe | Date and Time Started<br>7.1.96 (0825) | Date and Time Completed<br>7.1.96 (0830) |
| Equipment Type<br>Case W14 | Trench Orientation<br>East to West | Total Depth<br>3.0' | Total Number of Samples<br>1 (onsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 8' | 3.0' | | | 1 | | |

| | |
|---|---|
| Geologist or Hydrogeologist/Date<br>Brian House 6/26/96 | Checked by/Date |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow.2.5Y 7/3, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| | | | | | | metal / 4" pipe |
| 24 | SAME AS ABOVE | | | | | |
| | TP25501D2.5' (0830) HS = 0 ppm | SW | 0 | 90 | 10 | |
| 36 | | | | | | |
| | TD = 3.0' | | | | | |

OGDEN

# Field Log of Trench / TEST PIT

Project Name
CTO 0136 Midway Island RI

Sheet 1 of 1

| Trench Number | Project Number | Elevation and Datum | Location |
|---|---|---|---|
| M01TP 2 6 | 110190136 | TBD | Bulky Waste Landfill |
| **Equipment Supplier** | **Operator** | **Date and Time Started** | **Date and Time Completed** |
| PMC | Ranjith Ranasinghe | 7.1.96 (0835) | 7.1.96 (0840) |
| **Equipment Type** | **Trench Orientation** | **Total Depth** | **Total Number of Samples** |
| Case W14 | East to West | 3.0' | 1 (onsite) |

| Bucket Width | Trench Length | Trench Width | No. of Samples | Bulk | Grab | Drive | Hand Auger |
|---|---|---|---|---|---|---|---|
| 1.5' | 8' | 3.0' | | | 1 | | |

| Geologist or Hydrogeologist/Date | Checked by/Date |
|---|---|
| Brian House 6/26/96 | |

## Soil Description

| Depth (in.) | Description | USCS | Est. % of G | S | F | Comments |
|---|---|---|---|---|---|---|
| | SAND, fine grained, pale yellow.2.5Y 7/3, dry, loose, subrounded, trace silt | SW | 0 | 90 | 10 | grass and roots to 0.5' |
| 12 | | | | | | |
| | | | | | | |
| 24 | SAME AS ABOVE except gray SAND | | | | | |
| | TP26S01D 2.5' (0840) HS= 0ppm | SW | 0 | 90 | 10 | |
| 36 | | | | | | |
| | TD = 3.0' | | | | | |

# Appendix B

# GROUND-WATER SAMPLING LOG

| | | |
|---|---|---|
| WELL NO. MW-01 | LOCATION: Bulky Waste Landfill - Midway | PROJECT NO. 1-1019-0136 |
| DATE: 7-03-96 | TIME: 0935 | CLIMATIC CONDITIONS: Sunny |
| OVA/PID READING WHEN WELL OPENED: 0.0 ppm | DEPTH TO PRODUCT (TOC): na | |
| STATIC WATER LEVEL (TOC): 8.45 feet | TOTAL DEPTH OF WELL (TOC): 17.58 feet | |
| 80% RECOVERY DTW (TOC): na | DTW BEFORE SAMPLING/TIME: na | |

WELL PURGING:

LENGTH OF SATURATED ZONE: 9.13 LINEAR FT.

VOLUME OF WATER TO BE EVACUATED: .65 GALS./LINEAR FT.X 9.13 LINEAR FT. OF SATURATED X 3 CASING VOLUMES = 17.8 GALS.

METHOD OF REMOVAL: Submersible pump | PUMPING RATE: 1.9 gallons/min

WELL PURGE DATA:

| DATE/TIME | GALLONS REMOVED | Temp (C°) /Redox (mV) | pH | Sp. Cond. (µS) | Turbid. (NTU)/ Diss. $O_2$ (ppm) |
|---|---|---|---|---|---|
| 7/03/96 - 1025 | 0 | 30.3/28 | 7.46 | 90 | 5.92/1.4 |
| 7/03/96 - 1035 | 5 | 27.9/23 | 7.47 | 10.2 | 7.7/1.8 |
| 7/03/96 - 1037 | 10 | 27.0/23 | 7.46 | 10.4 | 6.0/1.9 |
| 7/03/96 - 1038 | 15 | 26.8/22 | 7.50 | 10.3 | 3.9/1.7 |
| 7/03/96 - 1040 | 20 | 26.6/20 | 7.55 | 10.0 | 3.0/0.9 |
| 7/03/96 - 1041 | 25 | 26.6/17 | 7.59 | 95.7 | 2.2/0.9 |
| 7/03/96 - 1042 | 30 | 26.1/12 | 7.61 | 95.8 | 1.7/0.8 |
| 7/03/96 - 1043 | 35 | 26.1/10 | 7.62 | 93.8 | 1.1/0.8 |

SAMPLE WITHDRAWAL METHOD: Submersible pump

SAMPLE NUMBER(S) AND TIME: M01MW01S01/D01 at 1050 | SAMPLED BY: BH, SS, JE

| APPEARANCE OF SAMPLE: | | TEMPERATURE | 30° C |
|---|---|---|---|
| COLOR- | clear | PH | 7.4 |
| TURBIDITY- | clear | COND. | 10.0 |
| SEDIMENT- | none | | |

NOTES:

LABORATORY ANALYSIS PARAMETERS AND PRESERVATIVES: Low level semivolatiles, pesticides, and PCB analyses

No preservatives

NUMBER AND TYPES OF SAMPLES CONTAINERS USED: 8 1-Liter amber jars (with duplicates)

DECONTAMINATION PROCEDURES: Dedicated Equipment

SAMPLES DELIVERED TO: ADL | TRANSPORTER: Federal Express

DATE: 7-04-96 | TIME: 12:00

CAPACITY OF CASING (GALLONS/LINEAR FOOT)

2" - 0.16 • 4" - 0.65 • 6" - 1.47 • 8" - 2.61 • 10" - 4.08 • 12" - 5.87

# GROUND-WATER SAMPLING LOG

| | | |
|---|---|---|
| WELL NO. MW-02 | LOCATION: Bulky Waste Landfill - Midway | PROJECT NO. 1-1019-0136 |
| DATE: 7-03-96 | TIME: 1250 | CLIMATIC CONDITIONS: Sunny |

OVA/PID READING WHEN WELL OPENED: 0.0 ppm | DEPTH TO PRODUCT (TOC): na

STATIC WATER LEVEL (TOC): 8.75 feet | TOTAL DEPTH OF WELL (TOC): 18.00 feet

80% RECOVERY DTW (TOC): na | DTW BEFORE SAMPLING/TIME: na

WELL PURGING:

LENGTH OF SATURATED ZONE: 9.25 LINEAR FT.

VOLUME OF WATER TO BE EVACUATED: .65 GALS./LINEAR FT.X 9.25

LINEAR FT. OF SATURATED X 3 CASING VOLUMES = 18.04 GALS.

METHOD OF REMOVAL: Submersible pump | PUMPING RATE: 1.14 gallons/min.

WELL PURGE DATA:

| DATE/TIME | GALLONS REMOVED | Temp (C°) /Redox (mV) | pH | Sp. Cond. (µS) | Turbid. (NTU)/ Diss. $O_2$ (ppm) |
|---|---|---|---|---|---|
| 7/03/96 - 1255 | 0 | 28.3/ -.5 | 8.24 | 3.3 | 14.7/ 8.55 |
| 7/03/96 - 1302 | 5 | 26.7/ -160 | 7.49 | 1.07 | 33.3/ 19.3 |
| 7/03/96 - 1305 | 8 | 26.7/ -271 | 7.35 | 3.28 | 20.5/ Fail |
| 7/03/96 - 1310 | 15 | 26.5/ -286 | 7.38 | 3.23 | 23.5/ Fail |
| 7/03/96 - 1312 | 18 | 26.4/ -287 | 7.38 | 3.33 | 17.0/ Fail |
| 7/03/96 - 1315 | 23 | 26.4/ -291 | 7.38 | 3.37 | 8.5/ Fail |
| 7/03/96 - 1319 | 28 | 26.4/ -292 | 7.37 | 3.4 | 7.3/ Fail |
| 7/03/96 - 1324 | 33 | 27.8/ -116 | 7.20 | 3.3 | 16.8/ Fail |

SAMPLE WITHDRAWAL METHOD: Submersible pump

SAMPLE NUMBER(S) AND TIME: M01MW02S01 at 1320 | SAMPLED BY: BH, SS, JE

APPEARANCE OF SAMPLE:

| | | | |
|---|---|---|---|
| COLOR | fluorescent pink | TEMPERATURE | 27°C |
| TURBIDITY | clear | PH | 7.20 |
| SEDIMENT | none | COND. | 3.3 |

NOTES: Fluoresecent pink color from dye injected into wells for Dye Trace Study

LABORATORY ANALYSIS PARAMETERS AND PRESERVATIVES: Low level semivolatiles, pesticides, and PCB analyses

No preservatives

NUMBER AND TYPES OF SAMPLES CONTAINERS USED: Two 1-Liter amber jars

DECONTAMINATION PROCEDURES: Utlized steam cleaner and deionized water

SAMPLES DELIVERED TO: ADL | TRANSPORTER: Federal Express

DATE: 7-04-96 TIME: 12:00

CAPACITY OF CASING (GALLONS/LINEAR FOOT)

2" - 0.16 • 4" - 0.65 • 6" - 1.47 • 8" - 2.61 • 10" - 4.08 • 12" - 5.87

# GROUND-WATER SAMPLING LOG

| | | |
|---|---|---|
| WELL NO. MW-03 | LOCATION: Bulky Waste Landfill - Midway | PROJECT NO. 1-1019-0136 |
| DATE: 7-03-96 | TIME: 1342 | CLIMATIC CONDITIONS: Sunny |

OVA/PID READING WHEN WELL OPENED: 0.0 ppm | DEPTH TO PRODUCT (TOC): na

STATIC WATER LEVEL (TOC): 8.69 feet | TOTAL DEPTH OF WELL (TOC): 16.90 feet

80% RECOVERY DTW (TOC): na | DTW BEFORE SAMPLING/TIME: na

WELL PURGING:

LENGTH OF SATURATED ZONE: 8.21 LINEAR FT.

VOLUME OF WATER TO BE EVACUATED: .65 GALS./LINEAR FT.X 8.21 LINEAR FT. OF SATURATED X 3 CASING VOLUMES = 16.01 GALS.

METHOD OF REMOVAL: Submersible pump | PUMPING RATE: 1.67 gallons/min.

WELL PURGE DATA:

| DATE/TIME | GALLONS REMOVED | Temp (C°) /Redox (mV) | pH | Sp. Cond. (µS) | Turbid. (NTU)/ Diss. $O_2$ (ppm) |
|---|---|---|---|---|---|
| 7/03/96 - 1405 | 0 | 28/ 26 | 7.06 | 277 | 23.0/ Fail |
| 7/03/96 - 1408 | 5 | 27.5/ -8 | 7.88 | 1.28 | 15.8/ Fail |
| 7/03/96 - 1411 | 10 | 26.8/ -38 | 8.25 | 2.25 | 9.9/ Fail |
| 7/03/96 - 1414 | 15 | 26.4/ -160 | 8.36 | 3.25 | 4.6/ Fail |
| 7/03/96 - 1417 | 20 | 26.3/ -219 | 8.44 | 3.21 | 7.6/ Fail |
| 7/03/96 - 1420 | 25 | 26.3/ -237 | 8.50 | 3.25 | 18.1/ Fail |
| 7/03/96 - 1423 | 30 | 26.3/ -243 | 8.53 | 3.24 | 19.8/ Fail |

SAMPLE WITHDRAWAL METHOD: Submersible pump

SAMPLE NUMBER(S) AND TIME: M01MW03S01 at 1425 | SAMPLED BY: BH, SS, JE

| APPEARANCE OF SAMPLE: | | | | |
|---|---|---|---|---|
| | COLOR | fluorescent green | TEMPERATURE | 26°C |
| | TURBIDITY | clear | PH | 8.4 |
| | SEDIMENT | none | COND. | 3.3 |

NOTES: Flouresecent green color from dye injected into wells for Dye Trace Study

LABORATORY ANALYSIS PARAMETERS AND PRESERVATIVES: Low level semivolatiles, pesticides, and PCB analyses

No preservatives

NUMBER AND TYPES OF SAMPLES CONTAINERS USED: Two 1-Liter amber jars

DECONTAMINATION PROCEDURES: Dedicated Equipment

SAMPLES DELIVERED TO: ADL | TRANSPORTER: Federal Express

DATE: 7-04-96 | TIME: 12:00

CAPACITY OF CASING (GALLONS/LINEAR FOOT)

2" - 0.16 • 4" - 0.65 • 6" - 1.47 • 8" - 2.61 • 10" - 4.08 • 12" - 5.87

# GROUND-WATER SAMPLING LOG

| | | |
|---|---|---|
| WELL NO. MW-04 | LOCATION: Bulky Waste Landfill - Midway | PROJECT NO. 1-1019-0136 |
| DATE: 7-03-96 | TIME: 1440 | CLIMATIC CONDITIONS: Sunny |

OVA/PID READING WHEN WELL OPENED: 0.0 ppm

DEPTH TO PRODUCT (TOC): na

STATIC WATER LEVEL (TOC): ~ 7.81 feet

TOTAL DEPTH OF WELL (TOC): ~ 17.22 feet

80% RECOVERY DTW (TOC): na

DTW BEFORE SAMPLING/TIME: na

WELL PURGING:

LENGTH OF SATURATED ZONE: 9.4 LINEAR FT.

VOLUME OF WATER TO BE EVACUATED: .65 GALS./LINEAR FT.X 9.4 LINEAR FT. OF SATURATED X 3 CASING VOLUMES = 18.4 GALS.

METHOD OF REMOVAL: Submersible pump

PUMPING RATE: 1.67 gallons/min.

WELL PURGE DATA:

| DATE/TIME | GALLONS REMOVED | Temp (C°) /Redox (mV) | pH | Sp. Cond. (µS) | Turbid. (NTU)/ Diss. $O_2$ (ppm) |
|---|---|---|---|---|---|
| 7/03/96 - 1445 | 0 | 29.0/ -168 | 7.55 | 20.0 | 2.73/ Fail |
| 7/03/96 - 1448 | 5 | 28.8/ -206 | 7.51 | 19.0 | 3.48/ Fail |
| 7/03/96 - 1451 | 10 | 28.7/ -203 | 7.5 | 19.6 | 2.88/ Fail |
| 7/03/96 - 1454 | 15 | 28.4/ -156 | 7.61 | 19.4 | 2.21/ Fail |
| 7/03/96 - 1457 | 20 | 28.2/ -136 | 7.67 | 19.6 | 1.76/ Fail |
| 7/03/96 - 1500 | 25 | 28.0/ -137 | 7.71 | 19.4 | 1.42/ Fail |
| 7/03/96 - 1503 | 30 | 28.0/ -140 | 7.74 | 19.8 | 1.80/ Fail |

SAMPLE WITHDRAWAL METHOD: Submersible pump

SAMPLE NUMBER(S) AND TIME: at 1505

SAMPLED BY: BH, SS, JE

APPEARANCE OF SAMPLE:

| | | | |
|---|---|---|---|
| COLOR | clear | TEMPERATURE | 28°C |
| TURBIDITY | clear | PH | 7.7 |
| SEDIMENT | none | COND. | 19.5 |

NOTES:

LABORATORY ANALYSIS PARAMETERS AND PRESERVATIVES: Low level semivolatiles, pesticides, and PCB analyses

No preservatives

NUMBER AND TYPES OF SAMPLES CONTAINERS USED: Two 1-Liter amber jars

DECONTAMINATION PROCEDURES: Dedicated Equipment

SAMPLES DELIVERED TO: ADL

TRANSPORTER Federal Express

DATE: 7-04-96

TIME: 12:00

CAPACITY OF CASING (GALLONS/LINEAR FOOT)

2" - 0.16 • 4" - 0.65 • 6" - 1.47 • 8" - 2.61 • 10" - 4.08 • 12" - 5.87

# GROUND-WATER SAMPLING LOG

| | | |
|---|---|---|
| WELL NO: MW-05 | LOCATION: Bulky Waste Landfill - Midway | PROJECT NO: 1-1019-0136 |
| DATE: 7-03-96 | TIME: 1518 | CLIMATIC CONDITIONS: Sunny |

| | |
|---|---|
| OVA/PID READING WHEN WELL OPENED: 0.0 ppm | DEPTH TO PRODUCT (TOC): na |
| STATIC WATER LEVEL (TOC): ~8.78 feet | TOTAL DEPTH OF WELL (TOC): ~ 17.75 feet |
| 80% RECOVERY DTW (TOC): na | DTW BEFORE SAMPLING/TIME: na |

WELL PURGING:

LENGTH OF SATURATED ZONE: 8.97 LINEAR FT.

VOLUME OF WATER TO BE EVACUATED: .65 GALS./LINEAR FT.X 8.97 LINEAR FT. OF SATURATED X 3 CASING VOLUMES = 17.4 GALS.

METHOD OF REMOVAL: Submersible pump | PUMPING RATE: 2.31 gallons/min.

WELL PURGE DATA:

| DATE/TIME | GALLONS REMOVED | Temp (C°) /Redox (mV) | pH | Sp. Cond. (µS) | Turbid. (NTU)/ Diss. $O_2$ (ppm) |
|---|---|---|---|---|---|
| 7/03/96 - 1527 | 0 | 25.0/ -71 | 7.54 | 21.2 | 2.55/ 0.7 |
| 7/03/96 - 1530 | 5 | 24.7/ -180 | 7.8 | 21.4 | 1.90/ Fail |
| 7/03/96 - 1532 | 10 | 24.6/ -231 | 7.86 | 21.6 | 0.95/ Fail |
| 7/03/96 - 1534 | 15 | 24.6/ -255 | 7.91 | 22.3 | 0.43/ Fail |
| 7/03/96 - 1536 | 20 | 24.6/ -265 | 7.9 | 22.6 | 0.36/ Fail |
| 7/03/96 - 1538 | 25 | 24.5/ -275 | 7.92 | 22.8 | 0.35/ Fail |
| 7/03/96 - 1540 | 30 | 25.4/ -285 | 7.92 | 24.7 | 0.35/ Fail |

SAMPLE WITHDRAWAL METHOD: Submersible pump

SAMPLE NUMBER(S) AND TIME: M01MW05S01 at 1540 | SAMPLED BY: BH, SS, JE

| APPEARANCE OF SAMPLE: | | | | |
|---|---|---|---|---|
| | COLOR | clear | TEMPERATURE | 25°C |
| | TURBIDITY | clear | PH | 7.92 |
| | SEDIMENT | none | COND. | 23 |

NOTES:

LABORATORY ANALYSIS PARAMETERS AND PRESERVATIVES: Low level semivolatiles, pesticides, and PCB analyses

No preservatives

NUMBER AND TYPES OF SAMPLES CONTAINERS USED: Two 1-Liter amber jars

DECONTAMINATION PROCEDURES: Dedicated Equipment

SAMPLES DELIVERED TO: ADL | TRANSPORTER Federal Express

DATE: 7-04-96 | TIME: 12:00

CAPACITY OF CASING (GALLONS/LINEAR FOOT)

2" - 0.16 • 4" - 0.65 • 6" - 1.47 • 8" - 2.61 • 10" - 4.08 • 12" - 5.87

# Appendix C

IDW DRUM INVENTORY
NAF MIDWAY SI/RI
CTO 136

| SITE | DRUM NUMBER | DRUM STORAGE LOCATION | IDW SOURCE(S) | IDW TYPE | WASTE VOLUME (% FULL) | IDW GENERATION DATE | STATUS OF DRUM CONTENTS | EXPECTED DISPOSAL DATE | ACTUAL DISPOSAL DATE | EXPECTED DISPOSAL METHOD | ACTUAL DISPOSAL METHOD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ***Bulky Waste Landfill-Site 01*** | | | | | | | | | | | |
| | 0136-01-D001 | Bunker S7122 | MW-1 | PPE | 100% | 10/19/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |
| | 0136-01-D002 | Bunker S7122 | MW-2 | PPE | 100% | 10/18/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |
| | 0136-01-D003 | Bunker S7122 | MW-3 | PPE | 100% | 10/18/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |
| | 0136-01-D004 | Bunker S7122 | MW-4 | PPE | 100% | 10/17/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |
| | 0136-01-D005 | Bunker S7122 | SB-1 | Soil Cuttings | 75% | 10/19/94 | Potential contam. | - | 9/17/96 | Landfill | Reintroduced(3) |
| | 0136-01-D006 | Bunker S7122 | SB-2 | Soil Cuttings | 75% | 10/18/94 | Potential contam. | - | 9/17/96 | Landfill | Reintroduced(3) |
| | 0136-01-D007 | Bunker S7122 | SB-3 | Soil Cuttings | 75% | 10/18/94 | Potential contam. | - | 9/17/96 | Solidification | Solidification(4) |
| | 0136-01-D008 | Bunker S7122 | SB-4 | Soil Cuttings | 75% | 10/17/94 | Potential contam. | - | 9/17/96 | Solidification | Solidification(4) |
| | 0136-01-D009 | Bunker S7122 | MW-1 | Purge Water | 50% | 10/22/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-01-D010 | Bunker S7122 | MW-2 | Purge Water | 50% | 10/22/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-01-D011 | Bunker S7122 | MW-3 | Purge Water | 50% | 10/22/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-01-D012 | Bunker S7122 | MW-4 | Purge Water | 50% | 10/24/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-01-D013 | Bunker S7122 | MW-1 thru 4 | Decom Water | 75% | 10/17 - 10/24/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-01-D014 | Bunker S7122 | MW-1 | Purge Water | 50% | 11/14/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-01-D015 | Bunker S7122 | MW-2 | Purge Water | 50% | 11/14/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-01-D016 | Bunker S7122 | MW-3 | Purge Water | 50% | 11/14/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-01-D017 | Bunker S7122 | MW-4 | Purge Water | 50% | 11/14/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-01-D018 | Bunker S7122 | MW-1 | Purge Water | 100% | 7/3/96 | Non-contam. | - | 9/17/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-01-D019 | Bunker S7122 | MW-2 | Purge Water | 100% | 7/3/96 | Non-contam. | - | 9/17/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-01-D020 | Bunker S7122 | MW-3 | Purge Water | 100% | 7/3/96 | Non-contam. | - | 9/17/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-01-D021 | Bunker S7122 | MW-4 | Purge Water | 100% | 7/3/96 | Non-contam. | - | 9/17/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-01-D022 | Bunker S7122 | MW-5 | Purge Water | 100% | 7/3/96 | Non-contam. | - | 9/17/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-01-D023 | - | RI Investigation | Decom Water | 100% | 6/20-7/03/96 | Non-contam. | - | Contents released during drum relocation | | |
| | 0136-01-D024 | Bunker S7122 | RI Investigation | Decom Water | 30% | 6/20-7/03/96 | Non-contam. | - | 9/17/96 | Reinfiltrated | Reinfiltrated(2) |
| ***Runway Landfill-Site 02*** | | | | | | | | | | | |
| | 0136-02-D001 | Bunker S7122 | MW-1 & MW-2 | PPE | 100% | 10/12/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |
| | 0136-02-D002 | Bunker S7122 | MW-3 | PPE | 100% | 10/12/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |
| | 0136-02-D003 | Bunker S7122 | MW-4 | PPE | 100% | 10/13/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |
| | 0136-02-D004 | Bunker S7122 | MW-5 | PPE | 100% | 10/14/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |
| | 0136-02-D005 | Bunker S7122 | MW-6 | PPE | 100% | 10/14/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |
| | 0136-02-D006 | Bunker S7122 | SB-1 | Soil Cuttings | 90% | 10/11/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-02-D007 | Bunker S7122 | SB-2 | Soil Cuttings | 40% | 10/12/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-02-D008 | Bunker S7122 | SB-3 | Soil Cuttings | 40% | 10/12/94 | Potential contam. | - | 9/17/96 | Landfill | Reintroduced(3) |
| | 0136-02-D009 | Bunker S7122 | SB-2 | Soil Cuttings | 100% | 10/12/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-02-D010 | Bunker S7122 | SB-3 | Soil Cuttings | 100% | 10/12/94 | Potential contam. | - | 9/17/96 | Landfill | Reintroduced(3) |
| | 0136-02-D011 | Bunker S7122 | SB-4 | Soil Cuttings | 100% | 10/13/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-02-D012 | Bunker S7122 | SB-5 | Soil Cuttings | 100% | 10/14/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |

IDW DRUM INVENTORY
NAF MIDWAY SI/RI
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| SITE | DRUM NUMBER | DRUM STORAGE LOCATION | IDW SOURCE(S) | IDW TYPE | WASTE VOLUME (% FULL) | IDW GENERATION DATE | STATUS OF DRUM CONTENTS | EXPECTED DISPOSAL DATE | ACTUAL DISPOSAL DATE | EXPECTED DISPOSAL METHOD | ACTUAL DISPOSAL METHOD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0136-02-D013 | Bunker S7122 | SB-6 | Soil Cuttings | 100% | 10/14/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-02-D014 | Bunker S7122 | SB-6 | Soil Cuttings | 100% | 10/14/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-02-D015 | Bunker S7122 | MW-1 | Purge Water | 60% | 10/11/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-02-D016 | Bunker S7122 | MW-2 | Purge Water | 60% | 10/12/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-02-D017 | Bunker S7122 | MW-3 | Purge Water | 60% | 10/12/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-02-D018 | Bunker S7122 | MW-4 | Purge Water | 60% | 10/13/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-02-D019 | Bunker S7122 | MW-5 | Purge Water | 60% | 10/14/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-02-D020 | Bunker S7122 | MW-6 | Purge Water | 60% | 10/14/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-02-D021 | Bunker S7122 | MW-1 thru 6 | Decon Water | 80% | 10/11 - 10/14/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-02-D022 | Bunker S7122 | MW-1 | Purge Water | 75% | 11/14/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-02-D023 | Bunker S7122 | MW-2 | Purge Water | 75% | 11/14/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-02-D024 | Bunker S7122 | MW-3 | Purge Water | 75% | 11/14/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-02-D025 | Bunker S7122 | MW-4 | Purge Water | 75% | 11/14/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-02-D026 | Bunker S7122 | MW-5 | Purge Water | 75% | 11/14/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-02-D027 | Bunker S7122 | MW-6 | Purge Water | 75% | 11/14/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-02-D028 | Bunker S7122 | MW-1-6 | Decon Water | 40% | 11/14/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| ***Area 401-Site 05*** | | | | | | | | | | | |
| | 0136-05-D001 | Bunker S7122 | SB-1 | Soil Cuttings | 100% | 11/11/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-05-D002 | Bunker S7122 | SB-2 | Soil Cuttings | 100% | 11/12/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-05-D003 | Bunker S7122 | SB-3 | Soil Cuttings | 100% | 11/12/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-05-D004 | Bunker S7122 | MW-1 | Purge Water | 90% | 11/11/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-05-D005 | Bunker S7122 | MW-2 | Purge Water | 90% | 11/12/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-05-D006 | Bunker S7122 | MW-3 | Purge Water | 90% | 11/12/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-05-D007 | Bunker S7122 | MW-2,3 | PPE | 100% | 11/12/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |
| | 0136-05-D008 | Bunker S7122 | MW-1 | PPE | 100% | 11/11/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |
| | 0136-05-D009 | Bunker S7122 | SB-2 | Soil Cuttings | 50% | 11/12/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-05-D010 | Bunker S7122 | SB-3 | Soil Cuttings | 50% | 11/12/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-05-D011 | Bunker S7122 | MW-1 | Purge Water | 90% | 11/16/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-05-D012 | Bunker S7122 | MW-2 | Purge Water | 90% | 11/16/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-05-D013 | Bunker S7122 | MW-3 | Purge Water | 90% | 11/16/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| ***Bldg. 144-Site 08*** | | | | | | | | | | | |
| | 0136-08-D001 | Bunker S7122 | SB-1 | Soil Cuttings | 90% | 11/9/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-08-D002 | Bunker S7122 | SB-2 | Soil Cuttings | 90% | 11/9/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-08-D003 | Bunker S7122 | SB-3 | Soil Cuttings | 100% | 11/10/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-08-D004 | Bunker S7122 | MW-1 | Purge Water | 90% | 11/9/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-08-D005 | Bunker S7122 | MW-2 | Purge Water | 90% | 11/9/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-08-D006 | Bunker S7122 | MW-3 | Purge Water | 90% | 11/10/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-08-D007 | Bunker S7122 | MW-1,2,3 | PPE | 100% | 11/9-11/10/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |

IDW DRUM INVENTORY
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| SITE | DRUM NUMBER | DRUM STORAGE LOCATION | IDW SOURCE(S) | IDW TYPE | WASTE VOLUME (% FULL) | IDW GENERATION DATE | STATUS OF DRUM CONTENTS | EXPECTED DISPOSAL DATE | ACTUAL DISPOSAL DATE | EXPECTED DISPOSAL METHOD | ACTUAL DISPOSAL METHOD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0136-08-D008 | Bunker S7122 | MW-1 | Purge Water | 50% | 11/15/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-08-D009 | Bunker S7122 | MW-2 | Purge Water | 50% | 11/15/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-08-D010 | Bunker S7122 | MW-3 | Purge Water | 50% | 11/15/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-08-D011 | Bunker S7122 | SB-3 | Soil Cuttings | 50% | 11/10/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-08-D012 | Bunker S7122 | SB-2 | Soil Cuttings | 100% | 11/9/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-08-D013 | Bunker S7122 | MW-1,2,3 | PPE | 100% | 11/10/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |
| | 0136-08-D014 | Bunker S7122 | SB-1 | Soil Cuttings | 90% | 11/9/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| ***NE Disposal Area-Site 10*** | | | | | | | | | | | |
| | 0136-10-D001 | Bunker S7122 | SB-1 | Soil Cuttings | 100% | 10/25/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-10-D002 | Bunker S7122 | SB-2 | Soil Cuttings | 100% | 10/26/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-10-D003 | Bunker S7122 | SB-3 | Soil Cuttings | 100% | 10/25/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-10-D004 | Bunker S7122 | MW-1 | Purge Water | 50% | 10/25/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-10-D005 | Bunker S7122 | MW-2 | Purge Water | 50% | 10/26/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-10-D006 | Bunker S7122 | MW-3 | Purge Water | 70% | 10/25/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-10-D007 | Bunker S7122 | MW-1 thru MW-3 | PPE | 100% | 10/25 - 10/26/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |
| | 0136-10-D008 | Bunker S7122 | MW-1 thru MW-3 | Decon Water | 100% | 10/25 - 10/26/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-10-D009 | Bunker S7122 | MW-1 | Purge Water | 90% | 11/5/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-10-D010 | Bunker S7122 | MW-2 | Purge Water | 90% | 11/5/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-10-D011 | Bunker S7122 | MW-3 | Purge Water | 90% | 11/5/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-10-D012 | Bunker S7122 | MW-1 to MW-3 | PPE | 100% | 10/25-11/5/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |
| ***SW Disposal Area-Site 11*** | | | | | | | | | | | |
| | 0136-11-D001 | Bunker S7122 | SB-1 | Soil Cuttings | 90% | 11/1/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-11-D002 | Bunker S7122 | SB-2 | Soil Cuttings | 90% | 11/1/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-11-D003 | Bunker S7122 | SB-3 | Soil Cuttings | 90% | 11/1/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-11-D004 | Bunker S7122 | MW-1 | Purge Water | 90% | 11/1/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-11-D005 | Bunker S7122 | MW-2 | Purge Water | 90% | 11/1/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-11-D006 | Bunker S7122 | MW-3 | Purge Water | 90% | 11/2/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-11-D007 | Bunker S7122 | MW-1 to 3 | PPE | 100% | 11/1-11/2/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |
| | 0136-11-D008 | Bunker S7122 | MW-1 to MW-3 | Decon Water | 100% | 11/1-11/2/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-11-D009 | Bunker S7122 | MW-1 | Purge Water | 90% | 11/16/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-11-D010 | Bunker S7122 | MW-2 | Purge Water | 90% | 11/7/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-11-D011 | Bunker S7122 | MW-3 | Purge Water | 90% | 11/16/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-11-D012 | Bunker S7122 | MW-1-3 | PPE | 100% | 11/1-11/15/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |
| ***SE Landfill Pit-Site 54*** | | | | | | | | | | | |
| | 0136-54-D001 | Bunker S7122 | SB-1 | Soil Cuttings | 100% | 10/31/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-54-D002 | Bunker S7122 | SB-2 | Soil Cuttings | 100% | 10/31/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-54-D003 | Bunker S7122 | SB-3 | Soil Cuttings | 100% | 10/26/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-54-D004 | Bunker S7122 | MW-1 | Purge Water | 100% | 10/31/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |

IDW DRUM INVENTORY
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| SITE | DRUM NUMBER | DRUM STORAGE LOCATION | IDW SOURCE(S) | IDW TYPE | WASTE VOLUME (% FULL) | IDW GENERATION DATE | STATUS OF DRUM CONTENTS | EXPECTED DISPOSAL DATE | ACTUAL DISPOSAL DATE | EXPECTED DISPOSAL METHOD | ACTUAL DISPOSAL METHOD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0136-54-D005 | Bunker S7122 | MW-2 | Purge Water | 60% | 10/31/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-54-D006 | Bunker S7122 | MW-3 | Purge Water | 60% | 10/26/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-54-D007 | Bunker S7122 | MW-1 to MW-3 | PPE | 100% | 10/26-10/27/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |
| | 0136-54-D008 | Bunker S7122 | MW-1 to MW-3 | Decon Water | 90% | 10/26-10/31/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-54-D009 | Bunker S7122 | MW-1 | Purge Water | 90% | 11/5/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-54-D010 | Bunker S7122 | MW-2 | Purge Water | 90% | 11/5/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-54-D011 | Bunker S7122 | MW-3 | Purge Water | 90% | 11/5/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| ***Antenna Field-Site 100 (AF)*** | | | | | | | | | | | |
| | 0136-AF-D001 | Bunker S7122 | SB-1 | Soil Cuttings | 100% | 11/2/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-AF-D002 | Bunker S7122 | SB-2 | Soil Cuttings | 100% | 11/3/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-AF-D003 | Bunker S7122 | SB-3 | Soil Cuttings | 100% | 11/3/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-AF-D004 | Bunker S7122 | MW-1 | Purge Water | 90% | 11/4/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-AF-D005 | Bunker S7122 | MW-2 | Purge Water | 90% | 11/3/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-AF-D006 | Bunker S7122 | MW-3 | Purge Water | 100% | 11/3/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-AF-D007 | Bunker S7122 | MW-1 to MW-3 | Decon Water | 90% | 11/2-11/4/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-AF-D008 | Bunker S7122 | MW-1 | Purge Water | 90% | 11/7/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-AF-D009 | Bunker S7122 | MW-2 | Purge Water | 90% | 11/7/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-AF-D010 | Bunker S7122 | MW-3 | Purge Water | 90% | 11/7/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| ***Superblock-Site SB*** | | | | | | | | | | | |
| | 0136-SB-D001 | Bunker S7122 | SB-1 | Soil Cuttings | 100% | 11/10/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-SB-D002 | Bunker S7122 | SB-2 | Soil Cuttings | 100% | 11/10/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-SB-D003 | Bunker S7122 | SB-3 | Soil Cuttings | 100% | 11/11/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-SB-D004 | Bunker S7122 | SB-4 | Soil Cuttings | 100% | 11/11/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-SB-D005 | Bunker S7122 | SB-5 | Soil Cuttings | 100% | 11/11/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-SB-D006 | Bunker S7122 | SB-2 | Soil Cuttings | 50% | 11/10/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-SB-D007 | Bunker S7122 | SB-3 | Soil Cuttings | 50% | 11/11/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-SB-D008 | Bunker S7122 | SB-4 | Soil Cuttings | 50% | 11/11/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-SB-D009 | Bunker S7122 | SB-5 | Soil Cuttings | 50% | 11/11/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| | 0136-SB-D010 | Bunker S7122 | MW-1 | Purge Water | 90% | 11/10/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-SB-D011 | Bunker S7122 | MW-2 | Purge Water | 90% | 11/10/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-SB-D012 | Bunker S7122 | MW-3 | Purge Water | 90% | 11/11/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-SB-D013 | Bunker S7122 | MW-4 | Purge Water | 90% | 11/11/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-SB-D014 | Bunker S7122 | MW-5 | Purge Water | 90% | 11/11/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-SB-D015 | Bunker S7122 | MW-2 | PPE | 100% | 11/10/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |
| | 0136-SB-D016 | Bunker S7122 | MW-3,4,5 | PPE | 100% | 11/11/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |
| | 0136-SB-D017 | Bunker S7122 | MW-1 | Purge Water | 70% | 11/14/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-SB-D018 | Bunker S7122 | MW-2 | Purge Water | 50% | 11/14/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-SB-D019 | Bunker S7122 | MW-3 | Purge Water | 50% | 11/14/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |

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| SITE | DRUM NUMBER | DRUM STORAGE LOCATION | IDW SOURCE(S) | IDW TYPE | WASTE VOLUME (% FULL) | IDW GENERATION DATE | STATUS OF DRUM CONTENTS | EXPECTED DISPOSAL DATE | ACTUAL DISPOSAL DATE | EXPECTED DISPOSAL METHOD | ACTUAL DISPOSAL METHOD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0136-SB-D020 | Bunker S7122 | MW-4 | Purge Water | 50% | 11/15/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-SB-D021 | Bunker S7122 | MW-5 | Purge Water | 50% | 11/15/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-SB-D022 | Bunker S7122 | MW-5 | Soil Cuttings | 40% | 11/10/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| ***Direct Push Sampling IDW-Multiple Sites*** | | | | | | | | | | | |
| | 0136-DP-D001 | Bunker S7122 | Multiple Sites | PPE | 100% | 10/5/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |
| | 0136-DP-D002 | Bunker S7122 | Multiple Sites | PPE | 100% | 10/6/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |
| | 0136-DP-D003 | Bunker S7122 | Multiple Sites | PPE | 100% | 10/10/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |
| | 0136-DP-D004 | Bunker S7122 | Multiple Sites | PPE | 100% | 10/17/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |
| | 0136-DP-D005 | Bunker S7122 | Multiple Sites | Decon Water | 75% | 10/5/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-DP-D006 | Bunker S7122 | Multiple Sites | Decon Water | 100% | 10/8/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-DP-D007 | Bunker S7122 | Multiple Sites | Decon Water | 75% | 10/17/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| ***Marine Sampling IDW-Mutiple Sites*** | | | | | | | | | | | |
| | 0136-MI-D001 | Bunker S7122 | All Sites | PPE | 100% | 9/15 - 11/10/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |
| | 0136-MI-D002 | Bunker S7122 | All Sites | Al. Core Tubes | 100% | 9/15 - 11/10/94 | Non-contam. | - | 7/2/96 | Landfill | Landfill |
| | 0136-MI-D003 | Bunker S7122 | All Sites | PPE | 100% | 9/15 - 11/10/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |
| | 0136-MI-D004 | Bunker S7122 | Sand Is. | Decon Water | 100% | 9/15 - 11/10/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-MI-D005 | Bunker S7122 | Eastern Is. | Decon Water | 20% | 9/15 - 11/10/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-MI-D006 | Bunker S7122 | All Sites | Sed./Water | 50% | 9/15 - 11/10/94 | Non-contam. | - | 7/2/96 | Reintroduced | Reintroduced(3) |
| ***PCB Wipe Sampling IDW-Multiple Sites*** | | | | | | | | | | | |
| | 0136-WW-D001 | Bunker S7122 | All PCB Wipe Site | Decon Water | 30% | 11/3 - 11/10/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-WW-D002 | Bunker S7122 | All PCB Wipe Site | PPE | 50% | 11/3 - 11/10/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |
| ***Eastern Island Decontamination Basin-Mutiple Eastern Island Sites*** | | | | | | | | | | | |
| | 0136-EI-D001 | Bunker S7122 | All Eastern I. Sites | PPE | 100% | 11/7/94 | Non-contam. | - | 7/3/96 | Incineration | Incineration(1) |
| ***Sand Island Decontamination Basin-Mutiple Sand Island Sites*** | | | | | | | | | | | |
| | 0136-SI-D001 | Bunker S7122 | All Sand Is. Sites | Grout | 75% | 10/1 - 11/10/94 | Non-contam. | - | 7/2/96 | Landfill | Reintroduced(3) |
| | 0136-SI-D002 | Bunker S7122 | All Sand Is. Sites | Decon Water | 80% | 10/1 - 11/10/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-SI-D003 | Bunker S7122 | All Sand Is. Sites | Decon Water | 90% | 10/1 - 11/10/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-SI-D004 | Bunker S7122 | All Sand Is. Sites | Decon Water | 90% | 10/1 - 11/10/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| | 0136-SI-D005 | Bunker S7122 | All Sand Is. Sites | Purge Water | 90% | 10/1 - 11/10/94 | Non-contam. | - | 7/2/96 | Reinfiltrated | Reinfiltrated(2) |
| ***Archived Onsite Lab Samples-Multiple Sites*** | | | | | | | | | | | |
| | 0136-BB-D001 | Bunker S7122 | All Sites | Soil and Water | 100% | 9/15 - 10/15/94 | Non-contam. | - | 12/15/96 | Reintroduced | Reintroduced(3) |
| | 0136-BB-D002 | Bunker S7122 | All Sites | Soil and Water | 100% | 9/15 - 10/15/95 | Non-contam. | - | 1/16/96 | Reintroduced | Reintroduced(3) |

Notes: Empty drums crushed and diposed in the New Bulky Waste Landfill on Sand Island
(1) Incineration = Contents incinerated at Sand Island Municipal Landfill
(2) Reinfiltrated = Contents reinfiltrated adjacent to Bunker S7122
(3) Reintroduced = Contents spread on surface adjacent to Bunker S7122
(4) Solidification = Soil stabilized/solidified and placed in CAMU in the New Bulky Waste Landfill

# Appendix D

# APPENDIX D - CEIMIC LABORATORY COMPLETE ANALYTICAL DATA - DETECTS & NON-DETECTS

Appendix D is comprised of summary tables of the analytical data received from CEIMIC Laboratory in San Diego, California. The data tables are structured with the samples in columns and the chemical analytes in rows. Analytes that are detected are shown in boldface type and italicized. The Lab Qualification codes are provided by the laboratory, while the Rev Qualification and Qualification Codes are added during Data Validation. Explanation of these codes follows:

## DATA QUALIFIER DEFINITIONS

| Lab/Rev Qual Code | Organics |
|---|---|
| U | The analyte was analyzed for, but was not detected above the reported sample quantitation limit. |
| J | The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample. |
| N | The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification." |
| NJ | The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. |
| UJ | The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample. |
| R | The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified. |

# QUALIFICATION CODE DEFINITIONS

| Qual Code | Organics |
|---|---|
| H | Holding times were exceeded. |
| S | Surrogate recovery was outside QC limits. |
| C | Calibration percent relative standard deviation or percent difference was noncompliant. |
| R | Calibration relative response factor was <0.05. |
| B | Presumed contamination from preparation (method) blank. |
| L | Not applicable. |
| Q | MS/MSD recovery was poor or RPD high. |
| E | Not applicable. |
| I | Internal standard performance was unsatisfactory. |
| A | Not applicable. |
| M | Tuning bromofluorobenzene or decafluorotriphenylphosphine was noncompliant. |
| T | Presumed contamination from trip blank. |
| + | False positive – reported compound was not present. |
| - | False negative – compound was present but not reported. |
| F | Presumed contamination from field blank or equipment rinsate. |
| $ | Reported result or other information was incorrect. |
| ? | Tentatively identified compound identity or reported retention time has been changed. |
| D | The analysis with this flag should not be used because another more technically sound analysis is available. |
| P | Instrument performance for pesticides was poor. |
| *# | Unusual problems found with the data that have been described the data validation report. The number following the asterisk (*) will indicate the subsection of the report where a description of the problem can be found. |

# Analytical Results Summary for

# Soil, Bulky Waste Landfill



| EPA NO | MC100 | | | | MC101 | | | | MC102 | | | | MC103 | | | | MC104 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS01S01 | | | | M01TS01S02 | | | | M01TS02S01 | | | | M01TS02S02 | | | | M01TS03S01 | | | |
| Date Sampled | 6/24/96 | | | | 6/24/96 | | | | 6/24/96 | | | | 6/24/96 | | | | 6/24/96 | | | |
| Depth | 3.0 | | | | 3.0 | | | | 3.0 | | | | 4.0 | | | | 3.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PHENOL | 740 | U | U | | 720 | U | UJ | C | 350 | U | UJ | C | 370 | U | UJ | C | 720 | U | U | |
| BIS(2-CHLOROETHYL)ETHER | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| 2-CHLOROPHENOL | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| 1,3-DICHLOROBENZENE | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| 1,4-DICHLOROBENZENE | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| 1,2-DICHLOROBENZENE | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| 2-METHYLPHENOL | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| 2,2'OXYBIS(1-CHLOROPROPAN | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| 4-METHYLPHENOL | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| N-NITROSO-DI-N-PROPYLAMIN | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| HEXACHLOROETHANE | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| NITROBENZENE | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| ISOPHORONE | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| 2-NITROPHENOL | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| 2,4-DIMETHYLPHENOL | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| BIS(2-CHLOROETHOXY)METHA | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| 2,4-DICHLOROPHENOL | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| 1,2,4-TRICHLOROBENZENE | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| NAPHTHALENE | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| 4-CHLOROANILINE | 740 | U | UJ | C | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| HEXACHLOROBUTADIENE | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| 4-CHLORO-3-METHYLPHENOL | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| 2-METHYLNAPHTHALENE | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| HEXACHLOROCYCLOPENTADI | 740 | U | U | | 720 | U | UJ | C | 350 | U | UJ | C | 370 | U | UJ | C | 720 | U | U | |
| 2,4,6-TRICHLOROPHENOL | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC100 | | | | MC101 | | | | MC102 | | | | MC103 | | | | MC104 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS01S01 | | | | M01TS01S02 | | | | M01TS02S01 | | | | M01TS02S02 | | | | M01TS03S01 | | | |
| Date Sampled | 6/24/96 | | | | 6/24/96 | | | | 6/24/96 | | | | 6/24/96 | | | | 6/24/96 | | | |
| Depth | 3.0 | | | | 3.0 | | | | 3.0 | | | | 4.0 | | | | 3.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| 2,4,5-TRICHLOROPHENOL | 1,800 | U | U | | 1,800 | U | U | | 890 | U | U | | 920 | U | U | | 1,800 | U | U | |
| 2-CHLORONAPHTHALENE | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| 2-NITROANILINE | 1,800 | U | U | | 1,800 | U | UJ | C | 890 | U | UJ | C | 920 | U | UJ | C | 1,800 | U | U | |
| DIMETHYLPHTHALATE | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| ACENAPHTHYLENE | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | ***310*** | ***J*** | ***J*** | |
| 2,6-DINITROTOLUENE | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| 3-NITROANILINE | 1,800 | U | U | | 1,800 | U | U | | 890 | U | U | | 920 | U | U | | 1,800 | U | UJ | C |
| ACENAPHTHENE | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | ***2,100*** | | | |
| 2,4-DINITROPHENOL | 1,800 | U | U | | 1,800 | U | UJ | C | 890 | U | UJ | C | 920 | U | UJ | C | 1,800 | U | UJ | C |
| 4-NITROPHENOL | 1,800 | U | U | | 1,800 | U | U | | 890 | U | U | | 920 | U | U | | 1,800 | U | U | |
| DIBENZOFURAN | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | ***420*** | ***J*** | ***J*** | |
| 2,4-DINITROTOLUENE | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| DIETHYLPHTHALATE | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| 4-CHLOROPHENYL-PHENYLET | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| FLUORENE | 740 | U | U | | 720 | U | UJ | C | 350 | U | UJ | C | 370 | U | UJ | C | ***1,400*** | | ***J*** | ***C*** |
| 4-NITROANILINE | 1,800 | U | U | | 1,800 | U | U | | 890 | U | U | | 920 | U | U | | 1,800 | U | U | |
| 4,6-DINITRO-2-METHYLPHENO | 1,800 | U | U | | 1,800 | U | U | | 890 | U | U | | 920 | U | U | | 1,800 | U | U | |
| N-NITROSODIPHENYLAMINE (1 | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| 4-BROMOPHENYL-PHENYLETH | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| HEXACHLOROBENZENE | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| PENTACHLOROPHENOL | 1,800 | U | U | | 1,800 | U | U | | 890 | U | U | | 920 | U | U | | 1,800 | U | U | |
| PHENANTHRENE | 740 | U | U | | ***420*** | ***J*** | ***J*** | | 350 | U | U | | ***180*** | ***J*** | ***J*** | | ***13,000*** | | | |
| ANTHRACENE | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | ***4,000*** | | | |
| CARBAZOLE | 740 | U | U | | 720 | U | UJ | C | 350 | U | UJ | C | 370 | U | UJ | C | ***2,300*** | | | |
| DI-N-BUTYLPHTHALATE | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC100 | | | | MC101 | | | | MC102 | | | | MC103 | | | | MC104 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS01S01 | | | | M01TS01S02 | | | | M01TS02S01 | | | | M01TS02S02 | | | | M01TS03S01 | | | |
| Date Sampled | 6/24/96 | | | | 6/24/96 | | | | 6/24/96 | | | | 6/24/96 | | | | 6/24/96 | | | |
| Depth | 3.0 | | | | 3.0 | | | | 3.0 | | | | 4.0 | | | | 3.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| FLUORANTHENE | ***220*** | ***J*** | ***J*** | | ***1,800*** | | | | ***420*** | | | | ***470*** | | | | ***19,000*** | | | |
| PYRENE | ***230*** | ***J*** | ***J*** | | ***2,100*** | | | | ***490*** | | | | ***520*** | | | | ***19,000*** | | | |
| BUTYLBENZYLPHTHALATE | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | ***4,500*** | | | |
| 3,3'-DICHLOROBENZIDINE | 740 | U | UJ | C | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | UJ | C |
| BENZO(A)ANTHRACENE | 740 | U | U | | ***1,100*** | | | | ***280*** | ***J*** | ***J*** | | ***290*** | ***J*** | ***J*** | | ***11,000*** | | | |
| CHRYSENE | ***150*** | ***J*** | ***J*** | | ***1,200*** | | | | ***360*** | | | | ***350*** | ***J*** | ***J*** | | ***10,000*** | | | |
| BIS(2-ETHYLHEXYL)PHTHALA | 740 | JB | U | B | 830 | B | UJ | B | 840 | B | UJ | B | 890 | B | UJ | B | 1,300 | B | UJ | B |
| DI-N-OCTYL PHTHALATE | 740 | U | U | | 720 | U | UJ | C | 350 | U | UJ | C | 370 | U | UJ | C | 720 | U | U | |
| BENZO(B)FLUORANTHENE | ***150*** | ***J*** | ***J*** | | ***770*** | | ***J*** | ***C*** | ***240*** | ***J*** | ***J*** | ***C*** | ***250*** | ***J*** | ***J*** | ***C*** | ***8,500*** | | | |
| BENZO(K)FLUORANTHENE | ***150*** | ***J*** | ***J*** | | ***740*** | | | | ***300*** | ***J*** | ***J*** | | ***330*** | ***J*** | ***J*** | | ***6,500*** | | | |
| BENZO(A)PYRENE | 740 | U | U | | ***820*** | | | | 350 | U | U | | 370 | U | U | | ***8,600*** | | | |
| INDENO(1,2,3-CD)PYRENE | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | ***2,300*** | | | |
| DIBENZ(A,H)ANTHRACENE | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | ***1,300*** | | | |
| BENZO(G,H,I)PERYLENE | 740 | U | U | | 720 | U | U | | 350 | U | U | | 370 | U | U | | 720 | U | U | |
| ***OLM03.1P - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| 4,4'-DDD | ***380*** | ***P*** | ***NJ*** | ****10,*11*** | 350 | U | U | | ***34.0*** | ***PC*** | ***J*** | ****11*** | 180 | U | U | | ***400*** | ***P*** | ***NJ*** | ****10,*11*** |
| 4,4'-DDE | ***340*** | ***P*** | | | ***480*** | ***P*** | ***J*** | ****11*** | ***48.0*** | ***C*** | | | 180 | U | U | | ***460*** | | | |
| 4,4'-DDT | ***280*** | ***P*** | ***NJ*** | ****10,*11*** | 350 | U | U | | ***43.0*** | ***PC*** | ***J*** | ****11*** | 180 | U | U | | ***890*** | ***P*** | ***NJ*** | ****10,*11*** |
| ALDRIN | 95.0 | U | U | | 180 | U | U | | 9.0 | U | U | | 93.0 | U | U | | 180 | U | U | |
| ALPHA-BHC | 95.0 | U | U | | 180 | U | U | | 9.0 | U | U | | 93.0 | U | U | | 180 | U | U | |
| ALPHA-CHLORDANE | 95.0 | U | U | | 180 | U | U | | 9.0 | U | U | | 93.0 | U | U | | 180 | U | U | |
| AROCLOR-1016 | 1,800 | U | U | | 3,500 | U | U | | 170 | U | U | | 1,800 | U | U | | 3,600 | U | U | |
| AROCLOR-1221 | 3,700 | U | U | | 7,200 | U | U | | 350 | U | U | | 3,700 | U | U | | 7,300 | U | U | |
| AROCLOR-1232 | 1,800 | U | U | | 3,500 | U | U | | 170 | U | U | | 1,800 | U | U | | 3,600 | U | U | |
| AROCLOR-1242 | 1,800 | U | U | | 3,500 | U | U | | 170 | U | U | | 1,800 | U | U | | 3,600 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC100 | | | | MC101 | | | | MC102 | | | | MC103 | | | | MC104 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS01S01 | | | | M01TS01S02 | | | | M01TS02S01 | | | | M01TS02S02 | | | | M01TS03S01 | | | |
| Date Sampled | 6/24/96 | | | | 6/24/96 | | | | 6/24/96 | | | | 6/24/96 | | | | 6/24/96 | | | |
| Depth | 3.0 | | | | 3.0 | | | | 3.0 | | | | 4.0 | | | | 3.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1P - Pesticides (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| AROCLOR-1248 | 1,800 | U | U | | 3,500 | U | U | | 170 | U | U | | 1,800 | U | U | | 3,600 | U | U | |
| AROCLOR-1254 | 1,800 | U | U | | 3,500 | U | U | | 170 | U | U | | 1,800 | U | U | | 3,600 | U | U | |
| AROCLOR-1260 | ***6,900*** | ***P*** | | | ***4,700*** | ***P*** | ***J*** | ****11*** | ***270*** | ***P*** | ***J*** | ****11*** | ***2,100*** | ***J*** | | | ***9,500*** | | | |
| BETA-BHC | 95.0 | U | UJ | C | 180 | U | UJ | C | 9.0 | U | UJ | C | 93.0 | U | UJ | C | 180 | U | UJ | C |
| DELTA-BHC | 95.0 | U | U | | 180 | U | U | | 9.0 | U | U | | 93.0 | U | U | | 180 | U | U | |
| DIELDRIN | 180 | U | U | | 350 | U | U | | 17.0 | U | U | | 180 | U | U | | 360 | U | U | |
| ENDOSULFAN I | 95.0 | U | U | | 180 | U | U | | 9.0 | U | U | | 93.0 | U | U | | 180 | U | U | |
| ENDOSULFAN II | ***230*** | ***P*** | ***NJ*** | ****10,*11*** | 350 | U | U | | 17.0 | U | U | | 180 | U | U | | 360 | U | U | |
| ENDOSULFAN SULFATE | 180 | U | U | | 350 | U | U | | 17.0 | U | U | | 180 | U | U | | 360 | U | U | |
| ENDRIN | 180 | U | U | | 350 | U | U | | 17.0 | U | U | | 180 | U | U | | 360 | U | U | |
| ENDRIN ALDEHYDE | ***340*** | | ***NJ*** | ****10,*11*** | 350 | U | U | | 17.0 | U | U | | 180 | U | U | | 360 | U | U | |
| ENDRIN KETONE | 180 | U | U | | 350 | U | U | | 17.0 | U | U | | 180 | U | U | | 360 | U | U | |
| GAMMA-BHC (LINDANE) | 95.0 | U | U | | 180 | U | U | | 9.0 | U | U | | 93.0 | U | U | | 180 | U | U | |
| GAMMA-CHLORDANE | 95.0 | U | U | | 180 | U | U | | 9.0 | U | U | | 93.0 | U | U | | 180 | U | U | |
| HEPTACHLOR | 95.0 | U | U | | 180 | U | U | | 9.0 | U | U | | 93.0 | U | U | | 180 | U | U | |
| HEPTACHLOR EPOXIDE | 95.0 | U | U | | 180 | U | U | | 9.0 | U | U | | 93.0 | U | U | | 180 | U | U | |
| METHOXYCHLOR | 950 | U | U | | 1,800 | U | U | | 90.0 | U | U | | 930 | U | U | | 1,800 | U | U | |
| TOXAPHENE | 9,500 | U | U | | 18,000 | U | U | | 900 | U | U | | 9,300 | U | U | | 18,000 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC105 | | | | MC106 | | | | MC107 | | | | MC108 | | | | MC109 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS03S02 | | | | M01TS04S01 | | | | M01TS04S02 | | | | M01TS05S01 | | | | M01TS05D01 | | | |
| Date Sampled | 6/24/96 | | | | 6/24/96 | | | | 6/24/96 | | | | 6/24/96 | | | | 6/24/96 | | | |
| Depth | 4.0 | | | | 4.0 | | | | 3.5 | | | | 4.0 | | | | 4.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PHENOL | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| BIS(2-CHLOROETHYL)ETHER | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| 2-CHLOROPHENOL | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| 1,3-DICHLOROBENZENE | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| 1,4-DICHLOROBENZENE | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| 1,2-DICHLOROBENZENE | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| 2-METHYLPHENOL | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| 2,2'OXYBIS(1-CHLOROPROPAN | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| 4-METHYLPHENOL | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| N-NITROSO-DI-N-PROPYLAMIN | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| HEXACHLOROETHANE | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| NITROBENZENE | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| ISOPHORONE | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| 2-NITROPHENOL | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| 2,4-DIMETHYLPHENOL | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| BIS(2-CHLOROETHOXY)METHA | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| 2,4-DICHLOROPHENOL | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| 1,2,4-TRICHLOROBENZENE | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| NAPHTHALENE | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| 4-CHLOROANILINE | 710 | U | U | | 360 | U | UJ | C | 340 | U | UJ | C | 340 | U | UJ | C | 380 | U | UJ | C |
| HEXACHLOROBUTADIENE | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| 4-CHLORO-3-METHYLPHENOL | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| 2-METHYLNAPHTHALENE | ***190*** | ***J*** | ***J*** | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| HEXACHLOROCYCLOPENTADI | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| 2,4,6-TRICHLOROPHENOL | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC105 | | | | MC106 | | | | MC107 | | | | MC108 | | | | MC109 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS03S02 | | | | M01TS04S01 | | | | M01TS04S02 | | | | M01TS05S01 | | | | M01TS05D01 | | | |
| Date Sampled | 6/24/96 | | | | 6/24/96 | | | | 6/24/96 | | | | 6/24/96 | | | | 6/24/96 | | | |
| Depth | 4.0 | | | | 4.0 | | | | 3.5 | | | | 4.0 | | | | 4.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| 2,4,5-TRICHLOROPHENOL | 1,800 | U | U | | 910 | U | U | | 860 | U | U | | 860 | U | U | | 940 | U | U | |
| 2-CHLORONAPHTHALENE | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| 2-NITROANILINE | 1,800 | U | U | | 910 | U | U | | 860 | U | U | | 860 | U | U | | 940 | U | U | |
| DIMETHYLPHTHALATE | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| ACENAPHTHYLENE | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| 2,6-DINITROTOLUENE | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| 3-NITROANILINE | 1,800 | U | UJ | C | 910 | U | U | | 860 | U | U | | 860 | U | U | | 940 | U | U | |
| ACENAPHTHENE | ***2,600*** | | | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| 2,4-DINITROPHENOL | 1,800 | U | UJ | C | 910 | U | U | | 860 | U | U | | 860 | U | U | | 940 | U | U | |
| 4-NITROPHENOL | 1,800 | U | U | | 910 | U | U | | 860 | U | U | | 860 | U | U | | 940 | U | U | |
| DIBENZOFURAN | ***890*** | | | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| 2,4-DINITROTOLUENE | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| DIETHYLPHTHALATE | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| 4-CHLOROPHENYL-PHENYLET | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| FLUORENE | ***1,900*** | | ***J*** | ***C*** | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| 4-NITROANILINE | 1,800 | U | U | | 910 | U | U | | 860 | U | U | | 860 | U | U | | 940 | U | U | |
| 4,6-DINITRO-2-METHYLPHENO | 1,800 | U | U | | 910 | U | U | | 860 | U | U | | 860 | U | U | | 940 | U | U | |
| N-NITROSODIPHENYLAMINE (1 | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| 4-BROMOPHENYL-PHENYLETH | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| HEXACHLOROBENZENE | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| PENTACHLOROPHENOL | 1,800 | U | U | | 910 | U | U | | 860 | U | U | | 860 | U | U | | 940 | U | U | |
| PHENANTHRENE | ***15,000*** | | | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| ANTHRACENE | ***4,100*** | | | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| CARBAZOLE | ***2,500*** | | | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| DI-N-BUTYLPHTHALATE | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC105 | | | | MC106 | | | | MC107 | | | | MC108 | | | | MC109 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS03S02 | | | | M01TS04S01 | | | | M01TS04S02 | | | | M01TS05S01 | | | | M01TS05D01 | | | |
| Date Sampled | 6/24/96 | | | | 6/24/96 | | | | 6/24/96 | | | | 6/24/96 | | | | 6/24/96 | | | |
| Depth | 4.0 | | | | 4.0 | | | | 3.5 | | | | 4.0 | | | | 4.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| FLUORANTHENE | ***16,000*** | | | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| PYRENE | ***15,000*** | | | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| BUTYLBENZYLPHTHALATE | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| 3,3'-DICHLOROBENZIDINE | 710 | U | UJ | C | 360 | U | UJ | C | 340 | U | UJ | C | 340 | U | UJ | C | 380 | U | UJ | C |
| BENZO(A)ANTHRACENE | ***8,000*** | | | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| CHRYSENE | ***7,700*** | | | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| BIS(2-ETHYLHEXYL)PHTHALA | 1,000 | B | UJ | B | 390 | B | UJ | B | 340 | B | UJ | B | 340 | JB | U | B | 380 | JB | U | B |
| DI-N-OCTYL PHTHALATE | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| BENZO(B)FLUORANTHENE | ***6,100*** | | | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| BENZO(K)FLUORANTHENE | ***3,900*** | | | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| BENZO(A)PYRENE | ***5,900*** | | | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| INDENO(1,2,3-CD)PYRENE | ***1,800*** | | | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| DIBENZ(A,H)ANTHRACENE | ***990*** | | | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| BENZO(G,H,I)PERYLENE | 710 | U | U | | 360 | U | U | | 340 | U | U | | 340 | U | U | | 380 | U | U | |
| ***OLM03.1P - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| 4,4'-DDD | 350 | U | U | | ***19.0*** | ***P*** | ***NJ*** | ****10,*11*** | 69.0 | U | U | | 170 | U | U | | 75.0 | U | U | |
| 4,4'-DDE | 350 | U | U | | ***280*** | ***C*** | | | ***160*** | ***C*** | | | ***260*** | ***P*** | ***J*** | ****11*** | ***350*** | | | |
| 4,4'-DDT | ***370*** | ***P*** | ***NJ*** | ****10,*11*** | ***260*** | ***C*** | | | ***98.0*** | ***PC*** | ***J*** | ****11*** | 170 | U | U | | 75.0 | U | U | |
| ALDRIN | 180 | U | U | | 9.2 | U | U | | 35.0 | U | U | | 89.0 | U | U | | ***60.0*** | | ***NJ*** | ****10,*1*** |
| ALPHA-BHC | 180 | U | U | | 9.2 | U | U | | 35.0 | U | U | | 89.0 | U | U | | 39.0 | U | U | |
| ALPHA-CHLORDANE | 180 | U | U | | 9.2 | U | U | | ***45.0*** | | ***NJ*** | ****10,*11*** | 89.0 | U | U | | ***94.0*** | | ***NJ*** | ****10,*1*** |
| AROCLOR-1016 | 3,500 | U | U | | 180 | U | U | | 690 | U | U | | 1,700 | U | U | | 750 | U | U | |
| AROCLOR-1221 | 7,100 | U | U | | 360 | U | U | | 1,400 | U | U | | 3,500 | U | U | | 1,500 | U | U | |
| AROCLOR-1232 | 3,500 | U | U | | 180 | U | U | | 690 | U | U | | 1,700 | U | U | | 750 | U | U | |
| AROCLOR-1242 | 3,500 | U | U | | 180 | U | U | | 690 | U | U | | 1,700 | U | U | | 750 | U | U | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems HGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC105 | | | | MC106 | | | | MC107 | | | | MC108 | | | | MC109 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS03S02 | | | | M01TS04S01 | | | | M01TS04S02 | | | | M01TS05S01 | | | | M01TS05D01 | | | |
| Date Sampled | 6/24/96 | | | | 6/24/96 | | | | 6/24/96 | | | | 6/24/96 | | | | 6/24/96 | | | |
| Depth | 4.0 | | | | 4.0 | | | | 3.5 | | | | 4.0 | | | | 4.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1P - Pesticides (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| AROCLOR-1248 | 3,500 | U | U | | 180 | U | U | | 690 | U | U | | 1,700 | U | U | | 750 | U | U | |
| AROCLOR-1254 | 3,500 | U | U | | 180 | U | U | | ***1,200*** | ***P*** | ***J*** | ****11*** | ***3,200*** | | | | ***3,500*** | ***P*** | ***J*** | ****11*** |
| AROCLOR-1260 | ***4,000*** | | | | 180 | U | U | | 690 | U | U | | 1,700 | U | U | | 750 | U | U | |
| BETA-BHC | 180 | U | UJ | C | 9.2 | U | UJ | C | 35.0 | U | UJ | C | 89.0 | U | UJ | C | 39.0 | U | UJ | C |
| DELTA-BHC | 180 | U | U | | 9.2 | U | U | | 35.0 | U | U | | 89.0 | U | U | | 39.0 | U | U | |
| DIELDRIN | 350 | U | U | | 18.0 | U | U | | 69.0 | U | U | | 170 | U | U | | ***130*** | ***P*** | ***NJ*** | ****10,*11*** |
| ENDOSULFAN I | 180 | U | U | | 9.2 | U | U | | 35.0 | U | U | | 89.0 | U | U | | 39.0 | U | U | |
| ENDOSULFAN II | 350 | U | U | | 18.0 | U | U | | 69.0 | U | U | | 170 | U | U | | 75.0 | U | U | |
| ENDOSULFAN SULFATE | 350 | U | U | | 18.0 | U | U | | 69.0 | U | U | | 170 | U | U | | 75.0 | U | U | |
| ENDRIN | 350 | U | U | | 18.0 | U | U | | 69.0 | U | U | | 170 | U | U | | 75.0 | U | U | |
| ENDRIN ALDEHYDE | 350 | U | U | | 18.0 | U | U | | 69.0 | U | U | | 170 | U | U | | 75.0 | U | U | |
| ENDRIN KETONE | 350 | U | U | | 18.0 | U | U | | 69.0 | U | U | | 170 | U | U | | 75.0 | U | U | |
| GAMMA-BHC (LINDANE) | 180 | U | U | | 9.2 | U | U | | 35.0 | U | U | | 89.0 | U | U | | 39.0 | U | U | |
| GAMMA-CHLORDANE | 180 | U | U | | 9.2 | U | U | | 35.0 | U | U | | 89.0 | U | U | | 39.0 | U | U | |
| HEPTACHLOR | 180 | U | U | | 9.2 | U | U | | 35.0 | U | U | | 89.0 | U | U | | 39.0 | U | U | |
| HEPTACHLOR EPOXIDE | 180 | U | U | | 9.2 | U | U | | 35.0 | U | U | | 89.0 | U | U | | ***47.0*** | ***P*** | ***NJ*** | ****10,*11*** |
| METHOXYCHLOR | 1,800 | U | U | | 92.0 | U | U | | 350 | U | U | | 890 | U | U | | 390 | U | U | |
| TOXAPHENE | 18,000 | U | U | | 920 | U | U | | 3,500 | U | U | | 8,900 | U | U | | 3,900 | U | U | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC110 | | | | MC111 | | | | MC112 | | | | MC113 | | | | MC114 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS05S02 | | | | M01TS06S01 | | | | M01TS06S02 | | | | M01TS07S01 | | | | M01TS07S02 | | | |
| Date Sampled | 6/24/96 | | | | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | |
| Depth | 2.5 | | | | 3.0 | | | | 4.0 | | | | 3.5 | | | | 6.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PHENOL | 370 | U | UJ | C | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| BIS(2-CHLOROETHYL)ETHER | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| 2-CHLOROPHENOL | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| 1,3-DICHLOROBENZENE | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| 1,4-DICHLOROBENZENE | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| 1,2-DICHLOROBENZENE | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| 2-METHYLPHENOL | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| 2,2'OXYBIS(1-CHLOROPROPAN | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| 4-METHYLPHENOL | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| N-NITROSO-DI-N-PROPYLAMIN | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| HEXACHLOROETHANE | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| NITROBENZENE | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| ISOPHORONE | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| 2-NITROPHENOL | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| 2,4-DIMETHYLPHENOL | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| BIS(2-CHLOROETHOXY)METHA | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| 2,4-DICHLOROPHENOL | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| 1,2,4-TRICHLOROBENZENE | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| NAPHTHALENE | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | ***790*** | | | |
| 4-CHLOROANILINE | 370 | U | U | | 360 | U | UJ | C | 370 | U | UJ | C | 360 | U | UJ | C | 360 | U | UJ | C |
| HEXACHLOROBUTADIENE | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| 4-CHLORO-3-METHYLPHENOL | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | ***160*** | ***J*** | ***J*** | |
| 2-METHYLNAPHTHALENE | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | ***900*** | | | |
| HEXACHLOROCYCLOPENTADI | 370 | U | UJ | C | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| 2,4,6-TRICHLOROPHENOL | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC110 | | | | MC111 | | | | MC112 | | | | MC113 | | | | MC114 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS05S02 | | | | M01TS06S01 | | | | M01TS06S02 | | | | M01TS07S01 | | | | M01TS07S02 | | | |
| Date Sampled | 6/24/96 | | | | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | |
| Depth | 2.5 | | | | 3.0 | | | | 4.0 | | | | 3.5 | | | | 6.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| 2,4,5-TRICHLOROPHENOL | 930 | U | U | | 890 | U | U | | 930 | U | U | | 900 | U | U | | 910 | U | U | |
| 2-CHLORONAPHTHALENE | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| 2-NITROANILINE | 930 | U | UJ | C | 890 | U | U | | 930 | U | U | | 900 | U | U | | 910 | U | U | |
| DIMETHYLPHTHALATE | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| ACENAPHTHYLENE | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | ***350*** | ***J*** | ***J*** | |
| 2,6-DINITROTOLUENE | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| 3-NITROANILINE | 930 | U | U | | 890 | U | U | | 930 | U | U | | 900 | U | UJ | C | 910 | U | U | |
| ACENAPHTHENE | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | ***200*** | ***J*** | ***J*** | |
| 2,4-DINITROPHENOL | 930 | U | UJ | C | 890 | U | U | | 930 | U | U | | 900 | U | U | | 910 | U | U | |
| 4-NITROPHENOL | 930 | U | U | | 890 | U | U | | 930 | U | U | | 900 | U | U | | 910 | U | U | |
| DIBENZOFURAN | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| 2,4-DINITROTOLUENE | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| DIETHYLPHTHALATE | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| 4-CHLOROPHENYL-PHENYLET | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| FLUORENE | 370 | U | UJ | C | 360 | U | U | | 370 | U | U | | 360 | U | U | | ***620*** | | | |
| 4-NITROANILINE | 930 | U | U | | 890 | U | U | | 930 | U | U | | 900 | U | U | | 910 | U | U | |
| 4,6-DINITRO-2-METHYLPHENO | 930 | U | U | | 890 | U | U | | 930 | U | U | | 900 | U | U | | 910 | U | U | |
| N-NITROSODIPHENYLAMINE (1 | 370 | U | U | | 360 | U | UJ | C | 370 | U | UJ | C | 360 | U | UJ | C | 360 | U | UJ | C |
| 4-BROMOPHENYL-PHENYLETH | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| HEXACHLOROBENZENE | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| PENTACHLOROPHENOL | 930 | U | U | | 890 | U | U | | 930 | U | U | | 900 | U | U | | 910 | U | U | |
| PHENANTHRENE | 370 | U | U | | 360 | U | U | | 370 | U | U | | ***220*** | ***J*** | ***J*** | | ***890*** | | | |
| ANTHRACENE | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | ***220*** | ***J*** | ***J*** | |
| CARBAZOLE | 370 | U | UJ | C | 360 | U | UJ | C | 370 | U | UJ | C | 360 | U | U | | 360 | U | UJ | C |
| DI-N-BUTYLPHTHALATE | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC110 | | | | MC111 | | | | MC112 | | | | MC113 | | | | MC114 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS05S02 | | | | M01TS06S01 | | | | M01TS06S02 | | | | M01TS07S01 | | | | M01TS07S02 | | | |
| Date Sampled | 6/24/96 | | | | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | |
| Depth | 2.5 | | | | 3.0 | | | | 4.0 | | | | 3.5 | | | | 6.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| FLUORANTHENE | ***170*** | ***J*** | ***J*** | | ***370*** | | | | 370 | U | U | | ***560*** | | | | ***810*** | | | |
| PYRENE | ***190*** | ***J*** | ***J*** | | ***400*** | | | | 370 | U | U | | ***640*** | | | | ***1,800*** | | | |
| BUTYLBENZYLPHTHALATE | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | U | |
| 3,3'-DICHLOROBENZIDINE | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | UJ | C | 360 | U | U | |
| BENZO(A)ANTHRACENE | 370 | U | U | | ***210*** | ***J*** | ***J*** | | 370 | U | U | | ***330*** | ***J*** | ***J*** | | ***230*** | ***J*** | ***J*** | |
| CHRYSENE | 370 | U | U | | ***310*** | ***J*** | ***J*** | | 370 | U | U | | ***400*** | | | | ***430*** | | | |
| BIS(2-ETHYLHEXYL)PHTHALA | 1,000 | B | UJ | B | 360 | U | U | | 370 | U | U | | 360 | U | U | | ***310*** | ***J*** | ***J*** | |
| DI-N-OCTYL PHTHALATE | 370 | U | UJ | C | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | UJ | I |
| BENZO(B)FLUORANTHENE | 370 | U | UJ | C | ***240*** | ***J*** | ***J*** | | 370 | U | U | | ***190*** | ***J*** | ***J*** | | ***210*** | ***J*** | ***J*** | ***I*** |
| BENZO(K)FLUORANTHENE | 370 | U | U | | ***220*** | ***J*** | ***J*** | | 370 | U | U | | ***660*** | | | | ***230*** | ***J*** | ***J*** | ***I*** |
| BENZO(A)PYRENE | 370 | U | U | | ***290*** | ***J*** | ***J*** | | 370 | U | U | | ***500*** | | | | ***420*** | | ***J*** | ***I*** |
| INDENO(1,2,3-CD)PYRENE | 370 | U | U | | ***190*** | ***J*** | ***J*** | | 370 | U | U | | ***140*** | ***J*** | ***J*** | | ***150*** | ***J*** | ***J*** | ***I*** |
| DIBENZ(A,H)ANTHRACENE | 370 | U | U | | 360 | U | U | | 370 | U | U | | 360 | U | U | | 360 | U | UJ | I |
| BENZO(G,H,I)PERYLENE | 370 | U | U | | ***250*** | ***J*** | ***J*** | | 370 | U | U | | ***160*** | ***J*** | ***J*** | | ***150*** | ***J*** | ***J*** | ***I*** |
| ***OLM03.1P - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| 4,4'-DDD | ***48.0*** | ***P*** | ***NJ*** | ****10,*11*** | 180 | U | U | | ***22.0*** | ***P*** | ***J*** | ****11*** | 36.0 | U | U | | ***68.0*** | ***P*** | ***NJ*** | ****10,*11*** |
| 4,4'-DDE | ***160*** | | | | 180 | U | U | | ***14.0*** | ***P*** | ***J*** | ****11*** | 36.0 | U | U | | ***36.0*** | ***P*** | ***J*** | ****11*** |
| 4,4'-DDT | ***120*** | ***P*** | ***J*** | ****11*** | 180 | U | U | | 3.7 | U | U | | ***44.0*** | ***P*** | ***NJ*** | ****10,*11*** | 36.0 | U | U | |
| ALDRIN | 9.5 | U | U | | 91.0 | U | U | | 1.9 | U | U | | 18.0 | U | U | | 19.0 | U | U | |
| ALPHA-BHC | 9.5 | U | U | | 91.0 | U | U | | 1.9 | U | U | | 18.0 | U | U | | 19.0 | U | U | |
| ALPHA-CHLORDANE | ***50.0*** | | | | 91.0 | U | U | | ***3.1*** | | | | 18.0 | U | U | | 19.0 | U | U | |
| AROCLOR-1016 | 180 | U | U | | 1,800 | U | U | | 37.0 | U | U | | 360 | U | U | | 360 | U | U | |
| AROCLOR-1221 | 380 | U | U | | 3,600 | U | U | | 75.0 | U | U | | 730 | U | U | | 730 | U | U | |
| AROCLOR-1232 | 180 | U | U | | 1,800 | U | U | | 37.0 | U | U | | 360 | U | U | | 360 | U | U | |
| AROCLOR-1242 | 180 | U | U | | 1,800 | U | U | | 37.0 | U | U | | 360 | U | U | | 360 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC110 | | | | MC111 | | | | MC112 | | | | MC113 | | | | MC114 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS05S02 | | | | M01TS06S01 | | | | M01TS06S02 | | | | M01TS07S01 | | | | M01TS07S02 | | | |
| Date Sampled | 6/24/96 | | | | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | |
| Depth | 2.5 | | | | 3.0 | | | | 4.0 | | | | 3.5 | | | | 6.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1P - Pesticides (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| AROCLOR-1248 | 180 | U | U | | 1,800 | U | U | | 37.0 | U | U | | 360 | U | U | | 360 | U | U | |
| AROCLOR-1254 | 180 | U | U | | 1,800 | U | U | | 37.0 | U | U | | 360 | U | U | | 360 | U | U | |
| AROCLOR-1260 | ***780*** | ***P*** | ***J*** | ****11*** | ***2,000*** | ***JP*** | | | ***230*** | ***P*** | ***J*** | ****11*** | ***1,200*** | | | | ***700*** | | ***J*** | ****11*** |
| BETA-BHC | 9.5 | U | UJ | C | 91.0 | U | U | | 1.9 | U | U | | 18.0 | U | U | | 19.0 | U | U | |
| DELTA-BHC | 9.5 | U | U | | 91.0 | U | U | | 1.9 | U | U | | 18.0 | U | U | | 19.0 | U | U | |
| DIELDRIN | 18.0 | U | U | | 180 | U | U | | 3.7 | U | U | | 36.0 | U | U | | 36.0 | U | U | |
| ENDOSULFAN I | 9.5 | U | U | | 91.0 | U | U | | 1.9 | U | U | | 18.0 | U | U | | 19.0 | U | U | |
| ENDOSULFAN II | 18.0 | U | U | | 180 | U | U | | ***6.6*** | ***P*** | ***NJ*** | ****10,*11*** | 36.0 | U | U | | 36.0 | U | U | |
| ENDOSULFAN SULFATE | 18.0 | U | U | | 180 | U | U | | 3.7 | U | U | | 36.0 | U | U | | 36.0 | U | U | |
| ENDRIN | ***45.0*** | ***P*** | ***NJ*** | ****10,*11*** | 180 | U | U | | ***11.0*** | ***P*** | ***NJ*** | ****10,*11*** | 36.0 | U | U | | ***45.0*** | ***P*** | ***NJ*** | ****10,*11*** |
| ENDRIN ALDEHYDE | 18.0 | U | U | | 180 | U | U | | ***13.0*** | | ***NJ*** | ****10,*11*** | ***64.0*** | ***P*** | ***NJ*** | ****10,*11*** | ***40.0*** | | ***NJ*** | ****10,*11*** |
| ENDRIN KETONE | 18.0 | U | U | | 180 | U | U | | 3.7 | U | U | | 36.0 | U | U | | 36.0 | U | U | |
| GAMMA-BHC (LINDANE) | 9.5 | U | U | | 91.0 | U | U | | 1.9 | U | U | | 18.0 | U | U | | 19.0 | U | U | |
| GAMMA-CHLORDANE | ***47.0*** | ***P*** | ***NJ*** | ****10,*11*** | 91.0 | U | U | | 1.9 | U | U | | 18.0 | U | U | | 19.0 | U | U | |
| HEPTACHLOR | 9.5 | U | U | | 91.0 | U | U | | 1.9 | U | U | | 18.0 | U | U | | 19.0 | U | U | |
| HEPTACHLOR EPOXIDE | 9.5 | U | U | | 91.0 | U | U | | 1.9 | U | U | | 18.0 | U | U | | 19.0 | U | U | |
| METHOXYCHLOR | 95.0 | U | U | | 910 | U | U | | 19.0 | U | U | | 180 | U | U | | 190 | U | U | |
| TOXAPHENE | 950 | U | U | | 9,100 | U | U | | 190 | U | U | | 1,800 | U | U | | 1,900 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for
## Soil, Bulky Waste Landfill

| EPA NO | MC114RE | | | | MC115 | | | | MC116 | | | | MC117 | | | | MC118 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS07S02 | | | | M01TS08S01 | | | | M01TS08S02 | | | | M01TS08D02 | | | | M01TS09S01 | | | |
| Date Sampled | | | | | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | |
| Depth | ? | | | | 4.0 | | | | 3.0 | | | | 3.0 | | | | 2.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PHENOL | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| BIS(2-CHLOROETHYL)ETHER | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| 2-CHLOROPHENOL | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| 1,3-DICHLOROBENZENE | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| 1,4-DICHLOROBENZENE | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| 1,2-DICHLOROBENZENE | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| 2-METHYLPHENOL | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| 2,2'OXYBIS(1-CHLOROPROPAN | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| 4-METHYLPHENOL | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| N-NITROSO-DI-N-PROPYLAMIN | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| HEXACHLOROETHANE | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| NITROBENZENE | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| ISOPHORONE | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| 2-NITROPHENOL | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| 2,4-DIMETHYLPHENOL | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| BIS(2-CHLOROETHOXY)METHA | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| 2,4-DICHLOROPHENOL | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| 1,2,4-TRICHLOROBENZENE | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| NAPHTHALENE | 850 | | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| 4-CHLOROANILINE | 360 | U | R | D | 380 | U | UJ | C | 370 | U | UJ | C | 370 | U | UJ | C | 360 | U | UJ | C |
| HEXACHLOROBUTADIENE | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| 4-CHLORO-3-METHYLPHENOL | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| 2-METHYLNAPHTHALENE | 940 | | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| HEXACHLOROCYCLOPENTADI | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| 2,4,6-TRICHLOROPHENOL | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC114RE | | | | MC115 | | | | MC116 | | | | MC117 | | | | MC118 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS07S02 | | | | M01TS08S01 | | | | M01TS08S02 | | | | M01TS08D02 | | | | M01TS09S01 | | | |
| Date Sampled | | | | | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | |
| Depth | ? | | | | 4.0 | | | | 3.0 | | | | 3.0 | | | | 2.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| 2,4,5-TRICHLOROPHENOL | 910 | U | R | D | 940 | U | U | | 920 | U | U | | 920 | U | U | | 910 | U | U | |
| 2-CHLORONAPHTHALENE | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| 2-NITROANILINE | 910 | U | R | D | 940 | U | U | | 920 | U | U | | 920 | U | U | | 910 | U | U | |
| DIMETHYLPHTHALATE | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| ACENAPHTHYLENE | 350 | J | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| 2,6-DINITROTOLUENE | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| 3-NITROANILINE | 910 | U | R | D | 940 | U | UJ | C | 920 | U | UJ | C | 920 | U | U | | 910 | U | U | |
| ACENAPHTHENE | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| 2,4-DINITROPHENOL | 910 | U | R | D | 940 | U | U | | 920 | U | U | | 920 | U | U | | 910 | U | U | |
| 4-NITROPHENOL | 910 | U | R | D | 940 | U | U | | 920 | U | U | | 920 | U | U | | 910 | U | U | |
| DIBENZOFURAN | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| 2,4-DINITROTOLUENE | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| DIETHYLPHTHALATE | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| 4-CHLOROPHENYL-PHENYLET | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| FLUORENE | 600 | | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| 4-NITROANILINE | 910 | U | R | D | 940 | U | U | | 920 | U | U | | 920 | U | U | | 910 | U | U | |
| 4,6-DINITRO-2-METHYLPHENO | 910 | U | R | D | 940 | U | U | | 920 | U | U | | 920 | U | U | | 910 | U | U | |
| N-NITROSODIPHENYLAMINE (1 | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | UJ | C | 360 | U | UJ | C |
| 4-BROMOPHENYL-PHENYLETH | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| HEXACHLOROBENZENE | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| PENTACHLOROPHENOL | 910 | U | R | D | 940 | U | U | | 920 | U | U | | 920 | U | U | | 910 | U | U | |
| PHENANTHRENE | 980 | | R | D | ***280*** | ***J*** | ***J*** | | 370 | U | U | | 370 | U | U | | ***920*** | | | |
| ANTHRACENE | 240 | J | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | ***280*** | ***J*** | ***J*** | |
| CARBAZOLE | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | UJ | C | 360 | U | UJ | C |
| DI-N-BUTYLPHTHALATE | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC114RE | | | | MC115 | | | | MC116 | | | | MC117 | | | | MC118 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS07S02 | | | | M01TS08S01 | | | | M01TS08S02 | | | | M01TS08D02 | | | | M01TS09S01 | | | |
| Date Sampled | | | | | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | |
| Depth | ? | | | | 4.0 | | | | 3.0 | | | | 3.0 | | | | 2.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| FLUORANTHENE | 1,000 | | R | D | ***610*** | | | | ***180*** | ***J*** | ***J*** | | ***140*** | ***J*** | ***J*** | | ***2,000*** | | | |
| PYRENE | 2,400 | | R | D | ***560*** | | | | ***170*** | ***J*** | ***J*** | | ***160*** | ***J*** | ***J*** | | ***2,300*** | | | |
| BUTYLBENZYLPHTHALATE | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| 3,3'-DICHLOROBENZIDINE | 360 | U | R | D | 380 | U | UJ | C | 370 | U | UJ | C | 370 | U | U | | 360 | U | U | |
| BENZO(A)ANTHRACENE | 370 | | R | D | ***280*** | ***J*** | ***J*** | | 370 | U | U | | 370 | U | U | | ***1,300*** | | | |
| CHRYSENE | 440 | | R | D | ***380*** | | | | 370 | U | U | | 370 | U | U | | ***1,500*** | | | |
| BIS(2-ETHYLHEXYL)PHTHALA | 310 | J | R | D | ***220*** | ***J*** | ***J*** | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| DI-N-OCTYL PHTHALATE | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| BENZO(B)FLUORANTHENE | 360 | U | R | D | ***210*** | ***J*** | ***J*** | | 370 | U | U | | 370 | U | U | | ***700*** | | | |
| BENZO(K)FLUORANTHENE | 360 | U | R | D | ***490*** | | | | 370 | U | U | | 370 | U | U | | ***720*** | | | |
| BENZO(A)PYRENE | 260 | J | R | D | ***270*** | ***J*** | ***J*** | | 370 | U | U | | 370 | U | U | | ***980*** | | | |
| INDENO(1,2,3-CD)PYRENE | 130 | J | R | D | ***94.0*** | ***J*** | ***J*** | | 370 | U | U | | 370 | U | U | | ***300*** | ***J*** | ***J*** | |
| DIBENZ(A,H)ANTHRACENE | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | ***160*** | ***J*** | ***J*** | |
| BENZO(G,H,I)PERYLENE | 360 | U | R | D | 380 | U | U | | 370 | U | U | | 370 | U | U | | ***280*** | ***J*** | ***J*** | |
| ***OLM03.1P - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| 4,4'-DDD | | | | | ***200*** | ***P*** | ***NJ*** | ****10,*11*** | 37.0 | U | U | | 37.0 | U | U | | 36.0 | U | U | |
| 4,4'-DDE | | | | | ***460*** | | | | ***80.0*** | | | | ***81.0*** | | | | ***38.0*** | | | |
| 4,4'-DDT | | | | | ***670*** | ***P*** | ***NJ*** | ****10,*11*** | ***120*** | ***P*** | ***NJ*** | ****10,*11*** | ***91.0*** | ***P*** | ***NJ*** | ****10,*11*** | 36.0 | U | U | |
| ALDRIN | | | | | 95.0 | U | U | | 19.0 | U | U | | 19.0 | U | U | | 19.0 | U | U | |
| ALPHA-BHC | | | | | 95.0 | U | U | | 19.0 | U | U | | 19.0 | U | U | | 19.0 | U | U | |
| ALPHA-CHLORDANE | | | | | 95.0 | U | U | | 19.0 | U | U | | 19.0 | U | U | | 19.0 | U | U | |
| AROCLOR-1016 | | | | | 1,900 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| AROCLOR-1221 | | | | | 3,800 | U | U | | 740 | U | U | | 740 | U | U | | 740 | U | U | |
| AROCLOR-1232 | | | | | 1,900 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| AROCLOR-1242 | | | | | 1,900 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC114RE | | | | MC115 | | | | MC116 | | | | MC117 | | | | MC118 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | | | | | M01TS08S01 | | | | M01TS08S02 | | | | M01TS08D02 | | | | M01TS09S01 | | | |
| Date Sampled | | | | | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | |
| Depth | | | | | 4.0 | | | | 3.0 | | | | 3.0 | | | | 2.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1P - Pesticides (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| AROCLOR-1248 | | | | | 1,900 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| AROCLOR-1254 | | | | | 1,900 | U | U | | 370 | U | U | | 370 | U | U | | 360 | U | U | |
| AROCLOR-1260 | | | | | ***4,600*** | ***P*** | | | ***770*** | ***P*** | | | ***760*** | ***P*** | | | ***670*** | ***P*** | | |
| BETA-BHC | | | | | 95.0 | U | U | | 19.0 | U | U | | 19.0 | U | U | | 19.0 | U | U | |
| DELTA-BHC | | | | | 95.0 | U | U | | 19.0 | U | U | | 19.0 | U | U | | 19.0 | U | U | |
| DIELDRIN | | | | | 190 | U | U | | ***110*** | | | | ***100*** | ***P*** | ***J*** | ****11*** | 36.0 | U | U | |
| ENDOSULFAN I | | | | | 95.0 | U | U | | 19.0 | U | U | | 19.0 | U | U | | 19.0 | U | U | |
| ENDOSULFAN II | | | | | 190 | U | U | | 37.0 | U | U | | 37.0 | U | U | | 36.0 | U | U | |
| ENDOSULFAN SULFATE | | | | | 190 | U | U | | 37.0 | U | U | | 37.0 | U | U | | 36.0 | U | U | |
| ENDRIN | | | | | 190 | U | U | | 37.0 | U | U | | 37.0 | U | U | | 36.0 | U | U | |
| ENDRIN ALDEHYDE | | | | | ***190*** | ***P*** | ***NJ*** | ****10,*11*** | 37.0 | U | U | | 37.0 | U | U | | 36.0 | U | U | |
| ENDRIN KETONE | | | | | 190 | U | U | | 37.0 | U | U | | 37.0 | U | U | | 36.0 | U | U | |
| GAMMA-BHC (LINDANE) | | | | | 95.0 | U | U | | 19.0 | U | U | | 19.0 | U | U | | 19.0 | U | U | |
| GAMMA-CHLORDANE | | | | | 95.0 | U | U | | 19.0 | U | U | | 19.0 | U | U | | 19.0 | U | U | |
| HEPTACHLOR | | | | | 95.0 | U | U | | 19.0 | U | U | | 19.0 | U | U | | 19.0 | U | U | |
| HEPTACHLOR EPOXIDE | | | | | 95.0 | U | U | | 19.0 | U | U | | 19.0 | U | U | | 19.0 | U | U | |
| METHOXYCHLOR | | | | | 950 | U | U | | 190 | U | U | | 190 | U | U | | 190 | U | U | |
| TOXAPHENE | | | | | 9,500 | U | U | | 1,900 | U | U | | 1,900 | U | U | | 1,900 | U | U | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC119 | | | | MC120 | | | | MC121 | | | | MC122 | | | | MC123 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS09S02 | | | | M01TS10S01 | | | | M01TS10S02 | | | | M01TS11S01 | | | | M01TS11S02 | | | |
| Date Sampled | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | |
| Depth | 3.5 | | | | 4.5 | | | | 5.0 | | | | 2.0 | | | | 2.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PHENOL | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| BIS(2-CHLOROETHYL)ETHER | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| 2-CHLOROPHENOL | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| 1,3-DICHLOROBENZENE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| 1,4-DICHLOROBENZENE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| 1,2-DICHLOROBENZENE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| 2-METHYLPHENOL | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| 2,2'OXYBIS(1-CHLOROPROPAN | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| 4-METHYLPHENOL | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| N-NITROSO-DI-N-PROPYLAMIN | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| HEXACHLOROETHANE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| NITROBENZENE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| ISOPHORONE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| 2-NITROPHENOL | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| 2,4-DIMETHYLPHENOL | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| BIS(2-CHLOROETHOXY)METHA | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| 2,4-DICHLOROPHENOL | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| 1,2,4-TRICHLOROBENZENE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| NAPHTHALENE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| 4-CHLOROANILINE | 360 | U | UJ | C | 400 | U | UJ | C | 400 | U | UJ | C | 370 | U | UJ | C | 360 | U | UJ | C |
| HEXACHLOROBUTADIENE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| 4-CHLORO-3-METHYLPHENOL | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| 2-METHYLNAPHTHALENE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| HEXACHLOROCYCLOPENTADI | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| 2,4,6-TRICHLOROPHENOL | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC119 | | | | MC120 | | | | MC121 | | | | MC122 | | | | MC123 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS09S02 | | | | M01TS10S01 | | | | M01TS10S02 | | | | M01TS11S01 | | | | M01TS11S02 | | | |
| Date Sampled | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | |
| Depth | 3.5 | | | | 4.5 | | | | 5.0 | | | | 2.0 | | | | 2.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| 2,4,5-TRICHLOROPHENOL | 910 | U | U | | 1,000 | U | U | | 1,000 | U | U | | 920 | U | U | | 900 | U | U | |
| 2-CHLORONAPHTHALENE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| 2-NITROANILINE | 910 | U | U | | 1,000 | U | U | | 1,000 | U | U | | 920 | U | U | | 900 | U | U | |
| DIMETHYLPHTHALATE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| ACENAPHTHYLENE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| 2,6-DINITROTOLUENE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| 3-NITROANILINE | 910 | U | U | | 1,000 | U | U | | 1,000 | U | U | | 920 | U | U | | 900 | U | U | |
| ACENAPHTHENE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| 2,4-DINITROPHENOL | 910 | U | U | | 1,000 | U | U | | 1,000 | U | U | | 920 | U | U | | 900 | U | U | |
| 4-NITROPHENOL | 910 | U | U | | 1,000 | U | U | | 1,000 | U | U | | 920 | U | U | | 900 | U | U | |
| DIBENZOFURAN | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| 2,4-DINITROTOLUENE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| DIETHYLPHTHALATE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| 4-CHLOROPHENYL-PHENYLET | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| FLUORENE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| 4-NITROANILINE | 910 | U | U | | 1,000 | U | U | | 1,000 | U | U | | 920 | U | U | | 900 | U | U | |
| 4,6-DINITRO-2-METHYLPHENO | 910 | U | U | | 1,000 | U | U | | 1,000 | U | U | | 920 | U | U | | 900 | U | U | |
| N-NITROSODIPHENYLAMINE (1 | 360 | U | UJ | C | 400 | U | UJ | C | 400 | U | UJ | C | 370 | U | UJ | C | 360 | U | UJ | C |
| 4-BROMOPHENYL-PHENYLETH | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| HEXACHLOROBENZENE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| PENTACHLOROPHENOL | 910 | U | U | | 1,000 | U | U | | 1,000 | U | U | | 920 | U | U | | 900 | U | U | |
| PHENANTHRENE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | ***680*** | | | |
| ANTHRACENE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | ***210*** | ***J*** | ***J*** | |
| CARBAZOLE | 360 | U | UJ | C | 400 | U | UJ | C | 400 | U | UJ | C | 370 | U | UJ | C | 360 | U | UJ | C |
| DI-N-BUTYLPHTHALATE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC119 | | | | MC120 | | | | MC121 | | | | MC122 | | | | MC123 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS09S02 | | | | M01TS10S01 | | | | M01TS10S02 | | | | M01TS11S01 | | | | M01TS11S02 | | | |
| Date Sampled | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | |
| Depth | 3.5 | | | | 4.5 | | | | 5.0 | | | | 2.0 | | | | 2.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| FLUORANTHENE | 360 | U | U | | ***170*** | ***J*** | ***J*** | | 400 | U | U | | ***210*** | ***J*** | ***J*** | | ***890*** | | | |
| PYRENE | 360 | U | U | | ***230*** | ***J*** | ***J*** | | 400 | U | U | | ***250*** | ***J*** | ***J*** | | ***870*** | | | |
| BUTYLBENZYLPHTHALATE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| 3,3'-DICHLOROBENZIDINE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| BENZO(A)ANTHRACENE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | ***450*** | | | |
| CHRYSENE | 360 | U | U | | ***190*** | ***J*** | ***J*** | | 400 | U | U | | ***210*** | ***J*** | ***J*** | | ***630*** | | | |
| BIS(2-ETHYLHEXYL)PHTHALA | 360 | U | U | | 400 | U | U | | 400 | U | U | | ***150*** | ***J*** | ***J*** | | 360 | U | U | |
| DI-N-OCTYL PHTHALATE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| BENZO(B)FLUORANTHENE | 360 | U | U | | 400 | U | U | | 400 | U | U | | ***170*** | ***J*** | ***J*** | | ***360*** | | | |
| BENZO(K)FLUORANTHENE | ***180*** | ***J*** | ***J*** | | 400 | U | U | | 400 | U | U | | 370 | U | U | | ***550*** | | | |
| BENZO(A)PYRENE | 360 | U | U | | 400 | U | U | | 400 | U | U | | ***160*** | ***J*** | ***J*** | | ***470*** | | | |
| INDENO(1,2,3-CD)PYRENE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| DIBENZ(A,H)ANTHRACENE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | 360 | U | U | |
| BENZO(G,H,I)PERYLENE | 360 | U | U | | 400 | U | U | | 400 | U | U | | 370 | U | U | | ***210*** | ***J*** | ***J*** | |
| ***OLM03.1P - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| 4,4'-DDD | 180 | U | U | | 200 | U | U | | ***100*** | ***P*** | ***J*** | ****11*** | ***19.0*** | ***P*** | ***NJ*** | ****10,*11*** | 72.0 | U | U | |
| 4,4'-DDE | 180 | U | U | | 200 | U | U | | ***320*** | | | | ***110*** | | | | ***300*** | | | |
| 4,4'-DDT | 180 | U | U | | 200 | U | U | | ***140*** | ***P*** | ***NJ*** | ****10,*11*** | ***84.0*** | ***P*** | ***NJ*** | ****10,*11*** | ***160*** | ***P*** | ***NJ*** | ****10,*11*** |
| ALDRIN | 93.0 | U | U | | 100 | U | U | | 41.0 | U | U | | 9.3 | U | U | | 37.0 | U | U | |
| ALPHA-BHC | 93.0 | U | U | | 100 | U | U | | 41.0 | U | U | | 9.3 | U | U | | 37.0 | U | U | |
| ALPHA-CHLORDANE | 93.0 | U | U | | 100 | U | U | | 41.0 | U | U | | ***140*** | | | | ***470*** | | | |
| AROCLOR-1016 | 1,800 | U | U | | 2,000 | U | U | | 790 | U | U | | 180 | U | U | | 720 | U | U | |
| AROCLOR-1221 | 3,700 | U | U | | 4,000 | U | U | | 1,600 | U | U | | 370 | U | U | | 1,500 | U | U | |
| AROCLOR-1232 | 1,800 | U | U | | 2,000 | U | U | | 790 | U | U | | 180 | U | U | | 720 | U | U | |
| AROCLOR-1242 | 1,800 | U | U | | 2,000 | U | U | | 790 | U | U | | 180 | U | U | | 720 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC119 | | | | MC120 | | | | MC121 | | | | MC122 | | | | MC123 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS09S02 | | | | M01TS10S01 | | | | M01TS10S02 | | | | M01TS11S01 | | | | M01TS11S02 | | | |
| Date Sampled | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | | 6/25/96 | | | |
| Depth | 3.5 | | | | 4.5 | | | | 5.0 | | | | 2.0 | | | | 2.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1P - Pesticides (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| AROCLOR-1248 | 1,800 | U | U | | 2,000 | U | U | | 790 | U | U | | 180 | U | U | | 720 | U | U | |
| AROCLOR-1254 | 1,800 | U | U | | 2,000 | U | U | | 790 | U | U | | 180 | U | U | | 720 | U | U | |
| AROCLOR-1260 | ***2,400*** | | | | ***2,000*** | ***P*** | | | ***830*** | ***JP*** | | | ***520*** | ***P*** | ***J*** | ****11*** | ***1,400*** | ***P*** | ***J*** | ****11*** |
| BETA-BHC | 93.0 | U | U | | 100 | U | U | | 41.0 | U | U | | 9.3 | U | U | | 37.0 | U | U | |
| DELTA-BHC | 93.0 | U | U | | 100 | U | U | | 41.0 | U | U | | 9.3 | U | U | | 37.0 | U | U | |
| DIELDRIN | 180 | U | U | | 200 | U | U | | 79.0 | U | U | | 18.0 | U | U | | 72.0 | U | U | |
| ENDOSULFAN I | 93.0 | U | U | | 100 | U | U | | 41.0 | U | U | | 9.3 | U | U | | 37.0 | U | U | |
| ENDOSULFAN II | 180 | U | U | | 200 | U | U | | 79.0 | U | U | | 18.0 | U | U | | 72.0 | U | U | |
| ENDOSULFAN SULFATE | 180 | U | U | | 200 | U | U | | 79.0 | U | U | | 18.0 | U | U | | 72.0 | U | U | |
| ENDRIN | 180 | U | U | | 200 | U | U | | 79.0 | U | U | | ***36.0*** | ***P*** | ***NJ*** | ****10,*11*** | 72.0 | U | U | |
| ENDRIN ALDEHYDE | 180 | U | U | | 200 | U | U | | 79.0 | U | U | | 18.0 | U | U | | 72.0 | U | U | |
| ENDRIN KETONE | 180 | U | U | | 200 | U | U | | 79.0 | U | U | | 18.0 | U | U | | 72.0 | U | U | |
| GAMMA-BHC (LINDANE) | 93.0 | U | U | | 100 | U | U | | 41.0 | U | U | | 9.3 | U | U | | 37.0 | U | U | |
| GAMMA-CHLORDANE | 93.0 | U | U | | 100 | U | U | | 41.0 | U | U | | ***160*** | ***P*** | ***NJ*** | ****10,*11*** | ***500*** | ***P*** | ***J*** | ****11*** |
| HEPTACHLOR | 93.0 | U | U | | 100 | U | U | | 41.0 | U | U | | 9.3 | U | U | | 37.0 | U | U | |
| HEPTACHLOR EPOXIDE | 93.0 | U | U | | 100 | U | U | | 41.0 | U | U | | 9.3 | U | U | | 37.0 | U | U | |
| METHOXYCHLOR | 930 | U | U | | 1,000 | U | U | | 410 | U | U | | 93.0 | U | U | | 370 | U | U | |
| TOXAPHENE | 9,300 | U | U | | 10,000 | U | U | | 4,100 | U | U | | 930 | U | U | | 3,700 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC124 | | | | MC125 | | | | MC126 | | | | MC127 | | | | MC128 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS12S01 | | | | M01TS12S02 | | | | M01TS13S01 | | | | M01TS13D01 | | | | M01TS13S02 | | | |
| Date Sampled | 6/26/96 | | | | 6/26/96 | | | | 6/26/96 | | | | 6/26/96 | | | | 6/26/96 | | | |
| Depth | 3.0 | | | | 2.5 | | | | 4.0 | | | | 4.0 | | | | 5.5 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PHENOL | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| BIS(2-CHLOROETHYL)ETHER | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| 2-CHLOROPHENOL | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| 1,3-DICHLOROBENZENE | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| 1,4-DICHLOROBENZENE | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| 1,2-DICHLOROBENZENE | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| 2-METHYLPHENOL | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| 2,2'OXYBIS(1-CHLOROPROPAN | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| 4-METHYLPHENOL | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| N-NITROSO-DI-N-PROPYLAMIN | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| HEXACHLOROETHANE | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| NITROBENZENE | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| ISOPHORONE | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| 2-NITROPHENOL | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| 2,4-DIMETHYLPHENOL | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| BIS(2-CHLOROETHOXY)METHA | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| 2,4-DICHLOROPHENOL | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| 1,2,4-TRICHLOROBENZENE | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| NAPHTHALENE | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| 4-CHLOROANILINE | 380 | U | UJ | C | 370 | U | UJ | C | 370 | U | UJ | C | 370 | U | UJ | C | 400 | U | UJ | C |
| HEXACHLOROBUTADIENE | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| 4-CHLORO-3-METHYLPHENOL | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| 2-METHYLNAPHTHALENE | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| HEXACHLOROCYCLOPENTADI | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| 2,4,6-TRICHLOROPHENOL | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC124 | | | | MC125 | | | | MC126 | | | | MC127 | | | | MC128 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS12S01 | | | | M01TS12S02 | | | | M01TS13S01 | | | | M01TS13D01 | | | | M01TS13S02 | | | |
| Date Sampled | 6/26/96 | | | | 6/26/96 | | | | 6/26/96 | | | | 6/26/96 | | | | 6/26/96 | | | |
| Depth | 3.0 | | | | 2.5 | | | | 4.0 | | | | 4.0 | | | | 5.5 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| 2,4,5-TRICHLOROPHENOL | 950 | U | U | | 920 | U | U | | 920 | U | U | | 940 | U | U | | 990 | U | U | |
| 2-CHLORONAPHTHALENE | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| 2-NITROANILINE | 950 | U | U | | 920 | U | U | | 920 | U | U | | 940 | U | U | | 990 | U | U | |
| DIMETHYLPHTHALATE | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| ACENAPHTHYLENE | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| 2,6-DINITROTOLUENE | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| 3-NITROANILINE | 950 | U | UJ | C | 920 | U | UJ | C | 920 | U | UJ | C | 940 | U | UJ | C | 990 | U | UJ | C |
| ACENAPHTHENE | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | ***180*** | ***J*** | ***J*** | |
| 2,4-DINITROPHENOL | 950 | U | U | | 920 | U | U | | 920 | U | U | | 940 | U | U | | 990 | U | U | |
| 4-NITROPHENOL | 950 | U | U | | 920 | U | U | | 920 | U | U | | 940 | U | U | | 990 | U | U | |
| DIBENZOFURAN | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| 2,4-DINITROTOLUENE | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| DIETHYLPHTHALATE | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| 4-CHLOROPHENYL-PHENYLET | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| FLUORENE | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| 4-NITROANILINE | 950 | U | U | | 920 | U | U | | 920 | U | U | | 940 | U | U | | 990 | U | U | |
| 4,6-DINITRO-2-METHYLPHENO | 950 | U | U | | 920 | U | U | | 920 | U | U | | 940 | U | U | | 990 | U | U | |
| N-NITROSODIPHENYLAMINE (1 | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| 4-BROMOPHENYL-PHENYLETH | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| HEXACHLOROBENZENE | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| PENTACHLOROPHENOL | 950 | U | U | | 920 | U | U | | 920 | U | U | | 940 | U | U | | 990 | U | U | |
| PHENANTHRENE | ***210*** | ***J*** | ***J*** | | 370 | U | U | | ***450*** | | | | 370 | U | U | | ***1,900*** | | | |
| ANTHRACENE | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | ***580*** | | | |
| CARBAZOLE | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | ***250*** | ***J*** | ***J*** | |
| DI-N-BUTYLPHTHALATE | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC124 | | | | MC125 | | | | MC126 | | | | MC127 | | | | MC128 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS12S01 | | | | M01TS12S02 | | | | M01TS13S01 | | | | M01TS13D01 | | | | M01TS13S02 | | | |
| Date Sampled | 6/26/96 | | | | 6/26/96 | | | | 6/26/96 | | | | 6/26/96 | | | | 6/26/96 | | | |
| Depth | 3.0 | | | | 2.5 | | | | 4.0 | | | | 4.0 | | | | 5.5 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| FLUORANTHENE | ***440*** | | | | 370 | U | U | | ***1,100*** | | | | ***670*** | | | | ***4,000*** | | | |
| PYRENE | ***510*** | | | | ***170*** | ***J*** | ***J*** | | ***1,100*** | | | | ***650*** | | | | ***3,400*** | | | |
| BUTYLBENZYLPHTHALATE | 380 | U | U | | 370 | U | U | | 370 | U | U | | ***100*** | ***J*** | ***J*** | | 400 | U | U | |
| 3,3'-DICHLOROBENZIDINE | 380 | U | UJ | C | 370 | U | UJ | C | 370 | U | UJ | C | 370 | U | UJ | C | 400 | U | UJ | C |
| BENZO(A)ANTHRACENE | ***220*** | ***J*** | ***J*** | | 370 | U | U | | 370 | U | U | | 370 | U | U | | ***1,800*** | | | |
| CHRYSENE | ***300*** | ***J*** | ***J*** | | 370 | U | U | | ***340*** | ***J*** | ***J*** | | ***380*** | | | | ***2,600*** | | | |
| BIS(2-ETHYLHEXYL)PHTHALA | 380 | U | U | | ***380*** | | | | 370 | U | U | | 370 | U | U | | ***160*** | ***J*** | ***J*** | |
| DI-N-OCTYL PHTHALATE | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | 400 | U | U | |
| BENZO(B)FLUORANTHENE | ***200*** | ***J*** | ***J*** | | 370 | U | U | | ***170*** | ***J*** | ***J*** | | ***190*** | ***J*** | ***J*** | | ***1,800*** | | | |
| BENZO(K)FLUORANTHENE | ***240*** | ***J*** | ***J*** | | 370 | U | U | | ***240*** | ***J*** | ***J*** | | ***250*** | ***J*** | ***J*** | | ***2,000*** | | | |
| BENZO(A)PYRENE | ***230*** | ***J*** | ***J*** | | 370 | U | U | | ***150*** | ***J*** | ***J*** | | ***160*** | ***J*** | ***J*** | | ***2,000*** | | | |
| INDENO(1,2,3-CD)PYRENE | 380 | U | U | | 370 | U | U | | 370 | U | U | | ***67.0*** | ***J*** | ***J*** | | ***630*** | | | |
| DIBENZ(A,H)ANTHRACENE | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | ***390*** | ***J*** | ***J*** | |
| BENZO(G,H,I)PERYLENE | 380 | U | U | | 370 | U | U | | 370 | U | U | | 370 | U | U | | ***520*** | | | |
| ***OLM03.1P - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| 4,4'-DDD | 38.0 | U | U | | 18.0 | U | U | | 3.7 | U | U | | 3.7 | U | U | | 20.0 | U | U | |
| 4,4'-DDE | ***100*** | ***P*** | ***J*** | ****11*** | ***130*** | | | | ***3.1*** | ***U*** | ***J*** | - | ***4.4*** | | | | ***110*** | | | |
| 4,4'-DDT | ***86.0*** | ***P*** | ***NJ*** | ****10,*11*** | ***49.0*** | ***P*** | ***NJ*** | ****10,*11*** | 3.7 | U | U | | 3.7 | U | U | | ***31.0*** | ***P*** | ***NJ*** | ****10,*11*** |
| ALDRIN | 20.0 | U | U | | 9.4 | U | U | | 1.9 | U | U | | 1.9 | U | U | | 10.0 | U | U | |
| ALPHA-BHC | 20.0 | U | U | | 9.4 | U | U | | 1.9 | U | U | | 1.9 | U | U | | 10.0 | U | U | |
| ALPHA-CHLORDANE | ***94.0*** | ***P*** | ***J*** | ****11*** | ***55.0*** | | | | 1.9 | U | U | | 1.9 | U | U | | ***25.0*** | | | |
| AROCLOR-1016 | 380 | U | U | | 180 | U | U | | 37.0 | U | U | | 37.0 | U | U | | 200 | U | U | |
| AROCLOR-1221 | 770 | U | U | | 370 | U | U | | 74.0 | U | U | | 75.0 | U | U | | 400 | U | U | |
| AROCLOR-1232 | 380 | U | U | | 180 | U | U | | 37.0 | U | U | | 37.0 | U | U | | 200 | U | U | |
| AROCLOR-1242 | 380 | U | U | | 180 | U | U | | 37.0 | U | U | | 37.0 | U | U | | 200 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC124 | | | | MC125 | | | | MC126 | | | | MC127 | | | | MC128 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS12S01 | | | | M01TS12S02 | | | | M01TS13S01 | | | | M01TS13D01 | | | | M01TS13S02 | | | |
| Date Sampled | 6/26/96 | | | | 6/26/96 | | | | 6/26/96 | | | | 6/26/96 | | | | 6/26/96 | | | |
| Depth | 3.0 | | | | 2.5 | | | | 4.0 | | | | 4.0 | | | | 5.5 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1P - Pesticides (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| AROCLOR-1248 | 380 | U | U | | 180 | U | U | | 37.0 | U | U | | 37.0 | U | U | | 200 | U | U | |
| AROCLOR-1254 | 380 | U | U | | 180 | U | U | | 37.0 | U | U | | 37.0 | U | U | | 200 | U | U | |
| AROCLOR-1260 | ***520*** | ***P*** | | ***$*** | ***410*** | ***P*** | ***J*** | ****11*** | 37.0 | U | U | | 37.0 | U | U | | ***605*** | ***P*** | ***J*** | ***$,*11*** |
| BETA-BHC | 20.0 | U | U | | 9.4 | U | U | | 1.9 | U | U | | 1.9 | U | U | | 10.0 | U | U | |
| DELTA-BHC | 20.0 | U | U | | 9.4 | U | U | | 1.9 | U | U | | 1.9 | U | U | | 10.0 | U | U | |
| DIELDRIN | ***60.0*** | ***P*** | ***J*** | ****11*** | 18.0 | U | U | | 3.7 | U | U | | 3.7 | U | U | | ***26.0*** | ***P*** | ***J*** | ****11*** |
| ENDOSULFAN I | 20.0 | U | U | | 9.4 | U | U | | 1.9 | U | U | | 1.9 | U | U | | 10.0 | U | U | |
| ENDOSULFAN II | 38.0 | U | U | | 18.0 | U | U | | 3.7 | U | U | | 3.7 | U | U | | 20.0 | U | U | |
| ENDOSULFAN SULFATE | 38.0 | U | U | | 18.0 | U | U | | 3.7 | U | U | | 3.7 | U | U | | 20.0 | U | U | |
| ENDRIN | ***50.0*** | ***P*** | ***NJ*** | ****10,*11*** | 18.0 | U | U | | 3.7 | U | U | | 3.7 | U | U | | 20.0 | U | U | |
| ENDRIN ALDEHYDE | 38.0 | U | U | | 18.0 | U | U | | 3.7 | U | U | | 3.7 | U | U | | ***39.0*** | ***P*** | ***NJ*** | ****10,*11*** |
| ENDRIN KETONE | 38.0 | U | U | | 18.0 | U | U | | 3.7 | U | U | | 3.7 | U | U | | 20.0 | U | U | |
| GAMMA-BHC (LINDANE) | 20.0 | U | U | | 9.4 | U | U | | 1.9 | U | U | | 1.9 | U | U | | 10.0 | U | U | |
| GAMMA-CHLORDANE | ***120*** | ***P*** | ***NJ*** | ****10,*11*** | ***63.0*** | ***P*** | ***NJ*** | ****10,*11*** | 1.9 | U | U | | 1.9 | U | U | | ***19.0*** | ***P*** | ***NJ*** | ****10,*11*** |
| HEPTACHLOR | 20.0 | U | U | | 9.4 | U | U | | 1.9 | U | U | | 1.9 | U | U | | 10.0 | U | U | |
| HEPTACHLOR EPOXIDE | 20.0 | U | U | | 9.4 | U | U | | 1.9 | U | U | | 1.9 | U | U | | 10.0 | U | U | |
| METHOXYCHLOR | 200 | U | U | | 94.0 | U | U | | 19.0 | U | U | | 19.0 | U | U | | 100 | U | U | |
| TOXAPHENE | 2,000 | U | U | | 940 | U | U | | 190 | U | U | | 190 | U | U | | 1,000 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC129 | | | | MC130 | | | | MC131 | | | | MC132 | | | | MC133 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS14S01 | | | | M01TS14S02 | | | | M01TS15S01 | | | | M01TS15S02 | | | | M01TS16S01 | | | |
| Date Sampled | 6/26/96 | | | | 6/26/96 | | | | 6/27/96 | | | | 6/27/96 | | | | 6/28/96 | | | |
| Depth | 4.5 | | | | 4.5 | | | | 5.0 | | | | 4.0 | | | | 4.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PHENOL | 370 | U | U | | 740 | U | UJ | C | 370 | U | UJ | C | 360 | U | U | | 380 | U | U | |
| BIS(2-CHLOROETHYL)ETHER | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| 2-CHLOROPHENOL | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| 1,3-DICHLOROBENZENE | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| 1,4-DICHLOROBENZENE | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| 1,2-DICHLOROBENZENE | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| 2-METHYLPHENOL | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| 2,2'OXYBIS(1-CHLOROPROPAN | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| 4-METHYLPHENOL | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| N-NITROSO-DI-N-PROPYLAMIN | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| HEXACHLOROETHANE | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| NITROBENZENE | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| ISOPHORONE | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| 2-NITROPHENOL | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| 2,4-DIMETHYLPHENOL | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| BIS(2-CHLOROETHOXY)METHA | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| 2,4-DICHLOROPHENOL | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| 1,2,4-TRICHLOROBENZENE | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| NAPHTHALENE | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| 4-CHLOROANILINE | 370 | U | UJ | C | 740 | U | U | | 370 | U | U | | 360 | U | UJ | C | 380 | U | U | |
| HEXACHLOROBUTADIENE | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| 4-CHLORO-3-METHYLPHENOL | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| 2-METHYLNAPHTHALENE | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| HEXACHLOROCYCLOPENTADI | 370 | U | U | | 740 | U | UJ | C | 370 | U | UJ | C | 360 | U | U | | 380 | U | U | |
| 2,4,6-TRICHLOROPHENOL | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC129 | | | | MC130 | | | | MC131 | | | | MC132 | | | | MC133 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS14S01 | | | | M01TS14S02 | | | | M01TS15S01 | | | | M01TS15S02 | | | | M01TS16S01 | | | |
| Date Sampled | 6/26/96 | | | | 6/26/96 | | | | 6/27/96 | | | | 6/27/96 | | | | 6/28/96 | | | |
| Depth | 4.5 | | | | 4.5 | | | | 5.0 | | | | 4.0 | | | | 4.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| 2,4,5-TRICHLOROPHENOL | 920 | U | U | | 1,800 | U | U | | 920 | U | U | | 910 | U | U | | 960 | U | U | |
| 2-CHLORONAPHTHALENE | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| 2-NITROANILINE | 920 | U | U | | 1,800 | U | UJ | C | 920 | U | UJ | C | 910 | U | U | | 960 | U | U | |
| DIMETHYLPHTHALATE | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| ACENAPHTHYLENE | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| 2,6-DINITROTOLUENE | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| 3-NITROANILINE | 920 | U | UJ | C | 1,800 | U | U | | 920 | U | U | | 910 | U | U | | 960 | U | UJ | C |
| ACENAPHTHENE | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| 2,4-DINITROPHENOL | 920 | U | U | | 1,800 | U | UJ | C | 920 | U | UJ | C | 910 | U | U | | 960 | U | UJ | C |
| 4-NITROPHENOL | 920 | U | U | | 1,800 | U | U | | 920 | U | U | | 910 | U | U | | 960 | U | U | |
| DIBENZOFURAN | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| 2,4-DINITROTOLUENE | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| DIETHYLPHTHALATE | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| 4-CHLOROPHENYL-PHENYLET | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| FLUORENE | 370 | U | U | | 740 | U | UJ | C | 370 | U | UJ | C | 360 | U | U | | 380 | U | UJ | C |
| 4-NITROANILINE | 920 | U | U | | 1,800 | U | U | | 920 | U | U | | 910 | U | U | | 960 | U | U | |
| 4,6-DINITRO-2-METHYLPHENO | 920 | U | U | | 1,800 | U | U | | 920 | U | U | | 910 | U | U | | 960 | U | U | |
| N-NITROSODIPHENYLAMINE (1 | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| 4-BROMOPHENYL-PHENYLETH | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| HEXACHLOROBENZENE | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| PENTACHLOROPHENOL | 920 | U | U | | 1,800 | U | U | | 920 | U | U | | 910 | U | U | | 960 | U | UJ | Q |
| PHENANTHRENE | 370 | U | U | | ***180*** | ***J*** | ***J*** | | 370 | U | U | | 360 | U | U | | ***160*** | ***J*** | ***J*** | |
| ANTHRACENE | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| CARBAZOLE | 370 | U | U | | 740 | U | UJ | C | 370 | U | UJ | C | 360 | U | U | | 380 | U | U | |
| DI-N-BUTYLPHTHALATE | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC129 | | | | MC130 | | | | MC131 | | | | MC132 | | | | MC133 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS14S01 | | | | M01TS14S02 | | | | M01TS15S01 | | | | M01TS15S02 | | | | M01TS16S01 | | | |
| Date Sampled | 6/26/96 | | | | 6/26/96 | | | | 6/27/96 | | | | 6/27/96 | | | | 6/28/96 | | | |
| Depth | 4.5 | | | | 4.5 | | | | 5.0 | | | | 4.0 | | | | 4.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| FLUORANTHENE | 370 | U | U | | ***510*** | ***J*** | ***J*** | | ***340*** | ***J*** | ***J*** | | 360 | U | U | | ***620*** | | | |
| PYRENE | 370 | U | U | | ***430*** | ***J*** | ***J*** | | ***420*** | | | | 360 | U | U | | ***670*** | | | |
| BUTYLBENZYLPHTHALATE | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| 3,3'-DICHLOROBENZIDINE | 370 | U | UJ | C | 740 | U | U | | 370 | U | U | | 360 | U | UJ | C | 380 | U | UJ | C |
| BENZO(A)ANTHRACENE | 370 | U | U | | ***250*** | ***J*** | ***J*** | | ***210*** | ***J*** | ***J*** | | 360 | U | U | | ***360*** | ***J*** | ***J*** | |
| CHRYSENE | 370 | U | U | | ***330*** | ***J*** | ***J*** | | ***270*** | ***J*** | ***J*** | | 360 | U | U | | ***430*** | | | |
| BIS(2-ETHYLHEXYL)PHTHALA | 370 | U | U | | 740 | JB | U | B | 710 | B | UJ | B | 360 | JB | U | B | 380 | U | U | |
| DI-N-OCTYL PHTHALATE | 370 | U | U | | 740 | U | UJ | C | 370 | U | UJ | C | 360 | U | U | | 380 | U | U | |
| BENZO(B)FLUORANTHENE | 370 | U | U | | ***260*** | ***J*** | ***J*** | ***C*** | ***210*** | ***J*** | ***J*** | ***C*** | ***79.0*** | ***J*** | ***J*** | | ***350*** | ***J*** | ***J*** | |
| BENZO(K)FLUORANTHENE | 370 | U | U | | ***360*** | ***J*** | ***J*** | | ***230*** | ***J*** | ***J*** | | 360 | U | U | | ***270*** | ***J*** | ***J*** | |
| BENZO(A)PYRENE | 370 | U | U | | ***250*** | ***J*** | ***J*** | | 370 | U | U | | 360 | U | U | | ***270*** | ***J*** | ***J*** | |
| INDENO(1,2,3-CD)PYRENE | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| DIBENZ(A,H)ANTHRACENE | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| BENZO(G,H,I)PERYLENE | 370 | U | U | | 740 | U | U | | 370 | U | U | | 360 | U | U | | 380 | U | U | |
| ***OLM03.1P - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| 4,4'-DDD | ***23.0*** | | | | 36.0 | U | U | | ***46.0*** | ***P*** | ***J*** | ****11*** | ***19.0*** | ***P*** | ***J*** | ****11*** | ***15.0*** | ***P*** | ***NJ*** | ****10,*11*** |
| 4,4'-DDE | ***48.0*** | ***P*** | ***J*** | ****11*** | ***100*** | | | | ***66.0*** | | | | ***48.0*** | ***P*** | ***J*** | ****11*** | ***29.0*** | | | |
| 4,4'-DDT | ***63.0*** | ***P*** | ***J*** | ****11*** | ***63.0*** | ***P*** | ***NJ*** | ****10,*11*** | ***61.0*** | ***P*** | ***NJ*** | ****10,*11*** | ***26.0*** | ***P*** | ***NJ*** | ****10,*11*** | ***37.0*** | ***P*** | ***J*** | ****11*** |
| ALDRIN | 1.8 | U | U | | 19.0 | U | U | | 19.0 | U | U | | 1.9 | U | U | | 1.9 | U | U | |
| ALPHA-BHC | 1.8 | U | U | | 19.0 | U | U | | 19.0 | U | U | | 1.9 | U | U | | 1.9 | U | U | |
| ALPHA-CHLORDANE | 1.8 | U | U | | 19.0 | U | U | | 19.0 | U | U | | ***2.2*** | ***P*** | ***J*** | ****11*** | ***5.5*** | | | |
| AROCLOR-1016 | 36.0 | U | U | | 360 | U | U | | 360 | U | U | | 36.0 | U | U | | 38.0 | U | U | |
| AROCLOR-1221 | 73.0 | U | U | | 730 | U | U | | 730 | U | U | | 74.0 | U | U | | 77.0 | U | U | |
| AROCLOR-1232 | 36.0 | U | U | | 360 | U | U | | 360 | U | U | | 36.0 | U | U | | 38.0 | U | U | |
| AROCLOR-1242 | 36.0 | U | U | | 360 | U | U | | 360 | U | U | | 36.0 | U | U | | 38.0 | U | U | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC129 | | | | MC130 | | | | MC131 | | | | MC132 | | | | MC133 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS14S01 | | | | M01TS14S02 | | | | M01TS15S01 | | | | M01TS15S02 | | | | M01TS16S01 | | | |
| Date Sampled | 6/26/96 | | | | 6/26/96 | | | | 6/27/96 | | | | 6/27/96 | | | | 6/28/96 | | | |
| Depth | 4.5 | | | | 4.5 | | | | 5.0 | | | | 4.0 | | | | 4.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1P - Pesticides (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| AROCLOR-1248 | 36.0 | U | U | | 360 | U | U | | 360 | U | U | | 36.0 | U | U | | 38.0 | U | U | |
| AROCLOR-1254 | 36.0 | U | U | | 360 | U | U | | 360 | U | U | | 36.0 | U | U | | 38.0 | U | U | |
| AROCLOR-1260 | ***150*** | | | | ***570*** | ***P*** | ***J*** | ****11*** | ***420*** | | | | ***170*** | | | | ***89.0*** | | | |
| BETA-BHC | 1.8 | U | U | | 19.0 | U | UJ | C | 19.0 | U | UJ | C | 1.9 | U | UJ | C | 1.9 | U | U | |
| DELTA-BHC | 1.8 | U | U | | 19.0 | U | U | | 19.0 | U | U | | 1.9 | U | U | | 1.9 | U | U | |
| DIELDRIN | 3.6 | U | U | | 36.0 | U | U | | 36.0 | U | U | | ***7.3*** | ***P*** | ***J*** | ****11*** | 3.8 | U | U | |
| ENDOSULFAN I | 1.8 | U | U | | 19.0 | U | U | | 19.0 | U | U | | 1.9 | U | U | | 1.9 | U | U | |
| ENDOSULFAN II | 3.6 | U | U | | 36.0 | U | U | | 36.0 | U | U | | 3.6 | U | U | | 3.8 | U | U | |
| ENDOSULFAN SULFATE | 3.6 | U | U | | 36.0 | U | U | | 36.0 | U | U | | 3.6 | U | U | | 3.8 | U | U | |
| ENDRIN | ***8.3*** | ***P*** | ***NJ*** | ****10,*11*** | 36.0 | U | U | | 36.0 | U | U | | ***6.0*** | ***P*** | ***NJ*** | ****10,*11*** | 3.8 | U | U | |
| ENDRIN ALDEHYDE | ***7.3*** | ***P*** | ***NJ*** | ****10,*11*** | 36.0 | U | U | | 36.0 | U | U | | ***5.5*** | | ***NJ*** | ****10,*11*** | ***19.0*** | ***P*** | ***NJ*** | ****10,*11*** |
| ENDRIN KETONE | 3.6 | U | U | | 36.0 | U | U | | 36.0 | U | U | | 3.6 | U | U | | 3.8 | U | U | |
| GAMMA-BHC (LINDANE) | 1.8 | U | U | | 19.0 | U | U | | 19.0 | U | U | | 1.9 | U | U | | 1.9 | U | U | |
| GAMMA-CHLORDANE | 1.8 | U | U | | 19.0 | U | U | | 19.0 | U | U | | 1.9 | U | U | | ***8.5*** | ***P*** | ***J*** | ****11*** |
| HEPTACHLOR | 1.8 | U | U | | 19.0 | U | U | | 19.0 | U | U | | 1.9 | U | U | | 1.9 | U | U | |
| HEPTACHLOR EPOXIDE | 1.8 | U | U | | 19.0 | U | U | | 19.0 | U | U | | 1.9 | U | U | | 1.9 | U | U | |
| METHOXYCHLOR | 18.0 | U | U | | 190 | U | U | | 190 | U | U | | 19.0 | U | U | | 19.0 | U | U | |
| TOXAPHENE | 180 | U | U | | 1,900 | U | U | | 1,900 | U | U | | 190 | U | U | | 190 | U | U | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC134 | | | | MC135 | | | | MC136 | | | | MC137 | | | | MC138 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS16S02 | | | | M01TS17S01 | | | | M01TS17S02 | | | | M01TS18S01 | | | | M01TS18S02 | | | |
| Date Sampled | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | |
| Depth | 2.0 | | | | 6.0 | | | | 5.0 | | | | 3.5 | | | | 4.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PHENOL | 700 | U | U | | 440 | U | U | | 410 | U | UJ | C | 740 | U | UJ | C | 380 | U | UJ | C |
| BIS(2-CHLOROETHYL)ETHER | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| 2-CHLOROPHENOL | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| 1,3-DICHLOROBENZENE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| 1,4-DICHLOROBENZENE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| 1,2-DICHLOROBENZENE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| 2-METHYLPHENOL | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| 2,2'OXYBIS(1-CHLOROPROPAN | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| 4-METHYLPHENOL | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| N-NITROSO-DI-N-PROPYLAMIN | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| HEXACHLOROETHANE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| NITROBENZENE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| ISOPHORONE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| 2-NITROPHENOL | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| 2,4-DIMETHYLPHENOL | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| BIS(2-CHLOROETHOXY)METHA | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| 2,4-DICHLOROPHENOL | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| 1,2,4-TRICHLOROBENZENE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| NAPHTHALENE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| 4-CHLOROANILINE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| HEXACHLOROBUTADIENE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| 4-CHLORO-3-METHYLPHENOL | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| 2-METHYLNAPHTHALENE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| HEXACHLOROCYCLOPENTADI | 700 | U | U | | 440 | U | U | | 410 | U | UJ | C | 740 | U | UJ | C | 380 | U | UJ | C |
| 2,4,6-TRICHLOROPHENOL | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC134 | | | | MC135 | | | | MC136 | | | | MC137 | | | | MC138 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS16S02 | | | | M01TS17S01 | | | | M01TS17S02 | | | | M01TS18S01 | | | | M01TS18S02 | | | |
| Date Sampled | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | |
| Depth | 2.0 | | | | 6.0 | | | | 5.0 | | | | 3.5 | | | | 4.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| 2,4,5-TRICHLOROPHENOL | 1,800 | U | U | | 1,100 | U | U | | 1,000 | U | U | | 1,800 | U | U | | 960 | U | U | |
| 2-CHLORONAPHTHALENE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| 2-NITROANILINE | 1,800 | U | U | | 1,100 | U | U | | 1,000 | U | UJ | C | 1,800 | U | UJ | C | 960 | U | UJ | C |
| DIMETHYLPHTHALATE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| ACENAPHTHYLENE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| 2,6-DINITROTOLUENE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| 3-NITROANILINE | 1,800 | U | UJ | C | 1,100 | U | U | | 1,000 | U | U | | 1,800 | U | U | | 960 | U | U | |
| ACENAPHTHENE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| 2,4-DINITROPHENOL | 1,800 | U | UJ | C | 1,100 | U | U | | 1,000 | U | UJ | C | 1,800 | U | UJ | C | 960 | U | UJ | C |
| 4-NITROPHENOL | 1,800 | U | U | | 1,100 | U | U | | 1,000 | U | U | | 1,800 | U | U | | 960 | U | U | |
| DIBENZOFURAN | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| 2,4-DINITROTOLUENE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| DIETHYLPHTHALATE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| 4-CHLOROPHENYL-PHENYLET | 700 | U | U | | 440 | U | UJ | C | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| FLUORENE | 700 | U | UJ | C | 440 | U | UJ | C | 410 | U | UJ | C | 740 | U | UJ | C | 380 | U | UJ | C |
| 4-NITROANILINE | 1,800 | U | U | | 1,100 | U | U | | 1,000 | U | U | | 1,800 | U | U | | 960 | U | U | |
| 4,6-DINITRO-2-METHYLPHENO | 1,800 | U | U | | 1,100 | U | U | | 1,000 | U | U | | 1,800 | U | U | | 960 | U | U | |
| N-NITROSODIPHENYLAMINE (1 | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| 4-BROMOPHENYL-PHENYLETH | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| HEXACHLOROBENZENE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| PENTACHLOROPHENOL | 1,800 | U | UJ | Q | 1,100 | U | UJ | Q | 1,000 | U | UJ | Q | 1,800 | U | UJ | Q | 960 | U | UJ | Q |
| PHENANTHRENE | 700 | U | U | | 440 | U | U | | ***420*** | | | | 740 | U | U | | 380 | U | U | |
| ANTHRACENE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| CARBAZOLE | 700 | U | U | | 440 | U | U | | 410 | U | UJ | C | 740 | U | UJ | C | 380 | U | UJ | C |
| DI-N-BUTYLPHTHALATE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC134 | | | | MC135 | | | | MC136 | | | | MC137 | | | | MC138 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS16S02 | | | | M01TS17S01 | | | | M01TS17S02 | | | | M01TS18S01 | | | | M01TS18S02 | | | |
| Date Sampled | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | |
| Depth | 2.0 | | | | 6.0 | | | | 5.0 | | | | 3.5 | | | | 4.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| FLUORANTHENE | 700 | U | U | | 440 | U | U | | ***360*** | ***J*** | ***J*** | | 740 | U | U | | ***160*** | ***J*** | ***J*** | |
| PYRENE | 700 | U | U | | 440 | U | U | | ***230*** | ***J*** | ***J*** | | 740 | U | U | | ***180*** | ***J*** | ***J*** | |
| BUTYLBENZYLPHTHALATE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| 3,3'-DICHLOROBENZIDINE | 700 | U | UJ | C | 440 | U | UJ | C | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| BENZO(A)ANTHRACENE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| CHRYSENE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| BIS(2-ETHYLHEXYL)PHTHALA | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| DI-N-OCTYL PHTHALATE | 700 | U | U | | 440 | U | U | | 410 | U | UJ | C | 740 | U | UJ | C | 380 | U | UJ | C |
| BENZO(B)FLUORANTHENE | 700 | U | U | | 440 | U | U | | 410 | U | UJ | C | 740 | U | UJ | C | 380 | U | UJ | C |
| BENZO(K)FLUORANTHENE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| BENZO(A)PYRENE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| INDENO(1,2,3-CD)PYRENE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| DIBENZ(A,H)ANTHRACENE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| BENZO(G,H,I)PERYLENE | 700 | U | U | | 440 | U | U | | 410 | U | U | | 740 | U | U | | 380 | U | U | |
| ***OLM03.1P - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| 4,4'-DDD | 3.5 | U | U | | 4.4 | U | U | | 4.1 | U | U | | ***7.4*** | ***P*** | ***NJ*** | ****10,*11*** | ***20.0*** | ***P*** | ***J*** | ****11*** |
| 4,4'-DDE | ***12.0*** | | | | 140 | E | R | D | 67.0 | E | R | D | ***65.0*** | ***P*** | ***J*** | ****11*** | 110 | E | R | D |
| 4,4'-DDT | ***24.0*** | ***P*** | ***J*** | ****11*** | 4.4 | U | U | | 4.1 | U | U | | ***39.0*** | ***P*** | ***NJ*** | ****10,*11*** | 100 | PE | R | D |
| ALDRIN | 1.8 | U | U | | ***2.6*** | ***P*** | ***NJ*** | ****10,*11*** | 2.1 | U | U | | 3.7 | U | U | | 1.9 | U | U | |
| ALPHA-BHC | 1.8 | U | U | | 2.2 | U | U | | 2.1 | U | U | | 3.7 | U | U | | 1.9 | U | U | |
| ALPHA-CHLORDANE | 1.8 | U | U | | ***12.0*** | ***P*** | ***NJ*** | ****10,*11*** | ***3.3*** | | | | ***11.0*** | ***P*** | ***J*** | ****11*** | ***11.0*** | ***P*** | ***J*** | ****11*** |
| AROCLOR-1016 | 35.0 | U | U | | 44.0 | U | U | | 41.0 | U | U | | 74.0 | U | U | | 38.0 | U | U | |
| AROCLOR-1221 | 70.0 | U | U | | 88.0 | U | U | | 82.0 | U | U | | 150 | U | U | | 77.0 | U | U | |
| AROCLOR-1232 | 35.0 | U | U | | 44.0 | U | U | | 41.0 | U | U | | 74.0 | U | U | | 38.0 | U | U | |
| AROCLOR-1242 | 35.0 | U | U | | 44.0 | U | U | | 41.0 | U | U | | 74.0 | U | U | | 38.0 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC134 | | | | MC135 | | | | MC136 | | | | MC137 | | | | MC138 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS16S02 | | | | M01TS17S01 | | | | M01TS17S02 | | | | M01TS18S01 | | | | M01TS18S02 | | | |
| Date Sampled | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | |
| Depth | 2.0 | | | | 6.0 | | | | 5.0 | | | | 3.5 | | | | 4.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1P - Pesticides (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| AROCLOR-1248 | 35.0 | U | U | | 44.0 | U | U | | 41.0 | U | U | | 74.0 | U | U | | 38.0 | U | U | |
| AROCLOR-1254 | 35.0 | U | U | | ***230*** | ***P*** | ***J*** | ****11*** | 41.0 | U | U | | 230 | U | U | $ | 38.0 | U | U | |
| AROCLOR-1260 | ***85.0*** | | | | 44.0 | U | U | | ***120*** | | | | ***190*** | ***U*** | ***J*** | ***-,*10,*1*** | ***180*** | | | |
| BETA-BHC | 1.8 | U | U | | 2.2 | U | U | | 2.1 | U | U | | 3.7 | U | U | | 1.9 | U | U | |
| DELTA-BHC | 1.8 | U | U | | 2.2 | U | U | | 2.1 | U | U | | 3.7 | U | U | | 1.9 | U | U | |
| DIELDRIN | 3.5 | U | U | | 4.4 | U | U | | ***4.1*** | ***P*** | ***J*** | ****11*** | ***23.0*** | ***P*** | ***J*** | ****11*** | ***40.0*** | ***P*** | ***J*** | ****11*** |
| ENDOSULFAN I | 1.8 | U | U | | 2.2 | U | U | | 2.1 | U | U | | 3.7 | U | U | | 1.9 | U | U | |
| ENDOSULFAN II | 3.5 | U | U | | 4.4 | U | U | | 4.1 | U | U | | 7.4 | U | U | | 3.8 | U | U | |
| ENDOSULFAN SULFATE | 3.5 | U | U | | 4.4 | U | U | | 4.1 | U | U | | 7.4 | U | U | | 3.8 | U | U | |
| ENDRIN | 3.5 | U | U | | ***20.0*** | | ***NJ*** | ****10,*11*** | 4.1 | U | U | | 7.4 | U | U | | 3.8 | U | U | |
| ENDRIN ALDEHYDE | ***5.2*** | ***P*** | ***NJ*** | ****10,*11*** | ***7.5*** | ***P*** | ***J*** | ****11*** | ***7.7*** | ***P*** | ***NJ*** | ****10,*11*** | 7.4 | U | U | | ***10.0*** | ***P*** | ***NJ*** | ****10,*11*** |
| ENDRIN KETONE | 3.5 | U | U | | 4.4 | U | U | | 4.1 | U | U | | ***8.4*** | ***P*** | ***NJ*** | ****10,*11*** | 3.8 | U | U | |
| GAMMA-BHC (LINDANE) | 1.8 | U | U | | 2.2 | U | U | | 2.1 | U | U | | 3.7 | U | U | | 1.9 | U | U | |
| GAMMA-CHLORDANE | ***2.3*** | ***P*** | ***J*** | ****11*** | ***6.6*** | ***P*** | ***NJ*** | ****10,*11*** | ***4.1*** | ***P*** | ***NJ*** | ****10,*11*** | ***6.4*** | ***P*** | ***J*** | ****11*** | ***14.0*** | ***P*** | ***J*** | ****11*** |
| HEPTACHLOR | 1.8 | U | U | | 2.2 | U | U | | 2.1 | U | U | | 3.7 | U | U | | 1.9 | U | U | |
| HEPTACHLOR EPOXIDE | 1.8 | U | U | | 2.2 | U | U | | 2.1 | U | U | | 3.7 | U | U | | 1.9 | U | U | |
| METHOXYCHLOR | 18.0 | U | U | | 22.0 | U | U | | 21.0 | U | U | | ***63.0*** | ***P*** | ***J*** | ****11*** | 19.0 | U | U | |
| TOXAPHENE | 180 | U | U | | 220 | U | U | | 210 | U | U | | 370 | U | U | | 190 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC139 | | | | MC140 | | | | MC141 | | | | MC142 | | | | MC143 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS19S01 | | | | M01TS19S02 | | | | M01TS20S01 | | | | M01TS20S02 | | | | M01TS20D02 | | | |
| Date Sampled | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | |
| Depth | 2.5 | | | | 3.0 | | | | 3.5 | | | | 3.0 | | | | 3.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PHENOL | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | UJ | C | 750 | U | U | |
| BIS(2-CHLOROETHYL)ETHER | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| 2-CHLOROPHENOL | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| 1,3-DICHLOROBENZENE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| 1,4-DICHLOROBENZENE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| 1,2-DICHLOROBENZENE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| 2-METHYLPHENOL | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| 2,2'OXYBIS(1-CHLOROPROPAN | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| 4-METHYLPHENOL | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| N-NITROSO-DI-N-PROPYLAMIN | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| HEXACHLOROETHANE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| NITROBENZENE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| ISOPHORONE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| 2-NITROPHENOL | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| 2,4-DIMETHYLPHENOL | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| BIS(2-CHLOROETHOXY)METHA | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| 2,4-DICHLOROPHENOL | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| 1,2,4-TRICHLOROBENZENE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| NAPHTHALENE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| 4-CHLOROANILINE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| HEXACHLOROBUTADIENE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| 4-CHLORO-3-METHYLPHENOL | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| 2-METHYLNAPHTHALENE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| HEXACHLOROCYCLOPENTADI | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | UJ | C | 750 | U | U | |
| 2,4,6-TRICHLOROPHENOL | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC139 | | | | MC140 | | | | MC141 | | | | MC142 | | | | MC143 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS19S01 | | | | M01TS19S02 | | | | M01TS20S01 | | | | M01TS20S02 | | | | M01TS20D02 | | | |
| Date Sampled | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | |
| Depth | 2.5 | | | | 3.0 | | | | 3.5 | | | | 3.0 | | | | 3.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| 2,4,5-TRICHLOROPHENOL | 1,000 | U | U | | 940 | U | U | | 2,000 | U | U | | 1,900 | U | U | | 1,900 | U | U | |
| 2-CHLORONAPHTHALENE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| 2-NITROANILINE | 1,000 | U | U | | 940 | U | U | | 2,000 | U | U | | 1,900 | U | UJ | C | 1,900 | U | U | |
| DIMETHYLPHTHALATE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| ACENAPHTHYLENE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| 2,6-DINITROTOLUENE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| 3-NITROANILINE | 1,000 | U | U | | 940 | U | U | | 2,000 | U | U | | 1,900 | U | U | | 1,900 | U | U | |
| ACENAPHTHENE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| 2,4-DINITROPHENOL | 1,000 | U | U | | 940 | U | U | | 2,000 | U | U | | 1,900 | U | UJ | C | 1,900 | U | U | |
| 4-NITROPHENOL | 1,000 | U | U | | 940 | U | U | | 2,000 | U | U | | 1,900 | U | U | | 1,900 | U | U | |
| DIBENZOFURAN | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| 2,4-DINITROTOLUENE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| DIETHYLPHTHALATE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| 4-CHLOROPHENYL-PHENYLET | 420 | U | UJ | C | 370 | U | UJ | C | 800 | U | UJ | C | 760 | U | U | | 750 | U | UJ | C |
| FLUORENE | 420 | U | UJ | C | 370 | U | UJ | C | 800 | U | UJ | C | 760 | U | UJ | C | 750 | U | UJ | C |
| 4-NITROANILINE | 1,000 | U | U | | 940 | U | U | | 2,000 | U | U | | 1,900 | U | U | | 1,900 | U | U | |
| 4,6-DINITRO-2-METHYLPHENO | 1,000 | U | U | | 940 | U | U | | 2,000 | U | U | | 1,900 | U | U | | 1,900 | U | U | |
| N-NITROSODIPHENYLAMINE (1 | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| 4-BROMOPHENYL-PHENYLETH | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| HEXACHLOROBENZENE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| PENTACHLOROPHENOL | 1,000 | U | UJ | Q | 940 | U | UJ | Q | 2,000 | U | UJ | Q | 1,900 | U | UJ | Q | 1,900 | U | UJ | Q |
| PHENANTHRENE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| ANTHRACENE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| CARBAZOLE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | UJ | C | 750 | U | U | |
| DI-N-BUTYLPHTHALATE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC139 | | | | MC140 | | | | MC141 | | | | MC142 | | | | MC143 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS19S01 | | | | M01TS19S02 | | | | M01TS20S01 | | | | M01TS20S02 | | | | M01TS20D02 | | | |
| Date Sampled | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | |
| Depth | 2.5 | | | | 3.0 | | | | 3.5 | | | | 3.0 | | | | 3.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| FLUORANTHENE | 420 | U | U | | ***82.0*** | ***J*** | ***J*** | | 800 | U | U | | ***390*** | ***J*** | ***J*** | | ***510*** | ***J*** | ***J*** | |
| PYRENE | 420 | U | U | | ***130*** | ***J*** | ***J*** | | 800 | U | U | | ***460*** | ***J*** | ***J*** | | ***540*** | ***J*** | ***J*** | |
| BUTYLBENZYLPHTHALATE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| 3,3'-DICHLOROBENZIDINE | 420 | U | UJ | C | 370 | U | UJ | C | 800 | U | UJ | C | 760 | U | U | | 750 | U | UJ | C |
| BENZO(A)ANTHRACENE | 420 | U | U | | ***150*** | ***J*** | ***J*** | | 800 | U | U | | 760 | U | U | | ***270*** | ***J*** | ***J*** | |
| CHRYSENE | 420 | U | U | | ***390*** | | | | 800 | U | U | | 760 | U | U | | ***370*** | ***J*** | ***J*** | |
| BIS(2-ETHYLHEXYL)PHTHALA | 420 | U | U | | ***280*** | ***J*** | ***J*** | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| DI-N-OCTYL PHTHALATE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | UJ | C | 750 | U | U | |
| BENZO(B)FLUORANTHENE | 420 | U | U | | ***440*** | | | | 800 | U | U | | 760 | U | UJ | C | ***270*** | ***J*** | ***J*** | |
| BENZO(K)FLUORANTHENE | 420 | U | U | | ***310*** | ***J*** | ***J*** | | 800 | U | U | | 760 | U | U | | ***200*** | ***J*** | ***J*** | |
| BENZO(A)PYRENE | 420 | U | U | | ***200*** | ***J*** | ***J*** | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| INDENO(1,2,3-CD)PYRENE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| DIBENZ(A,H)ANTHRACENE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| BENZO(G,H,I)PERYLENE | 420 | U | U | | 370 | U | U | | 800 | U | U | | 760 | U | U | | 750 | U | U | |
| ***OLM03.1P - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| 4,4'-DDD | 4.2 | U | U | | 3.7 | U | U | | 40.0 | U | U | | ***22.0*** | ***P*** | ***J*** | ****11*** | ***10.0*** | ***P*** | ***J*** | ****11*** |
| 4,4'-DDE | ***51.0*** | | | | ***8.3*** | | | | ***70.0*** | ***P*** | ***J*** | ****11*** | 120 | E | R | D | 93.0 | E | R | D |
| 4,4'-DDT | ***30.0*** | ***P*** | ***NJ*** | ****10,*11*** | 3.7 | U | U | | 40.0 | U | U | | 110 | E | R | D | 76.0 | E | R | D |
| ALDRIN | 2.1 | U | U | | 1.9 | U | U | | 20.0 | U | U | | ***1.9*** | ***P*** | ***NJ*** | ****10,*11*** | 1.9 | U | U | |
| ALPHA-BHC | 2.1 | U | U | | 1.9 | U | U | | 20.0 | U | U | | 1.9 | U | U | | 1.9 | U | U | |
| ALPHA-CHLORDANE | 2.1 | U | U | | 1.9 | U | U | | 20.0 | U | U | | ***10.0*** | ***P*** | ***NJ*** | ****10,*11*** | ***5.0*** | | | |
| AROCLOR-1016 | 42.0 | U | U | | 37.0 | U | U | | 400 | U | U | | 38.0 | U | U | | 37.0 | U | U | |
| AROCLOR-1221 | 84.0 | U | U | | 75.0 | U | U | | 800 | U | U | | 76.0 | U | U | | 75.0 | U | U | |
| AROCLOR-1232 | 42.0 | U | U | | 37.0 | U | U | | 400 | U | U | | 38.0 | U | U | | 37.0 | U | U | |
| AROCLOR-1242 | 42.0 | U | U | | 37.0 | U | U | | 400 | U | U | | 38.0 | U | U | | 37.0 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC139 | | | | MC140 | | | | MC141 | | | | MC142 | | | | MC143 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS19S01 | | | | M01TS19S02 | | | | M01TS20S01 | | | | M01TS20S02 | | | | M01TS20D02 | | | |
| Date Sampled | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | |
| Depth | 2.5 | | | | 3.0 | | | | 3.5 | | | | 3.0 | | | | 3.0 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1P - Pesticides (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| AROCLOR-1248 | 42.0 | U | U | | 37.0 | U | U | | 400 | U | U | | 38.0 | U | U | | 37.0 | U | U | |
| AROCLOR-1254 | 42.0 | U | U | | 37.0 | U | U | | 400 | U | U | | ***130*** | ***P*** | ***J*** | ***$,*10,*1*** | 37.0 | U | U | |
| AROCLOR-1260 | 42.0 | U | U | | 37.0 | U | U | | 4,200 | E | R | D | ***150*** | | ***J*** | ****10,*11*** | ***51.0*** | ***P*** | ***NJ*** | ****10,*11*** |
| BETA-BHC | 2.1 | U | U | | 1.9 | U | U | | 20.0 | U | U | | 1.9 | U | U | | 1.9 | U | U | |
| DELTA-BHC | 2.1 | U | U | | 1.9 | U | U | | 20.0 | U | U | | 1.9 | U | U | | 1.9 | U | U | |
| DIELDRIN | 4.2 | U | U | | 3.7 | U | U | | 40.0 | U | U | | ***6.2*** | ***P*** | ***NJ*** | ****10,*11*** | ***5.1*** | ***P*** | ***J*** | ****11*** |
| ENDOSULFAN I | 2.1 | U | U | | 1.9 | U | U | | 20.0 | U | U | | 1.9 | U | U | | 1.9 | U | U | |
| ENDOSULFAN II | ***10.0*** | ***PE*** | ***NJ*** | ****10,*11*** | 3.7 | U | U | | ***100*** | ***P*** | ***NJ*** | ****10,*11*** | ***4.6*** | ***P*** | ***NJ*** | ****10,*11*** | 3.7 | U | U | |
| ENDOSULFAN SULFATE | 4.2 | U | U | | 3.7 | U | U | | 40.0 | U | U | | 3.8 | U | U | | 3.7 | U | U | |
| ENDRIN | 4.2 | U | U | | 3.7 | U | U | | 40.0 | U | U | | ***14.0*** | ***P*** | ***NJ*** | ****10,*11*** | 3.7 | U | U | |
| ENDRIN ALDEHYDE | 4.2 | U | U | | 3.7 | U | U | | ***210*** | ***P*** | ***NJ*** | ****10,*11*** | ***7.8*** | ***P*** | ***NJ*** | ****10,*11*** | 3.7 | U | U | |
| ENDRIN KETONE | 4.2 | U | U | | 3.7 | U | U | | 40.0 | U | U | | 3.8 | U | U | | 3.7 | U | U | |
| GAMMA-BHC (LINDANE) | 2.1 | U | U | | 1.9 | U | U | | 20.0 | U | U | | 1.9 | U | U | | 1.9 | U | U | |
| GAMMA-CHLORDANE | 2.1 | U | U | | 1.9 | U | U | | 20.0 | U | U | | ***8.3*** | ***P*** | ***NJ*** | ****10,*11*** | ***5.2*** | ***P*** | ***J*** | ****11*** |
| HEPTACHLOR | 2.1 | U | U | | 1.9 | U | U | | 20.0 | U | U | | 1.9 | U | U | | 1.9 | U | U | |
| HEPTACHLOR EPOXIDE | 2.1 | U | U | | 1.9 | U | U | | 20.0 | U | U | | 1.9 | U | U | | 1.9 | U | U | |
| METHOXYCHLOR | 21.0 | U | U | | 19.0 | U | U | | 200 | U | U | | 19.0 | U | U | | ***23.0*** | ***P*** | ***J*** | ****11*** |
| TOXAPHENE | 210 | U | U | | 190 | U | U | | 2,000 | U | U | | 190 | U | U | | 190 | U | U | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC144 | | | | MC144A | | | | MC148 | | | | MC122DL | | | | MC135DL | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01PS01S01 | | | | M01PS01S01A | | | | M01TP11S02 | | | | | | | | | | | |
| Date Sampled | 6/26/96 | | | | 6/26/96 | | | | 7/1/96 | | | | | | | | | | | |
| Depth | PE SAMPLE | | | | PE SAMPLE | | | | 3.0 | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PHENOL | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| BIS(2-CHLOROETHYL)ETHER | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| 2-CHLOROPHENOL | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| 1,3-DICHLOROBENZENE | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| 1,2-DICHLOROBENZENE | ***520*** | | | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| 2-METHYLPHENOL | ***710*** | | | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| 2,2'OXYBIS(1-CHLOROPROPAN | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| 4-METHYLPHENOL | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| N-NITROSO-DI-N-PROPYLAMIN | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| HEXACHLOROETHANE | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| NITROBENZENE | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| ISOPHORONE | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| 2-NITROPHENOL | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| BIS(2-CHLOROETHOXY)METHA | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| 2,4-DICHLOROPHENOL | ***4,000*** | | | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | ***1,400*** | | | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| NAPHTHALENE | ***1,500*** | | | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| 4-CHLOROANILINE | 330 | U | UJ | C | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| HEXACHLOROBUTADIENE | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| 4-CHLORO-3-METHYLPHENOL | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| HEXACHLOROCYCLOPENTADI | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| 2,4,6-TRICHLOROPHENOL | ***2,900*** | | | | 500 | U | R | D | 740 | U | U | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC144 | | | | MC144A | | | | MC148 | | | | MC122DL | | | | MC135DL | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01PS01S01 | | | | M01PS01S01A | | | | M01TP11S02 | | | | | | | | | | | |
| Date Sampled | 6/26/96 | | | | 6/26/96 | | | | 7/1/96 | | | | | | | | | | | |
| Depth | PE SAMPLE | | | | PE SAMPLE | | | | 3.0 | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| 2,4,5-TRICHLOROPHENOL | ***3,500*** | | | | 1,200 | U | R | D | 1,800 | U | U | | | | | | | | | |
| 2-CHLORONAPHTHALENE | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| 2-NITROANILINE | 830 | U | U | | 1,200 | U | R | D | 1,800 | U | U | | | | | | | | | |
| DIMETHYLPHTHALATE | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| ACENAPHTHYLENE | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| 2,6-DINITROTOLUENE | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| 3-NITROANILINE | 830 | U | U | | 1,200 | U | R | D | 1,800 | U | U | | | | | | | | | |
| ACENAPHTHENE | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| 2,4-DINITROPHENOL | 830 | U | U | | 1,200 | U | R | D | 1,800 | U | U | | | | | | | | | |
| 4-NITROPHENOL | 830 | U | U | | 1,200 | U | R | D | 1,800 | U | U | | | | | | | | | |
| DIBENZOFURAN | ***6,000*** | | | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| 2,4-DINITROTOLUENE | ***4,300*** | | | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| DIETHYLPHTHALATE | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| 4-CHLOROPHENYL-PHENYLET | ***4,000*** | | | | 500 | U | R | D | 740 | U | UJ | C | | | | | | | | |
| FLUORENE | ***1,800*** | | | | 500 | U | R | D | 740 | U | UJ | C | | | | | | | | |
| 4-NITROANILINE | 830 | U | U | | 1,200 | U | R | D | 1,800 | U | U | | | | | | | | | |
| 4,6-DINITRO-2-METHYLPHENO | 830 | U | U | | 1,200 | U | R | D | 1,800 | U | U | | | | | | | | | |
| N-NITROSODIPHENYLAMINE (1 | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| 4-BROMOPHENYL-PHENYLETH | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| HEXACHLOROBENZENE | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| PENTACHLOROPHENOL | ***4,600*** | | | | 1,200 | U | R | D | 1,800 | U | UJ | Q | | | | | | | | |
| PHENANTHRENE | ***4,400*** | | | | 500 | U | R | D | ***1,700*** | | | | | | | | | | | |
| ANTHRACENE | ***4,000*** | | | | 500 | U | R | D | ***570*** | ***J*** | ***J*** | | | | | | | | | |
| CARBAZOLE | 330 | U | U | | 500 | U | R | D | ***170*** | ***J*** | ***J*** | | | | | | | | | |
| DI-N-BUTYLPHTHALATE | ***86.0*** | ***J*** | ***J*** | | 500 | U | R | D | 740 | U | U | | | | | | | | | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC144 | | | | MC144A | | | | MC148 | | | | MC122DL | | | | MC135DL | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01PS01S01 | | | | M01PS01S01 | | | | M01TP11S02 | | | | M01TS11S01 | | | | M01TS17S01 | | | |
| Date Sampled | 6/26/96 | | | | 6/26/96 | | | | 7/1/96 | | | | 6/25/96 | | | | 6/28/96 | | | |
| Depth | PE SAMPLE | | | | PE SAMPLE | | | | 3.0 | | | | DILUTION | | | | DILUTION | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| FLUORANTHENE | 330 | U | U | | 500 | U | R | D | ***6,700*** | | | | | | | | | | | |
| PYRENE | ***1,800*** | | | | 500 | U | R | D | ***7,100*** | | | | | | | | | | | |
| BUTYLBENZYLPHTHALATE | ***2,700*** | | | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| 3,3'-DICHLOROBENZIDINE | 330 | U | UJ | C | 500 | U | R | D | 740 | U | UJ | C | | | | | | | | |
| BENZO(A)ANTHRACENE | 330 | U | U | | 500 | U | R | D | ***3,800*** | | | | | | | | | | | |
| CHRYSENE | ***4,800*** | | | | 500 | U | R | D | ***4,500*** | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALA | 2,800 | B | UJ | B | 540 | B | R | D | 740 | U | U | | | | | | | | | |
| DI-N-OCTYL PHTHALATE | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| BENZO(B)FLUORANTHENE | ***4,000*** | | | | 500 | U | R | D | ***2,600*** | | | | | | | | | | | |
| BENZO(K)FLUORANTHENE | 330 | U | U | | 500 | U | R | D | ***2,700*** | | | | | | | | | | | |
| BENZO(A)PYRENE | ***1,600*** | | | | 500 | U | R | D | ***2,600*** | | | | | | | | | | | |
| INDENO(1,2,3-CD)PYRENE | 330 | U | U | | 500 | U | R | D | ***620*** | ***J*** | ***J*** | | | | | | | | | |
| DIBENZ(A,H)ANTHRACENE | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| BENZO(G,H,I)PERYLENE | 330 | U | U | | 500 | U | R | D | 740 | U | U | | | | | | | | | |
| ***OLM03.1P - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| 4,4'-DDD | ***110*** | | | | 330 | U | U | | 74.0 | U | U | | 72.0 | U | R | D | 44.0 | U | R | D |
| 4,4'-DDE | ***96.0*** | | | | 330 | U | U | | ***170*** | ***P*** | ***J*** | ****11*** | 120 | D | R | D | ***190*** | ***D*** | | |
| 4,4'-DDT | ***75.0*** | | | | 330 | U | U | | 74.0 | U | U | | 87.0 | DP | R | D | 44.0 | U | R | D |
| ALDRIN | ***120*** | | | | 170 | U | U | | ***79.0*** | ***P*** | ***NJ*** | ****10,*11*** | 37.0 | U | R | D | 22.0 | U | R | D |
| ALPHA-BHC | 17.0 | U | U | | 170 | U | U | | 37.0 | U | U | | 37.0 | U | R | D | 22.0 | U | R | D |
| ALPHA-CHLORDANE | ***110*** | ***P*** | ***J*** | ****11*** | 170 | U | U | | ***100*** | | | | 190 | D | R | D | 22.0 | U | R | D |
| AROCLOR-1016 | 330 | U | U | | 3,300 | U | U | | 740 | U | U | | 720 | U | R | D | 440 | U | R | D |
| AROCLOR-1221 | 670 | U | U | | 6,700 | U | U | | 1,500 | U | U | | 1,500 | U | R | D | 880 | U | R | D |
| AROCLOR-1232 | 330 | U | U | | 3,300 | U | U | | 740 | U | U | | 720 | U | R | D | 440 | U | R | D |
| AROCLOR-1242 | 330 | U | U | | 3,300 | U | U | | 740 | U | U | | 720 | U | R | D | 440 | U | R | D |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC144 | | | | MC144A | | | | MC148 | | | | MC122DL | | | | MC135DL | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01PS01S01 | | | | M01PS01S01 | | | | M01TP11S02 | | | | M01TS11S01 | | | | M01TS17S01 | | | |
| Date Sampled | 6/26/96 | | | | 6/26/96 | | | | 7/1/96 | | | | 6/25/96 | | | | 6/28/96 | | | |
| Depth | PE SAMPLE | | | | PE SAMPLE | | | | 3.0 | | | | DILUTION | | | | DILUTION | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1P - Pesticides (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| AROCLOR-1248 | 330 | U | U | | 3,300 | U | U | | ***1,400*** | ***P*** | ***NJ*** | ****10,*11*** | 720 | U | R | D | 440 | U | R | D |
| AROCLOR-1254 | 330 | U | U | | 3,300 | U | U | | 740 | U | U | | 720 | U | R | D | 440 | U | R | D |
| AROCLOR-1260 | 330 | U | U | | ***13,000*** | ***P*** | ***J*** | ****11*** | 11,000 | E | R | D | 720 | U | R | D | 440 | U | R | D |
| BETA-BHC | ***130*** | ***P*** | ***J*** | ***C,*11*** | 170 | U | UJ | C | 37.0 | U | U | | 37.0 | U | R | D | 22.0 | U | R | D |
| DELTA-BHC | ***210*** | | | | 170 | U | U | | 37.0 | U | U | | 37.0 | U | R | D | 22.0 | U | R | D |
| DIELDRIN | ***140*** | | | | 330 | U | U | | ***100*** | ***P*** | ***NJ*** | ****10,*11*** | 72.0 | U | R | D | 44.0 | U | R | D |
| ENDOSULFAN I | 17.0 | U | U | | 170 | U | U | | 37.0 | U | U | | 37.0 | U | R | D | 22.0 | U | R | D |
| ENDOSULFAN II | 33.0 | U | U | | ***450*** | ***P*** | ***NJ*** | ****10,*11*** | ***280*** | ***P*** | ***NJ*** | ****10,*11*** | 72.0 | U | R | D | 44.0 | U | R | D |
| ENDOSULFAN SULFATE | 33.0 | U | U | | 330 | U | U | | 74.0 | U | U | | 72.0 | U | R | D | 44.0 | U | R | D |
| ENDRIN | ***220*** | | | | 330 | U | U | | ***200*** | ***P*** | ***NJ*** | ****10,*11*** | 72.0 | U | R | D | 44.0 | U | R | D |
| ENDRIN ALDEHYDE | 33.0 | U | U | | ***720*** | | ***NJ*** | ****10,*11*** | ***370*** | ***P*** | ***NJ*** | ****10,*11*** | 72.0 | U | R | D | 44.0 | U | R | D |
| ENDRIN KETONE | 33.0 | U | U | | 330 | U | U | | 74.0 | U | U | | 72.0 | U | R | D | 44.0 | U | R | D |
| GAMMA-BHC (LINDANE) | ***110*** | | | | 170 | U | U | | 37.0 | U | U | | 37.0 | U | R | D | 22.0 | U | R | D |
| GAMMA-CHLORDANE | 17.0 | U | U | | 170 | U | U | | ***38.0*** | ***P*** | ***NJ*** | ****10,*11*** | 200 | DP | R | D | 22.0 | U | R | D |
| HEPTACHLOR | ***120*** | | | | 170 | U | U | | 37.0 | U | U | | 37.0 | U | R | D | 22.0 | U | R | D |
| HEPTACHLOR EPOXIDE | ***94.0*** | | | | 170 | U | U | | ***67.0*** | ***P*** | ***NJ*** | ****10,*11*** | 37.0 | U | R | D | 22.0 | U | R | D |
| METHOXYCHLOR | 170 | U | U | | 1,700 | U | U | | 370 | U | U | | 370 | U | R | D | 220 | U | R | D |
| TOXAPHENE | 1,700 | U | U | | 17,000 | U | U | | 3,700 | U | U | | 3,700 | U | R | D | 2,200 | U | R | D |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC136DL | | | | MC138DL | | | | MC139DL | | | | MC141DL | | | | MC142DL | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | | | | | | | | | | | | | | | | | | | | |
| Date Sampled | | | | | | | | | | | | | | | | | | | | |
| Depth | | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PHENOL | | | | | | | | | | | | | | | | | | | | |
| BIS(2-CHLOROETHYL)ETHER | | | | | | | | | | | | | | | | | | | | |
| 2-CHLOROPHENOL | | | | | | | | | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | | | | | | | | |
| 1,2-DICHLOROBENZENE | | | | | | | | | | | | | | | | | | | | |
| 2-METHYLPHENOL | | | | | | | | | | | | | | | | | | | | |
| 2,2'OXYBIS(1-CHLOROPROPAN | | | | | | | | | | | | | | | | | | | | |
| 4-METHYLPHENOL | | | | | | | | | | | | | | | | | | | | |
| N-NITROSO-DI-N-PROPYLAMIN | | | | | | | | | | | | | | | | | | | | |
| HEXACHLOROETHANE | | | | | | | | | | | | | | | | | | | | |
| NITROBENZENE | | | | | | | | | | | | | | | | | | | | |
| ISOPHORONE | | | | | | | | | | | | | | | | | | | | |
| 2-NITROPHENOL | | | | | | | | | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | | | | | | | | | | | | | | | | | | | | |
| BIS(2-CHLOROETHOXY)METHA | | | | | | | | | | | | | | | | | | | | |
| 2,4-DICHLOROPHENOL | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | | | | | | | | | |
| 4-CHLOROANILINE | | | | | | | | | | | | | | | | | | | | |
| HEXACHLOROBUTADIENE | | | | | | | | | | | | | | | | | | | | |
| 4-CHLORO-3-METHYLPHENOL | | | | | | | | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | | | | | | | | | | | | | | | | | | | | |
| HEXACHLOROCYCLOPENTADI | | | | | | | | | | | | | | | | | | | | |
| 2,4,6-TRICHLOROPHENOL | | | | | | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC136DL | | | | MC138DL | | | | MC139DL | | | | MC141DL | | | | MC142DL | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | | | | | | | | | | | | | | | | | | | | |
| Date Sampled | | | | | | | | | | | | | | | | | | | | |
| Depth | | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| 2,4,5-TRICHLOROPHENOL | | | | | | | | | | | | | | | | | | | | |
| 2-CHLORONAPHTHALENE | | | | | | | | | | | | | | | | | | | | |
| 2-NITROANILINE | | | | | | | | | | | | | | | | | | | | |
| DIMETHYLPHTHALATE | | | | | | | | | | | | | | | | | | | | |
| ACENAPHTHYLENE | | | | | | | | | | | | | | | | | | | | |
| 2,6-DINITROTOLUENE | | | | | | | | | | | | | | | | | | | | |
| 3-NITROANILINE | | | | | | | | | | | | | | | | | | | | |
| ACENAPHTHENE | | | | | | | | | | | | | | | | | | | | |
| 2,4-DINITROPHENOL | | | | | | | | | | | | | | | | | | | | |
| 4-NITROPHENOL | | | | | | | | | | | | | | | | | | | | |
| DIBENZOFURAN | | | | | | | | | | | | | | | | | | | | |
| 2,4-DINITROTOLUENE | | | | | | | | | | | | | | | | | | | | |
| DIETHYLPHTHALATE | | | | | | | | | | | | | | | | | | | | |
| 4-CHLOROPHENYL-PHENYLET | | | | | | | | | | | | | | | | | | | | |
| FLUORENE | | | | | | | | | | | | | | | | | | | | |
| 4-NITROANILINE | | | | | | | | | | | | | | | | | | | | |
| 4,6-DINITRO-2-METHYLPHENO | | | | | | | | | | | | | | | | | | | | |
| N-NITROSODIPHENYLAMINE (1 | | | | | | | | | | | | | | | | | | | | |
| 4-BROMOPHENYL-PHENYLETH | | | | | | | | | | | | | | | | | | | | |
| HEXACHLOROBENZENE | | | | | | | | | | | | | | | | | | | | |
| PENTACHLOROPHENOL | | | | | | | | | | | | | | | | | | | | |
| PHENANTHRENE | | | | | | | | | | | | | | | | | | | | |
| ANTHRACENE | | | | | | | | | | | | | | | | | | | | |
| CARBAZOLE | | | | | | | | | | | | | | | | | | | | |
| DI-N-BUTYLPHTHALATE | | | | | | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC136DL | | | | MC138DL | | | | MC139DL | | | | MC141DL | | | | MC142DL | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS17S02 | | | | M01TS18S02 | | | | M01TS19S01 | | | | M01TS20S01 | | | | M01TS20S02 | | | |
| Date Sampled | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | |
| Depth | DILUTION | | | | DILUTION | | | | DILUTION | | | | DILUTION | | | | DILUTION | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| FLUORANTHENE | | | | | | | | | | | | | | | | | | | | |
| PYRENE | | | | | | | | | | | | | | | | | | | | |
| BUTYLBENZYLPHTHALATE | | | | | | | | | | | | | | | | | | | | |
| 3,3'-DICHLOROBENZIDINE | | | | | | | | | | | | | | | | | | | | |
| BENZO(A)ANTHRACENE | | | | | | | | | | | | | | | | | | | | |
| CHRYSENE | | | | | | | | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALA | | | | | | | | | | | | | | | | | | | | |
| DI-N-OCTYL PHTHALATE | | | | | | | | | | | | | | | | | | | | |
| BENZO(B)FLUORANTHENE | | | | | | | | | | | | | | | | | | | | |
| BENZO(K)FLUORANTHENE | | | | | | | | | | | | | | | | | | | | |
| BENZO(A)PYRENE | | | | | | | | | | | | | | | | | | | | |
| INDENO(1,2,3-CD)PYRENE | | | | | | | | | | | | | | | | | | | | |
| DIBENZ(A,H)ANTHRACENE | | | | | | | | | | | | | | | | | | | | |
| BENZO(G,H,I)PERYLENE | | | | | | | | | | | | | | | | | | | | |
| ***OLM03.1P - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| 4,4'-DDD | 21.0 | U | R | D | 38.0 | U | R | D | 42.0 | U | R | D | 400 | U | R | D | 38.0 | U | R | D |
| 4,4'-DDE | ***85.0*** | ***D*** | | | ***170*** | ***D*** | | | 68.0 | D | R | D | 400 | U | R | D | ***200*** | ***D*** | | |
| 4,4'-DDT | 21.0 | U | R | D | ***190*** | ***DP*** | ***J*** | ****11*** | 42.0 | U | R | D | 400 | U | R | D | ***130*** | ***DP*** | ***J*** | ****11*** |
| ALDRIN | 10.0 | U | R | D | 19.0 | U | R | D | 21.0 | U | R | D | 200 | U | R | D | 19.0 | U | R | D |
| ALPHA-BHC | 10.0 | U | R | D | 19.0 | U | R | D | 21.0 | U | R | D | 200 | U | R | D | 19.0 | U | R | D |
| ALPHA-CHLORDANE | 10.0 | U | R | D | 19.0 | U | R | D | 21.0 | U | R | D | 200 | U | R | D | 19.0 | U | R | D |
| AROCLOR-1016 | 210 | U | R | D | 380 | U | R | D | 420 | U | R | D | 4,000 | U | R | D | 380 | U | R | D |
| AROCLOR-1221 | 410 | U | R | D | 770 | U | R | D | 840 | U | R | D | 8,000 | U | R | D | 760 | U | R | D |
| AROCLOR-1232 | 210 | U | R | D | 380 | U | R | D | 420 | U | R | D | 4,000 | U | R | D | 380 | U | R | D |
| AROCLOR-1242 | 210 | U | R | D | 380 | U | R | D | 420 | U | R | D | 4,000 | U | R | D | 380 | U | R | D |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC136DL | | | | MC138DL | | | | MC139DL | | | | MC141DL | | | | MC142DL | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS17S02 | | | | M01TS18S02 | | | | M01TS19S01 | | | | M01TS20S01 | | | | M01TS20S02 | | | |
| Date Sampled | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | | 6/28/96 | | | |
| Depth | DILUTION | | | | DILUTION | | | | DILUTION | | | | DILUTION | | | | DILUTION | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1P - Pesticides (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| AROCLOR-1248 | 210 | U | R | D | 380 | U | R | D | 420 | U | R | D | 4,000 | U | R | D | 380 | U | R | D |
| AROCLOR-1254 | 210 | U | R | D | 380 | U | R | D | 420 | U | R | D | 4,000 | U | R | D | 380 | U | R | D |
| AROCLOR-1260 | 210 | U | R | D | 380 | U | R | D | 420 | U | R | D | ***7,800*** | ***D*** | | | 380 | U | R | D |
| BETA-BHC | 10.0 | U | R | D | 19.0 | U | R | D | 21.0 | U | R | D | 200 | U | R | D | 19.0 | U | R | D |
| DELTA-BHC | 10.0 | U | R | D | 19.0 | U | R | D | 21.0 | U | R | D | 200 | U | R | D | 19.0 | U | R | D |
| DIELDRIN | 21.0 | U | R | D | 49.0 | DP | R | D | 42.0 | U | R | D | 400 | U | R | D | 38.0 | U | R | D |
| ENDOSULFAN I | 10.0 | U | R | D | 19.0 | U | R | D | 21.0 | U | R | D | 200 | U | R | D | 19.0 | U | R | D |
| ENDOSULFAN II | 21.0 | U | R | D | 38.0 | U | R | D | 42.0 | U | R | D | 400 | U | R | D | 38.0 | U | R | D |
| ENDOSULFAN SULFATE | 21.0 | U | R | D | 38.0 | U | R | D | 42.0 | U | R | D | 400 | U | R | D | 38.0 | U | R | D |
| ENDRIN | 21.0 | U | R | D | 38.0 | U | R | D | 42.0 | U | R | D | 480 | DP | R | D | 38.0 | U | R | D |
| ENDRIN ALDEHYDE | 21.0 | U | R | D | 38.0 | U | R | D | 42.0 | U | R | D | 430 | DP | R | D | 38.0 | U | R | D |
| ENDRIN KETONE | 21.0 | U | R | D | 38.0 | U | R | D | 42.0 | U | R | D | 400 | U | R | D | 38.0 | U | R | D |
| GAMMA-BHC (LINDANE) | 10.0 | U | R | D | 19.0 | U | R | D | 21.0 | U | R | D | 200 | U | R | D | 19.0 | U | R | D |
| GAMMA-CHLORDANE | 10.0 | U | R | D | 19.0 | U | R | D | 21.0 | U | R | D | 200 | U | R | D | 19.0 | U | R | D |
| HEPTACHLOR | 10.0 | U | R | D | 19.0 | U | R | D | 21.0 | U | R | D | 200 | U | R | D | 19.0 | U | R | D |
| HEPTACHLOR EPOXIDE | 10.0 | U | R | D | 19.0 | U | R | D | 21.0 | U | R | D | 200 | U | R | D | 19.0 | U | R | D |
| METHOXYCHLOR | 100 | U | R | D | 190 | U | R | D | 210 | U | R | D | 2,000 | U | R | D | 190 | U | R | D |
| TOXAPHENE | 1,000 | U | R | D | 1,900 | U | R | D | 2,100 | U | R | D | 20,000 | U | R | D | 1,900 | U | R | D |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC143DL | | | | MC148DL | | | | ? | | | | ? | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | | | | | | | | | | | | | | | | | | | | |
| Date Sampled | | | | | | | | | | | | | | | | | | | | |
| Depth | | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PHENOL | | | | | | | | | | | | | | | | | | | | |
| BIS(2-CHLOROETHYL)ETHER | | | | | | | | | | | | | | | | | | | | |
| 2-CHLOROPHENOL | | | | | | | | | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | | | | | | | | |
| 1,2-DICHLOROBENZENE | | | | | | | | | | | | | | | | | | | | |
| 2-METHYLPHENOL | | | | | | | | | | | | | | | | | | | | |
| 2,2'OXYBIS(1-CHLOROPROPAN | | | | | | | | | | | | | | | | | | | | |
| 4-METHYLPHENOL | | | | | | | | | | | | | | | | | | | | |
| N-NITROSO-DI-N-PROPYLAMIN | | | | | | | | | | | | | | | | | | | | |
| HEXACHLOROETHANE | | | | | | | | | | | | | | | | | | | | |
| NITROBENZENE | | | | | | | | | | | | | | | | | | | | |
| ISOPHORONE | | | | | | | | | | | | | | | | | | | | |
| 2-NITROPHENOL | | | | | | | | | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | | | | | | | | | | | | | | | | | | | | |
| BIS(2-CHLOROETHOXY)METHA | | | | | | | | | | | | | | | | | | | | |
| 2,4-DICHLOROPHENOL | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | | | | | | | | | |
| 4-CHLOROANILINE | | | | | | | | | | | | | | | | | | | | |
| HEXACHLOROBUTADIENE | | | | | | | | | | | | | | | | | | | | |
| 4-CHLORO-3-METHYLPHENOL | | | | | | | | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | | | | | | | | | | | | | | | | | | | | |
| HEXACHLOROCYCLOPENTADI | | | | | | | | | | | | | | | | | | | | |
| 2,4,6-TRICHLOROPHENOL | | | | | | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC143DL | | | | MC148DL | | | | ? | | | | ? | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | | | | | | | | | | | | | | | | | | | | |
| Date Sampled | | | | | | | | | | | | | | | | | | | | |
| Depth | | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| 2,4,5-TRICHLOROPHENOL | | | | | | | | | | | | | | | | | | | | |
| 2-CHLORONAPHTHALENE | | | | | | | | | | | | | | | | | | | | |
| 2-NITROANILINE | | | | | | | | | | | | | | | | | | | | |
| DIMETHYLPHTHALATE | | | | | | | | | | | | | | | | | | | | |
| ACENAPHTHYLENE | | | | | | | | | | | | | | | | | | | | |
| 2,6-DINITROTOLUENE | | | | | | | | | | | | | | | | | | | | |
| 3-NITROANILINE | | | | | | | | | | | | | | | | | | | | |
| ACENAPHTHENE | | | | | | | | | | | | | | | | | | | | |
| 2,4-DINITROPHENOL | | | | | | | | | | | | | | | | | | | | |
| 4-NITROPHENOL | | | | | | | | | | | | | | | | | | | | |
| DIBENZOFURAN | | | | | | | | | | | | | | | | | | | | |
| 2,4-DINITROTOLUENE | | | | | | | | | | | | | | | | | | | | |
| DIETHYLPHTHALATE | | | | | | | | | | | | | | | | | | | | |
| 4-CHLOROPHENYL-PHENYLET | | | | | | | | | | | | | | | | | | | | |
| FLUORENE | | | | | | | | | | | | | | | | | | | | |
| 4-NITROANILINE | | | | | | | | | | | | | | | | | | | | |
| 4,6-DINITRO-2-METHYLPHENO | | | | | | | | | | | | | | | | | | | | |
| N-NITROSODIPHENYLAMINE (1 | | | | | | | | | | | | | | | | | | | | |
| 4-BROMOPHENYL-PHENYLETH | | | | | | | | | | | | | | | | | | | | |
| HEXACHLOROBENZENE | | | | | | | | | | | | | | | | | | | | |
| PENTACHLOROPHENOL | | | | | | | | | | | | | | | | | | | | |
| PHENANTHRENE | | | | | | | | | | | | | | | | | | | | |
| ANTHRACENE | | | | | | | | | | | | | | | | | | | | |
| CARBAZOLE | | | | | | | | | | | | | | | | | | | | |
| DI-N-BUTYLPHTHALATE | | | | | | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC143DL | | | | MC148DL | | | | ? | | | | ? | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS20D02 | | | | M01TP11S02 | | | | | | | | | | | | | | | |
| Date Sampled | 6/28/96 | | | | 7/1/96 | | | | | | | | | | | | | | | |
| Depth | DILUTION | | | | DILUTION | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| FLUORANTHENE | | | | | | | | | | | | | | | | | | | | |
| PYRENE | | | | | | | | | | | | | | | | | | | | |
| BUTYLBENZYLPHTHALATE | | | | | | | | | | | | | | | | | | | | |
| 3,3'-DICHLOROBENZIDINE | | | | | | | | | | | | | | | | | | | | |
| BENZO(A)ANTHRACENE | | | | | | | | | | | | | | | | | | | | |
| CHRYSENE | | | | | | | | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALA | | | | | | | | | | | | | | | | | | | | |
| DI-N-OCTYL PHTHALATE | | | | | | | | | | | | | | | | | | | | |
| BENZO(B)FLUORANTHENE | | | | | | | | | | | | | | | | | | | | |
| BENZO(K)FLUORANTHENE | | | | | | | | | | | | | | | | | | | | |
| BENZO(A)PYRENE | | | | | | | | | | | | | | | | | | | | |
| INDENO(1,2,3-CD)PYRENE | | | | | | | | | | | | | | | | | | | | |
| DIBENZ(A,H)ANTHRACENE | | | | | | | | | | | | | | | | | | | | |
| BENZO(G,H,I)PERYLENE | | | | | | | | | | | | | | | | | | | | |
| ***OLM03.1P - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| 4,4'-DDD | 37.0 | U | R | D | 740 | U | R | D | | | | | | | | | | | | |
| 4,4'-DDE | ***120*** | ***D*** | | | 740 | U | R | D | | | | | | | | | | | | |
| 4,4'-DDT | ***89.0*** | ***DP*** | ***J*** | ****11*** | 740 | U | R | D | | | | | | | | | | | | |
| ALDRIN | 19.0 | U | R | D | 370 | U | R | D | | | | | | | | | | | | |
| ALPHA-BHC | 19.0 | U | R | D | 370 | U | R | D | | | | | | | | | | | | |
| ALPHA-CHLORDANE | 19.0 | U | R | D | 370 | U | R | D | | | | | | | | | | | | |
| AROCLOR-1016 | 370 | U | R | D | 7,400 | U | R | D | | | | | | | | | | | | |
| AROCLOR-1221 | 750 | U | R | D | 15,000 | U | R | D | | | | | | | | | | | | |
| AROCLOR-1232 | 370 | U | R | D | 7,400 | U | R | D | | | | | | | | | | | | |
| AROCLOR-1242 | 370 | U | R | D | 7,400 | U | R | D | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Soil, Bulky Waste Landfill

| EPA NO | MC143DL | | | | MC148DL | | | | ? | | | | ? | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01TS20D02 | | | | M01TP11S02 | | | | | | | | | | | | | | | |
| Date Sampled | 6/28/96 | | | | 7/1/96 | | | | | | | | | | | | | | | |
| Depth | DILUTION | | | | DILUTION | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1P - Pesticides (UG/KG) Co*** | | | | | | | | | | | | | | | | | | | | |
| AROCLOR-1248 | 370 | U | R | D | 7,400 | U | R | D | | | | | | | | | | | | |
| AROCLOR-1254 | 370 | U | R | D | 7,400 | U | R | D | | | | | | | | | | | | |
| AROCLOR-1260 | 370 | U | R | D | ***19,000*** | ***DP*** | ***J*** | ****11*** | | | | | | | | | | | | |
| BETA-BHC | 19.0 | U | R | D | 370 | U | R | D | | | | | | | | | | | | |
| DELTA-BHC | 19.0 | U | R | D | 370 | U | R | D | | | | | | | | | | | | |
| DIELDRIN | 37.0 | U | R | D | 740 | U | R | D | | | | | | | | | | | | |
| ENDOSULFAN I | 19.0 | U | R | D | 370 | U | R | D | | | | | | | | | | | | |
| ENDOSULFAN II | 37.0 | U | R | D | 740 | U | R | D | | | | | | | | | | | | |
| ENDOSULFAN SULFATE | 37.0 | U | R | D | 740 | U | R | D | | | | | | | | | | | | |
| ENDRIN | 37.0 | U | R | D | 740 | U | R | D | | | | | | | | | | | | |
| ENDRIN ALDEHYDE | 37.0 | U | R | D | 860 | DP | R | D | | | | | | | | | | | | |
| ENDRIN KETONE | 37.0 | U | R | D | 740 | U | R | D | | | | | | | | | | | | |
| GAMMA-BHC (LINDANE) | 19.0 | U | R | D | 370 | U | R | D | | | | | | | | | | | | |
| GAMMA-CHLORDANE | 19.0 | U | R | D | 370 | U | R | D | | | | | | | | | | | | |
| HEPTACHLOR | 19.0 | U | R | D | 370 | U | R | D | | | | | | | | | | | | |
| HEPTACHLOR EPOXIDE | 19.0 | U | R | D | 370 | U | R | D | | | | | | | | | | | | |
| METHOXYCHLOR | 190 | U | R | D | 3,700 | U | R | D | | | | | | | | | | | | |
| TOXAPHENE | 1,900 | U | R | D | 37,000 | U | R | D | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

# Field QC Water, Bulky Waste Landfill

| EPA NO | MC145 | | | | MC146 | | | | MC147 | | | | MC155 | | | | MC187 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01QW02E02 | | | | M01QW14E02 | | | | M01QW17E02 | | | | M01QW01F01 | | | | | | | |
| Date Sampled | | | | | | | | | | | | | | | | | | | | |
| Depth | ? | | | | ? | | | | ? | | | | ? | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| PHENOL | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| BIS(2-CHLOROETHYL)ETHER | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| 2-CHLOROPHENOL | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| 1,3-DICHLOROBENZENE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| 1,4-DICHLOROBENZENE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| 1,2-DICHLOROBENZENE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| 2-METHYLPHENOL | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| 2,2'OXYBIS(1-CHLOROPROPAN | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| 4-METHYLPHENOL | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| N-NITROSO-DI-N-PROPYLAMIN | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| HEXACHLOROETHANE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| NITROBENZENE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| ISOPHORONE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| 2-NITROPHENOL | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| 2,4-DIMETHYLPHENOL | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| BIS(2-CHLOROETHOXY)METHA | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| 2,4-DICHLOROPHENOL | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| 1,2,4-TRICHLOROBENZENE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| NAPHTHALENE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| 4-CHLOROANILINE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| HEXACHLOROBUTADIENE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| 4-CHLORO-3-METHYLPHENOL | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| 2-METHYLNAPHTHALENE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| HEXACHLOROCYCLOPENTADI | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| 2,4,6-TRICHLOROPHENOL | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for

## Field QC Water, Bulky Waste Landfill

| EPA NO | MC145 | | | | MC146 | | | | MC147 | | | | MC155 | | | | MC187 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01QW02E02 | | | | M01QW14E02 | | | | M01QW17E02 | | | | M01QW01F01 | | | | | | | |
| Date Sampled | 6/24/96 | | | | 6/26/96 | | | | 6/28/96 | | | | 6/26/96 | | | | | | | |
| Depth | | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/L) Cont*** | | | | | | | | | | | | | | | | | | | | |
| 2,4,5-TRICHLOROPHENOL | 25.0 | U | U | | 25.0 | U | U | | 25.0 | U | U | | 25.0 | U | U | | | | | |
| 2-CHLORONAPHTHALENE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| 2-NITROANILINE | 25.0 | U | U | | 25.0 | U | U | | 25.0 | U | U | | 25.0 | U | U | | | | | |
| DIMETHYLPHTHALATE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| ACENAPHTHYLENE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| 2,6-DINITROTOLUENE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| 3-NITROANILINE | 25.0 | U | U | | 25.0 | U | U | | 25.0 | U | U | | 25.0 | U | U | | | | | |
| ACENAPHTHENE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| 2,4-DINITROPHENOL | 25.0 | U | U | | 25.0 | U | U | | 25.0 | U | U | | 25.0 | U | U | | | | | |
| 4-NITROPHENOL | 25.0 | U | U | | 25.0 | U | U | | 25.0 | U | U | | 25.0 | U | U | | | | | |
| DIBENZOFURAN | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| 2,4-DINITROTOLUENE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| DIETHYLPHTHALATE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| 4-CHLOROPHENYL-PHENYLET | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| FLUORENE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| 4-NITROANILINE | 25.0 | U | U | | 25.0 | U | U | | 25.0 | U | U | | 25.0 | U | U | | | | | |
| 4,6-DINITRO-2-METHYLPHENO | 25.0 | U | U | | 25.0 | U | U | | 25.0 | U | U | | 25.0 | U | U | | | | | |
| N-NITROSODIPHENYLAMINE (1 | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| 4-BROMOPHENYL-PHENYLETH | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| HEXACHLOROBENZENE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| PENTACHLOROPHENOL | 25.0 | U | U | | 25.0 | U | U | | 25.0 | U | U | | 25.0 | U | U | | | | | |
| PHENANTHRENE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| ANTHRACENE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| CARBAZOLE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| DI-N-BUTYLPHTHALATE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for
# Field QC Water, Bulky Waste Landfill

| EPA NO | MC145 | | | | MC146 | | | | MC147 | | | | MC155 | | | | MC187 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01QW02E02 | | | | M01QW14E02 | | | | M01QW17E02 | | | | M01QW01F01 | | | | | | | |
| Date Sampled | 6/24/96 | | | | 6/26/96 | | | | 6/28/96 | | | | 6/26/96 | | | | | | | |
| Depth | | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1B - Semi-Voa (UG/L) Cont*** | | | | | | | | | | | | | | | | | | | | |
| FLUORANTHENE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| PYRENE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| BUTYLBENZYLPHTHALATE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| 3,3'-DICHLOROBENZIDINE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| BENZO(A)ANTHRACENE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| CHRYSENE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALA | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| DI-N-OCTYL PHTHALATE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| BENZO(B)FLUORANTHENE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| BENZO(K)FLUORANTHENE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| BENZO(A)PYRENE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| INDENO(1,2,3-CD)PYRENE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| DIBENZ(A,H)ANTHRACENE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| BENZO(G,H,I)PERYLENE | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | 10.0 | U | U | | | | | |
| ***OLM03.1P - Pesticides (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| 4,4'-DDD | 0.10 | U | U | | 0.10 | U | U | | 0.10 | U | U | | 0.10 | U | U | | | | | |
| 4,4'-DDE | 0.10 | U | U | | 0.10 | U | U | | 0.10 | U | U | | 0.10 | U | U | | | | | |
| 4,4'-DDT | 0.10 | U | U | | 0.10 | U | U | | 0.10 | U | U | | 0.10 | U | U | | | | | |
| ALDRIN | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | | | | | |
| ALPHA-BHC | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | | | | | |
| ALPHA-CHLORDANE | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | | | | | |
| AROCLOR-1016 | 1.0 | U | U | | 1.0 | U | U | | 1.0 | U | U | | 1.0 | U | U | | | | | |
| AROCLOR-1221 | 2.0 | U | U | | 2.0 | U | U | | 2.0 | U | U | | 2.0 | U | U | | | | | |
| AROCLOR-1232 | 1.0 | U | U | | 1.0 | U | U | | 1.0 | U | U | | 1.0 | U | U | | | | | |
| AROCLOR-1242 | 1.0 | U | U | | 1.0 | U | U | | 1.0 | U | U | | 1.0 | U | U | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Field QC Water, Bulky Waste Landfill

| EPA NO | MC145 | | | | MC146 | | | | MC147 | | | | MC155 | | | | MC187 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01QW02E02 | | | | M01QW14E02 | | | | M01QW17E02 | | | | M01QW01F01 | | | | M01QW01E01 | | | |
| Date Sampled | 6/24/96 | | | | 6/26/96 | | | | 6/28/96 | | | | 6/26/96 | | | | 9/10/96 | | | |
| Depth | | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***OLM03.1P - Pesticides (UG/L) Conti*** | | | | | | | | | | | | | | | | | | | | |
| AROCLOR-1248 | 1.0 | U | U | | 1.0 | U | U | | 1.0 | U | U | | 1.0 | U | U | | | | | |
| AROCLOR-1254 | 1.0 | U | U | | 1.0 | U | U | | 1.0 | U | U | | 1.0 | U | U | | | | | |
| AROCLOR-1260 | 1.0 | U | U | | 1.0 | U | U | | 1.0 | U | U | | 1.0 | U | U | | | | | |
| BETA-BHC | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | | | | | |
| DELTA-BHC | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | | | | | |
| DIELDRIN | 0.10 | U | U | | 0.10 | U | U | | 0.10 | U | U | | 0.10 | U | U | | | | | |
| ENDOSULFAN I | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | | | | | |
| ENDOSULFAN II | 0.10 | U | U | | 0.10 | U | U | | 0.10 | U | U | | 0.10 | U | U | | | | | |
| ENDOSULFAN SULFATE | 0.10 | U | U | | 0.10 | U | U | | 0.10 | U | U | | 0.10 | U | U | | | | | |
| ENDRIN | 0.10 | U | U | | 0.10 | U | U | | 0.10 | U | U | | 0.10 | U | U | | | | | |
| ENDRIN ALDEHYDE | 0.10 | U | U | | 0.10 | U | U | | 0.10 | U | U | | 0.10 | U | U | | | | | |
| ENDRIN KETONE | 0.10 | U | U | | 0.10 | U | U | | 0.10 | U | U | | 0.10 | U | U | | | | | |
| GAMMA-BHC (LINDANE) | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | | | | | |
| GAMMA-CHLORDANE | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | | | | | |
| HEPTACHLOR | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | | | | | |
| HEPTACHLOR EPOXIDE | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | | | | | |
| METHOXYCHLOR | 0.50 | U | U | | 0.50 | U | U | | 0.50 | U | U | | 0.50 | U | U | | | | | |
| TOXAPHENE | 5.0 | U | U | | 5.0 | U | U | | 5.0 | U | U | | 5.0 | U | U | | | | | |
| ***STIV141C - PCBs (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | | | | | | | | | | | | | | | | | ***0.000460*** | | | |
| PCB-18 (2,2',5) | | | | | | | | | | | | | | | | | ***0.000930*** | | | |
| PCB-28 (2,4,4') | | | | | | | | | | | | | | | | | 0.000940 | U | U | |
| PCB-52 (2,2',5,5') | | | | | | | | | | | | | | | | | 0.000350 | N | U | + |
| PCB-44 (2,2',3,5') | | | | | | | | | | | | | | | | | 0.000300 | U | U | |
| PCB-66 (2,3',4,4') | | | | | | | | | | | | | | | | | 0.000290 | U | U | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

# Field QC Water, Bulky Waste Landfill

| EPA NO | MC145 | | | | MC146 | | | | MC147 | | | | MC155 | | | | MC187 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | | | | | | | | | | | | | | | | | M01QW01E01 | | | |
| Date Sampled | | | | | | | | | | | | | | | | | 9/10/96 | | | |
| Depth | | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/L) Continue*** | | | | | | | | | | | | | | | | | | | | |
| PCB-101 (2,2',3,5,5') | | | | | | | | | | | | | | | | | 0.000360 | U | U | |
| PCB-77 (3,3',4,4') | | | | | | | | | | | | | | | | | 0.000520 | U | U | |
| PCB-118 (2,3',4,4',5) | | | | | | | | | | | | | | | | | 0.000340 | U | U | |
| PCB-153 (2,2',4,4',5,5') | | | | | | | | | | | | | | | | | 0.000230 | U | U | |
| PCB-105 (2,3,3',4,4') | | | | | | | | | | | | | | | | | 0.000530 | U | U | |
| PCB-138 (2,2',3,4,4',5') | | | | | | | | | | | | | | | | | 0.000460 | | UJ | B |
| PCB-126 (3,3',4,4',5) | | | | | | | | | | | | | | | | | 0.000440 | U | U | |
| PCB-187 (2,2',3,4',5,5',6) | | | | | | | | | | | | | | | | | 0.000540 | U | U | |
| PCB-128 (2,2',3,3',4,4') | | | | | | | | | | | | | | | | | 0.000290 | U | U | |
| PCB-180 (2,2',3,4,4',5,5') | | | | | | | | | | | | | | | | | 0.000680 | U | U | |
| PCB-170 (2,2',3,3',4,4',5) | | | | | | | | | | | | | | | | | 0.00 | U | U | |
| PCB-195 (2,2',3,3',4,4',5,6) | | | | | | | | | | | | | | | | | 0.000550 | N | U | + |
| PCB-206 (2,2',3,3',4,4',5,5',6) | | | | | | | | | | | | | | | | | 0.000420 | U | U | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | | | | | | | | | | | | | | | | | 0.000510 | U | U | |
| ***STIV141E - Pesticides (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | | | | | | | | | | | | | | | | | 0.000380 | U | U | |
| 2,4'-DDE | | | | | | | | | | | | | | | | | 0.000320 | U | U | |
| ENDOSULFAN I | | | | | | | | | | | | | | | | | 0.000550 | U | U | |
| HEXACHLOROBENZENE | | | | | | | | | | | | | | | | | ***0.000230*** | ***J*** | ***J*** | |
| BETA-BHC | | | | | | | | | | | | | | | | | 0.000240 | U | U | |
| GAMMA-BHC (LINDANE) | | | | | | | | | | | | | | | | | ***0.000320*** | | | |
| DELTA-BHC | | | | | | | | | | | | | | | | | 0.000290 | N | U | + |
| HEPTACHLOR | | | | | | | | | | | | | | | | | 0.000410 | U | U | |
| ALDRIN | | | | | | | | | | | | | | | | | 0.000500 | U | U | |
| GAMMA-CHLORDANE | | | | | | | | | | | | | | | | | 0.000200 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Field QC Water, Bulky Waste Landfill

| EPA NO | MC145 | | | | MC146 | | | | MC147 | | | | MC155 | | | | MC187 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | | | | | | | | | | | | | | | | | M01QW01E01 | | | |
| Date Sampled | | | | | | | | | | | | | | | | | 9/10/96 | | | |
| Depth | | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/L) Conti*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-CHLORDANE | | | | | | | | | | | | | | | | | 0.000440 | U | U | |
| TRANS-NONACHLOR | | | | | | | | | | | | | | | | | 0.000310 | U | U | |
| HEPTACHLOR EPOXIDE | | | | | | | | | | | | | | | | | 0.000760 | U | U | |
| DIELDRIN | | | | | | | | | | | | | | | | | 0.000370 | U | U | |
| 4,4'-DDE | | | | | | | | | | | | | | | | | 0.000180 | U | U | |
| 2,4'-DDD | | | | | | | | | | | | | | | | | 0.000680 | U | U | |
| ENDRIN | | | | | | | | | | | | | | | | | 0.000520 | U | U | |
| ENDRIN ALDEHYDE | | | | | | | | | | | | | | | | | 0.000290 | U | U | |
| 4,4'-DDD | | | | | | | | | | | | | | | | | 0.000440 | U | U | |
| 2,4'-DDT | | | | | | | | | | | | | | | | | 0.000290 | N | U | + |
| ENDOSULFAN II | | | | | | | | | | | | | | | | | 0.000550 | U | U | |
| ENDOSULFAN SULFATE | | | | | | | | | | | | | | | | | 0.000550 | U | U | |
| 4,4'-DDT | | | | | | | | | | | | | | | | | 0.000660 | U | U | |
| ENDRIN KETONE | | | | | | | | | | | | | | | | | 0.000290 | N | U | + |
| METHOXYCHLOR | | | | | | | | | | | | | | | | | 0.000750 | U | U | |
| MIREX | | | | | | | | | | | | | | | | | 0.000220 | U | U | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Appendix E

# APPENDIX E - ARTHUR D. LITTLE, INC. LABORATORY COMPLETE ANALYTICAL DATA - DETECTS & NON-DETECTS

Appendix E is comprised of summary tables of the analytical data received from Arthur D. Little Laboratory in Cambridge, Massachusetts. The data tables are structured with the samples in columns and the chemical analytes in rows. Analytes that are detected are shown in boldface type and italicized. The Lab Qualification codes are provided by the laboratory, while the Rev Qualification and Qualification Codes are added during Data Validation. Explanation of these codes follows:

## DATA QUALIFIER DEFINITIONS

| Lab/Rev Qual Code | Organics |
|---|---|
| U | The analyte was analyzed for, but was not detected above the reported sample quantitation limit. |
| J | The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample. |
| N | The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification." |
| NJ | The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. |
| UJ | The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample. |
| R | The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified. |

# QUALIFICATION CODE DEFINITIONS

| Qual Code | Organics |
|---|---|
| H | Holding times were exceeded. |
| S | Surrogate recovery was outside QC limits. |
| C | Calibration percent relative standard deviation or percent difference was noncompliant. |
| R | Calibration relative response factor was <0.05. |
| B | Presumed contamination from preparation (method) blank. |
| L | Not applicable. |
| Q | MS/MSD recovery was poor or RPD high. |
| E | Not applicable. |
| I | Internal standard performance was unsatisfactory. |
| A | Not applicable. |
| M | Tuning bromofluorobenzene or decafluorotriphenylphosphine was noncompliant. |
| T | Presumed contamination from trip blank. |
| + | False positive – reported compound was not present. |
| - | False negative – compound was present but not reported. |
| F | Presumed contamination from field blank or equipment rinsate. |
| $ | Reported result or other information was incorrect. |
| ? | Tentatively identified compound identity or reported retention time has been changed. |
| D | The analysis with this flag should not be used because another more technically sound analysis is available. |
| P | Instrument performance for pesticides was poor. |
| *# | Unusual problems found with the data that have been described the data validation report. The number following the asterisk (*) will indicate the subsection of the report where a description of the problem can be found. |

# Analytical Results Summary for

## Marine Sediment, Reference Sites

| EPA NO | MA700 | | | | MA701 | | | | MA702 | | | | MA703 | | | | MA704 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M00MS01S01 | | | | M00MS02S01 | | | | M00MS02D01 | | | | M00MS03S01 | | | | M00MS04S01 | | | |
| Date Sampled | 9/12/96 | | | | 9/12/96 | | | | 9/12/96 | | | | 9/12/96 | | | | 9/12/96 | | | |
| Depth | 0.5 | | | | 0.5 | | | | 0.5 | | | | 0.5 | | | | 0.5 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 0.04 | U | U | | 0.05 | U | U | | 0.04 | U | U | | 0.04 | U | U | | 0.04 | U | U | |
| PCB-18 (2,2',5) | 0.09 | U | U | | 0.10 | U | U | | 0.09 | U | U | | 0.09 | U | U | | 0.09 | U | U | |
| PCB-28 (2,4,4') | 0.06 | U | U | | 0.07 | U | U | | 0.06 | U | U | | 0.06 | U | U | | 0.06 | U | U | |
| PCB-52 (2,2',5,5') | 0.03 | U | U | | 0.03 | U | U | | 0.03 | U | U | | 0.03 | U | U | | 0.03 | U | U | |
| PCB-44 (2,2',3,5') | 0.03 | U | U | | 0.03 | U | U | | 0.03 | U | U | | 0.03 | U | U | | 0.03 | U | U | |
| PCB-66 (2,3',4,4') | 0.03 | U | U | | 0.04 | U | U | | 0.03 | U | U | | 0.03 | U | U | | 0.03 | U | U | |
| PCB-101 (2,2',3,5,5') | 0.03 | U | U | | 0.03 | U | U | | 0.03 | U | U | | 0.03 | U | U | | 0.03 | U | U | |
| PCB-77 (3,3',4,4') | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | |
| PCB-118 (2,3',4,4',5) | 0.04 | U | U | | 0.04 | U | U | | 0.04 | U | U | | 0.04 | U | U | | 0.04 | U | U | |
| PCB-153 (2,2',4,4',5,5') | 0.03 | U | U | | 0.04 | U | U | | 0.03 | U | U | | 0.03 | U | U | | 0.03 | U | U | |
| PCB-105 (2,3,3',4,4') | 0.03 | U | U | | 0.03 | U | U | | 0.03 | U | U | | 0.03 | U | U | | 0.03 | U | U | |
| PCB-138 (2,2',3,4,4',5') | ***0.04*** | | | | ***0.08*** | | | | ***0.07*** | | | | ***0.07*** | | | | ***0.06*** | | | |
| PCB-126 (3,3',4,4',5) | 0.08 | U | U | | 0.09 | U | U | | 0.08 | U | U | | 0.08 | U | U | | 0.08 | U | U | |
| PCB-187 (2,2',3,4',5,5',6) | 0.06 | U | U | | 0.06 | U | U | | 0.06 | U | U | | 0.06 | U | U | | 0.06 | U | U | |
| PCB-128 (2,2',3,3',4,4') | 0.03 | U | U | | 0.04 | U | U | | 0.04 | U | U | | 0.03 | U | U | | 0.04 | U | U | |
| PCB-180 (2,2',3,4,4',5,5') | 0.04 | U | U | | 0.04 | U | U | | 0.04 | U | U | | 0.04 | U | U | | 0.04 | J | U | + |
| PCB-170 (2,2',3,3',4,4',5) | 0.13 | U | U | | 0.14 | U | U | | 0.13 | U | U | | 0.13 | U | U | | 0.13 | U | U | |
| PCB-195 (2,2',3,3',4,4',5,6) | 0.03 | U | U | | 0.03 | U | U | | 0.03 | U | U | | 0.03 | NJ | U | + | 0.03 | NJ | U | + |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 0.02 | U | U | | 0.03 | U | U | | 0.02 | U | U | | 0.02 | U | U | | 0.02 | U | U | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.03 | U | U | | 0.03 | U | U | | 0.03 | U | U | | 0.03 | U | U | | 0.03 | U | U | |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 0.03 | J | U | + | 0.03 | U | U | | 0.03 | J | U | + | 0.03 | J | U | + | 0.03 | NJ | U | + |
| 2,4'-DDE | ***0.13*** | | | | 0.04 | U | U | | 0.04 | U | U | | 0.04 | U | U | | 0.04 | U | U | |
| ENDOSULFAN I | 0.05 | U | U | | 0.06 | U | U | | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | |
| HEXACHLOROBENZENE | 0.04 | J | U | + | 0.04 | U | U | | 0.04 | U | U | | 0.04 | NJ | U | + | 0.04 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

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# Analytical Results Summary for

## Marine Sediment, Reference Sites

| EPA NO | MA700 | | | | MA701 | | | | MA702 | | | | MA703 | | | | MA704 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M00MS01S01 | | | | M00MS02S01 | | | | M00MS02D01 | | | | M00MS03S01 | | | | M00MS04S01 | | | |
| Date Sampled | 9/12/96 | | | | 9/12/96 | | | | 9/12/96 | | | | 9/12/96 | | | | 9/12/96 | | | |
| Depth | 0.5 | | | | 0.5 | | | | 0.5 | | | | 0.5 | | | | 0.5 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.05 | U | U | | 0.06 | U | U | | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | |
| GAMMA-BHC (LINDANE) | 0.04 | U | U | | 0.04 | U | U | | 0.04 | U | U | | 0.04 | U | U | | 0.04 | U | U | |
| DELTA-BHC | 0.03 | N | U | + | 0.03 | N | U | + | 0.03 | N | U | + | 0.03 | U | U | | 0.03 | N | U | + |
| HEPTACHLOR | 0.04 | U | UJ | C | 0.04 | U | UJ | C | 0.04 | U | UJ | C | 0.04 | U | UJ | C | 0.04 | U | UJ | C |
| ALDRIN | 0.04 | U | U | | 0.04 | U | U | | 0.04 | U | U | | 0.04 | U | U | | 0.04 | U | U | |
| GAMMA-CHLORDANE | 0.04 | U | U | | 0.04 | U | U | | 0.04 | U | U | | 0.04 | U | U | | 0.04 | U | U | |
| ALPHA-CHLORDANE | 0.03 | U | U | | 0.04 | U | U | | 0.04 | U | U | | 0.04 | U | U | | 0.04 | U | U | |
| TRANS-NONACHLOR | 0.02 | U | U | | 0.02 | U | U | | 0.02 | U | U | | 0.02 | U | U | | 0.02 | U | U | |
| HEPTACHLOR EPOXIDE | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | |
| DIELDRIN | 0.04 | U | U | | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | |
| 4,4'-DDE | 0.03 | U | U | | 0.04 | U | U | | 0.04 | U | U | | 0.03 | U | U | | 0.04 | U | U | |
| 2,4'-DDD | 0.04 | U | U | | 0.04 | U | U | | 0.04 | N | U | + | 0.04 | U | U | | 0.04 | U | U | |
| ENDRIN | 0.01 | U | U | | 0.01 | U | U | | 0.01 | U | U | | 0.01 | U | U | | 0.01 | U | U | |
| ENDRIN ALDEHYDE | 0.03 | U | U | | 0.03 | U | U | | 0.03 | U | U | | 0.03 | U | U | | 0.03 | U | U | |
| 4,4'-DDD | 0.06 | U | U | | 0.07 | U | U | | 0.06 | U | U | | 0.06 | U | U | | 0.06 | U | U | |
| 2,4'-DDT | 0.05 | U | U | | 0.06 | U | U | | 0.06 | U | U | | 0.06 | U | U | | 0.06 | U | U | |
| ENDOSULFAN II | 0.05 | N | U | + | 0.06 | U | U | | 0.06 | N | U | + | 0.05 | U | U | | 0.05 | U | U | |
| ENDOSULFAN SULFATE | 0.05 | U | U | | 0.06 | U | U | | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | |
| 4,4'-DDT | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | | 0.05 | U | U | |
| ENDRIN KETONE | 0.03 | U | U | | 0.03 | U | U | | 0.03 | U | U | | 0.03 | U | U | | 0.03 | U | U | |
| METHOXYCHLOR | 0.18 | U | U | | 0.20 | U | U | | 0.18 | U | U | | 0.18 | U | U | | 0.18 | U | U | |
| MIREX | 0.04 | U | U | | 0.04 | U | U | | 0.04 | U | U | | 0.04 | U | U | | 0.04 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Seawater, Reference Sites

| EPA NO | MA705 | | | | MA706 | | | | MA715 | | | | ? | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M00SW01S01 | | | | M00SW03S01 | | | | M00SW03D01 | | | | | | | | | | | |
| Date Sampled | 9/12/96 | | | | 9/12/96 | | | | 9/12/96 | | | | | | | | | | | |
| Depth | | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 0.000330 | N | U | + | 0.000340 | N | U | + | 0.000330 | U | U | | | | | | | | | |
| PCB-18 (2,2',5) | 0.000440 | U | U | | 0.000440 | U | U | | 0.000440 | U | U | | | | | | | | | |
| PCB-28 (2,4,4') | 0.000920 | U | U | | 0.000930 | U | U | | 0.000920 | U | U | | | | | | | | | |
| PCB-52 (2,2',5,5') | 0.000340 | U | U | | 0.000350 | U | U | | 0.000340 | U | U | | | | | | | | | |
| PCB-44 (2,2',3,5') | 0.000290 | U | U | | 0.000300 | U | U | | 0.000290 | U | U | | | | | | | | | |
| PCB-66 (2,3',4,4') | 0.000280 | U | U | | 0.000280 | U | U | | 0.000280 | U | U | | | | | | | | | |
| PCB-101 (2,2',3,5,5') | 0.000350 | U | U | | 0.000360 | U | U | | 0.000350 | U | U | | | | | | | | | |
| PCB-77 (3,3',4,4') | 0.000510 | U | U | | 0.000510 | U | U | | 0.000510 | U | U | | | | | | | | | |
| PCB-118 (2,3',4,4',5) | 0.000330 | U | U | | 0.000330 | U | U | | 0.000330 | U | U | | | | | | | | | |
| PCB-153 (2,2',4,4',5,5') | 0.000230 | U | U | | 0.000230 | U | U | | 0.000230 | U | U | | | | | | | | | |
| PCB-105 (2,3,3',4,4') | 0.000520 | U | U | | 0.000520 | U | U | | 0.000520 | U | U | | | | | | | | | |
| PCB-138 (2,2',3,4,4',5') | 0.000600 | | UJ | B | 0.000850 | | UJ | B | 0.000630 | | UJ | B | | | | | | | | |
| PCB-126 (3,3',4,4',5) | 0.000430 | U | U | | 0.000430 | U | U | | 0.000430 | U | U | | | | | | | | | |
| PCB-187 (2,2',3,4',5,5',6) | 0.000530 | U | U | | 0.000540 | U | U | | 0.000530 | U | U | | | | | | | | | |
| PCB-128 (2,2',3,3',4,4') | 0.000290 | U | U | | 0.000290 | U | U | | 0.000290 | U | U | | | | | | | | | |
| PCB-180 (2,2',3,4,4',5,5') | 0.000670 | U | U | | 0.000670 | U | U | | 0.000670 | U | U | | | | | | | | | |
| PCB-170 (2,2',3,3',4,4',5) | 0.0025 | U | U | | 0.0025 | U | U | | 0.0025 | U | U | | | | | | | | | |
| PCB-195 (2,2',3,3',4,4',5,6) | 0.000540 | U | U | | 0.000540 | N | U | + | 0.000540 | U | U | | | | | | | | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000410 | U | U | | 0.000420 | U | U | | 0.000410 | U | U | | | | | | | | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000500 | U | U | | 0.000500 | U | U | | 0.000500 | U | U | | | | | | | | | |
| ***STIV141E - Pesticides (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 0.000370 | U | UJ | C | 0.000370 | U | UJ | C | 0.000370 | U | UJ | C | | | | | | | | |
| 2,4'-DDE | 0.000310 | U | U | | 0.000320 | U | U | | 0.000310 | U | U | | | | | | | | | |
| ENDOSULFAN I | 0.000540 | U | U | | 0.000550 | U | U | | 0.000540 | U | U | | | | | | | | | |
| HEXACHLOROBENZENE | ***0.000320*** | ***J*** | ***J*** | | 0.000340 | N | U | + | ***0.000250*** | ***J*** | ***J*** | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for

## Seawater, Reference Sites

| EPA NO | MA705 | | | | MA706 | | | | MA715 | | | | ? | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M00SW01S01 | | | | M00SW03S01 | | | | M00SW03D01 | | | | | | | | | | | |
| Date Sampled | 9/12/96 | | | | 9/12/96 | | | | 9/12/96 | | | | | | | | | | | |
| Depth | | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/L) Conti*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.000240 | U | U | | 0.000240 | N | U | + | 0.000240 | N | U | + | | | | | | | | |
| GAMMA-BHC (LINDANE) | 0.000260 | U | U | | 0.000270 | U | U | | ***0.000320*** | | | | | | | | | | | |
| DELTA-BHC | 0.000280 | U | U | | 0.000280 | U | U | | 0.000280 | U | U | | | | | | | | | |
| HEPTACHLOR | 0.000400 | N | U | + | 0.000400 | N | U | + | 0.000400 | N | U | + | | | | | | | | |
| ALDRIN | 0.000490 | U | U | | 0.000490 | U | U | | 0.000490 | U | U | | | | | | | | | |
| GAMMA-CHLORDANE | 0.000200 | U | U | | 0.000200 | U | U | | 0.000200 | U | U | | | | | | | | | |
| ALPHA-CHLORDANE | 0.000430 | U | U | | 0.000430 | U | U | | 0.000430 | U | U | | | | | | | | | |
| TRANS-NONACHLOR | 0.000310 | U | U | | 0.000310 | U | U | | 0.000310 | U | U | | | | | | | | | |
| HEPTACHLOR EPOXIDE | 0.000740 | U | U | | 0.000750 | U | U | | 0.000740 | U | U | | | | | | | | | |
| DIELDRIN | 0.000360 | U | U | | 0.000360 | U | U | | 0.000360 | U | U | | | | | | | | | |
| 4,4'-DDE | 0.000180 | U | U | | 0.000180 | U | U | | 0.000180 | U | U | | | | | | | | | |
| 2,4'-DDD | 0.000670 | U | U | | 0.000670 | U | U | | 0.000670 | U | U | | | | | | | | | |
| ENDRIN | 0.000510 | U | U | | 0.000510 | U | U | | 0.000510 | U | U | | | | | | | | | |
| ENDRIN ALDEHYDE | 0.000280 | U | U | | 0.000290 | U | U | | 0.000280 | U | U | | | | | | | | | |
| 4,4'-DDD | 0.000430 | U | U | | 0.000440 | U | U | | 0.000430 | U | U | | | | | | | | | |
| 2,4'-DDT | 0.000280 | U | U | | 0.000280 | U | U | | 0.000280 | U | U | | | | | | | | | |
| ENDOSULFAN II | 0.000540 | U | U | | 0.000550 | U | U | | 0.000540 | U | U | | | | | | | | | |
| ENDOSULFAN SULFATE | 0.000540 | U | U | | 0.000550 | U | U | | 0.000540 | U | U | | | | | | | | | |
| 4,4'-DDT | 0.000650 | U | UJ | C | 0.000660 | U | UJ | C | 0.000650 | U | UJ | C | | | | | | | | |
| ENDRIN KETONE | 0.000280 | U | U | | 0.000290 | U | U | | 0.000280 | U | U | | | | | | | | | |
| METHOXYCHLOR | 0.000730 | U | U | | 0.000740 | U | U | | 0.000730 | U | U | | | | | | | | | |
| MIREX | 0.000210 | U | U | | 0.000220 | U | U | | 0.000210 | U | U | | | | | | | | | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for
## Marine Tissues, Reference Sites

| EPA NO | MA707 | | | | MA708 | | | | MA709 | | | | MA710 | | | | MA713 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M00MT01S01 | | | | M00MT01D01 | | | | M00MT01S02 | | | | M00MT01D02 | | | | M00MT01S04 | | | |
| Date Sampled | 9/8/96 | | | | 9/8/96 | | | | 9/8/96 | | | | 9/8/96 | | | | 9/8/96 | | | |
| Depth | URCHINS | | | | URCHINS | | | | STEGASTES | | | | STEGASTES | | | | GOATFISH | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 0.11 | U | U | | 0.11 | U | U | | ***1.3*** | | | | ***2.6*** | | | | ***0.48*** | | | |
| PCB-18 (2,2',5) | ***0.35*** | | ***J*** | ***F*** | ***0.29*** | | ***J*** | ***F*** | 0.12 | U | UJ | C | ***1.0*** | | ***J*** | ***C*** | ***0.27*** | | | |
| PCB-28 (2,4,4') | 0.14 | U | U | | 0.14 | U | U | | 0.11 | U | U | | 0.13 | U | U | | 0.24 | NJ | U | + |
| PCB-52 (2,2',5,5') | 0.25 | NJ | U | + | 0.25 | NJ | U | + | 0.21 | N | U | + | ***1.8*** | | | | 0.45 | U | U | |
| PCB-44 (2,2',3,5') | 0.12 | U | U | | 0.11 | U | U | | 0.09 | U | U | | 0.11 | U | U | | 0.21 | U | UJ | C |
| PCB-66 (2,3',4,4') | 0.20 | N | U | + | 0.19 | N | U | + | 0.16 | U | U | | 0.19 | U | U | | 0.35 | NJ | U | + |
| PCB-101 (2,2',3,5,5') | 0.60 | U | U | | 0.59 | U | U | | ***1.2*** | | | | ***3.4*** | | | | 1.1 | NJ | UJ | C,+ |
| PCB-77 (3,3',4,4') | 0.26 | U | U | | 0.25 | U | U | | 0.21 | U | U | | 0.25 | U | U | | 0.46 | U | U | |
| PCB-118 (2,3',4,4',5) | 0.69 | U | U | | 0.68 | U | U | | 0.56 | U | U | | 0.66 | U | U | | 1.2 | U | U | |
| PCB-153 (2,2',4,4',5,5') | 1.1 | U | U | | 1.1 | U | U | | ***2.6*** | | | | ***6.1*** | | | | ***3.0*** | | | |
| PCB-105 (2,3,3',4,4') | 0.14 | U | U | | 0.14 | U | U | | 0.12 | U | U | | ***0.77*** | | | | 0.26 | NJ | U | + |
| PCB-138 (2,2',3,4,4',5') | 1.4 | U | U | | 1.3 | U | U | | ***2.2*** | | | | ***4.2*** | | | | ***1.5*** | ***J*** | ***J*** | |
| PCB-126 (3,3',4,4',5) | 0.21 | U | U | | 0.21 | U | U | | 0.17 | U | U | | 0.20 | U | U | | 0.38 | U | U | |
| PCB-187 (2,2',3,4',5,5',6) | 0.49 | U | U | | 0.48 | U | U | | 0.40 | U | U | | ***1.7*** | | | | ***1.4*** | | | |
| PCB-128 (2,2',3,3',4,4') | 0.34 | U | U | | 0.33 | U | U | | ***0.15*** | ***J*** | ***J*** | | ***0.24*** | ***J*** | ***J*** | | 0.61 | U | U | |
| PCB-180 (2,2',3,4,4',5,5') | 0.27 | U | U | | 0.26 | U | U | | ***1.1*** | | | | ***2.3*** | | | | ***2.6*** | | | |
| PCB-170 (2,2',3,3',4,4',5) | 0.17 | U | U | | 0.16 | U | U | | ***0.30*** | | | | ***0.72*** | | | | ***0.76*** | | | |
| PCB-195 (2,2',3,3',4,4',5,6) | 0.24 | U | U | | 0.23 | U | U | | ***0.25*** | | | | ***0.31*** | | | | ***0.33*** | ***J*** | ***J*** | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 0.20 | U | U | | 0.20 | NJ | U | + | 0.16 | U | U | | 0.19 | U | U | | ***0.38*** | | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.11 | U | U | | 0.11 | U | U | | 0.09 | N | U | + | 0.11 | U | U | | 0.20 | U | U | |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 0.15 | NJ | UJ | C,+ | ***0.12*** | ***J*** | ***J*** | ***C*** | ***0.23*** | | | | ***0.24*** | | | | ***0.20*** | ***J*** | ***J*** | |
| 2,4'-DDE | 0.25 | U | U | | 0.24 | U | U | | 0.20 | U | U | | 0.24 | U | U | | ***0.73*** | | | |
| ENDOSULFAN I | 0.33 | U | U | | 0.32 | N | U | + | ***0.16*** | ***J*** | ***J*** | | 0.32 | U | U | | 0.59 | U | U | |
| HEXACHLOROBENZENE | 0.10 | NJ | U | + | 0.10 | U | U | | ***0.34*** | | | | ***0.46*** | | | | ***0.12*** | ***J*** | ***J*** | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Reference Sites

| EPA NO | MA707 | | | | MA708 | | | | MA709 | | | | MA710 | | | | MA713 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M00MT01S01 | | | | M00MT01D01 | | | | M00MT01S02 | | | | M00MT01D02 | | | | M00MT01S04 | | | |
| Date Sampled | 9/8/96 | | | | 9/8/96 | | | | 9/8/96 | | | | 9/8/96 | | | | 9/8/96 | | | |
| Depth | URCHINS | | | | URCHINS | | | | STEGASTES | | | | STEGASTES | | | | GOATFISH | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.12 | N | U | + | 0.12 | U | U | | ***0.18*** | | | | 0.12 | N | U | + | 0.22 | U | U | |
| GAMMA-BHC (LINDANE) | ***0.92*** | | | | 0.12 | U | U | | ***0.56*** | | ***J*** | ***C*** | ***0.63*** | | | | ***0.06*** | ***J*** | ***J*** | |
| DELTA-BHC | 0.10 | NJ | UJ | C,+ | 0.10 | U | UJ | C | 0.02 | N | UJ | +,C | 0.10 | N | UJ | +,C | 0.18 | N | UJ | C,+ |
| HEPTACHLOR | 0.08 | U | U | | 0.08 | U | U | | 0.07 | U | U | | 0.08 | U | U | | 0.15 | U | U | |
| ALDRIN | 0.45 | U | U | | 0.44 | U | U | | 0.08 | N | U | + | 0.43 | U | U | | 0.80 | U | U | |
| GAMMA-CHLORDANE | 0.44 | U | U | | 0.43 | U | U | | 0.36 | U | U | | ***0.12*** | ***J*** | ***J*** | | 0.79 | U | U | |
| ALPHA-CHLORDANE | 0.25 | U | U | | 0.24 | U | U | | ***0.15*** | ***J*** | ***J*** | | ***0.40*** | | | | 0.45 | U | U | |
| TRANS-NONACHLOR | 0.23 | U | U | | 0.23 | U | U | | ***2.3*** | | | | ***3.5*** | | | | 0.42 | U | U | |
| HEPTACHLOR EPOXIDE | 0.15 | U | U | | 0.15 | U | U | | ***0.59*** | | | | ***0.43*** | | | | 0.28 | U | U | |
| DIELDRIN | 0.16 | U | U | | 0.16 | U | U | | 0.13 | N | U | + | ***1.6*** | | | | 0.29 | U | U | |
| 4,4'-DDE | 1.1 | U | U | | 1.1 | U | U | | ***5.4*** | | | | ***18.0*** | | | | 1.9 | J | U | + |
| 2,4'-DDD | 0.27 | U | U | | ***0.13*** | ***J*** | ***J*** | | ***14.0*** | | | | ***12.0*** | | | | ***0.35*** | ***J*** | ***J*** | |
| ENDRIN | 0.09 | U | U | | 0.09 | U | U | | 0.07 | U | U | | 0.09 | U | U | | ***0.08*** | ***J*** | ***J*** | |
| ENDRIN ALDEHYDE | 0.23 | U | U | | 0.22 | U | U | | 0.18 | U | U | | 0.22 | U | U | | 0.40 | U | U | |
| 4,4'-DDD | 0.67 | U | U | | 0.66 | U | U | | ***1.2*** | | ***J*** | ***C*** | ***1.7*** | | | | 1.2 | U | U | |
| 2,4'-DDT | 0.16 | U | U | | 0.16 | U | U | | 0.13 | U | U | | 0.15 | U | U | | 0.29 | U | U | |
| ENDOSULFAN II | 0.33 | U | U | | 0.32 | U | U | | 0.27 | U | U | | 0.32 | U | U | | 0.59 | U | U | |
| ENDOSULFAN SULFATE | 0.33 | U | U | | 0.32 | U | U | | 0.27 | U | U | | 0.32 | U | U | | 0.59 | U | U | |
| 4,4'-DDT | 0.24 | U | U | | 0.24 | U | U | | ***1.0*** | | | | ***2.3*** | | | | 0.43 | U | U | |
| ENDRIN KETONE | 0.23 | U | U | | 0.22 | U | U | | 0.18 | U | U | | 0.22 | U | U | | 0.40 | U | U | |
| METHOXYCHLOR | 0.19 | U | U | | 0.19 | U | U | | 0.16 | U | U | | 0.18 | U | U | | 0.34 | U | U | |
| MIREX | 0.15 | U | U | | 0.15 | U | U | | 0.13 | U | U | | 0.15 | U | U | | ***0.14*** | ***J*** | ***J*** | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for
## Marine Tissues, Reference Sites

| EPA NO | MA714 | | | | MA716 | | | | MA717 | | | | MA718 | | | | MA719 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M00MT01D04 | | | | M00MT04S01 | | | | M00MT04S02 | | | | M00MT04S04 | | | | M00MT04S05 | | | |
| Date Sampled | 9/8/96 | | | | 9/10/96 | | | | 9/10/96 | | | | 9/10/96 | | | | 9/10/96 | | | |
| Depth | GOATFISH | | | | URCHINS | | | | STEGASTES | | | | GOATFISH | | | | DICTYOTA | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | ***0.41*** | | | | 0.11 | N | U | + | ***1.8*** | | | | ***0.82*** | | | | 0.17 | N | U | + |
| PCB-18 (2,2',5) | 0.28 | U | U | | 0.14 | N | U | + | 0.15 | N | UJ | +,C | 0.30 | U | U | | 0.22 | U | U | |
| PCB-28 (2,4,4') | 0.27 | U | U | | 0.14 | U | U | | 0.14 | U | U | | 0.29 | U | U | | 0.22 | U | U | |
| PCB-52 (2,2',5,5') | 0.50 | U | UJ | C | 0.25 | U | U | | ***1.3*** | | | | 0.52 | U | UJ | C | 30.0 | N | UJ | C,+ |
| PCB-44 (2,2',3,5') | 0.23 | U | U | | 0.12 | U | U | | 0.11 | U | U | | 0.24 | U | U | | 0.18 | U | U | |
| PCB-66 (2,3',4,4') | 0.38 | J | U | + | 0.20 | U | U | | 0.19 | U | U | | 0.41 | U | U | | 0.30 | N | U | + |
| PCB-101 (2,2',3,5,5') | 0.12 | J | UJ | C,+ | 0.60 | U | U | | ***0.59*** | | | | 1.3 | NJ | UJ | C,+ | 0.93 | U | U | |
| PCB-77 (3,3',4,4') | 0.51 | U | U | | 0.26 | U | U | | 0.25 | U | U | | 0.54 | U | U | | 0.40 | U | U | |
| PCB-118 (2,3',4,4',5) | 1.4 | U | U | | 0.70 | U | U | | 0.68 | U | U | | 1.4 | U | U | | 1.1 | N | U | + |
| PCB-153 (2,2',4,4',5,5') | ***6.4*** | | | | 1.1 | U | U | | ***1.8*** | | | | ***0.98*** | ***J*** | ***J*** | | 1.7 | U | U | |
| PCB-105 (2,3,3',4,4') | ***0.36*** | | | | 0.14 | U | U | | ***0.26*** | | | | 0.30 | U | U | | ***1.3*** | | | |
| PCB-138 (2,2',3,4,4',5') | ***3.6*** | | | | ***0.07*** | ***J*** | ***J*** | | ***1.5*** | | | | 2.9 | J | U | + | ***3.3*** | | | |
| PCB-126 (3,3',4,4',5) | 0.42 | U | U | | 0.21 | U | U | | 0.21 | U | U | | 0.44 | U | U | | ***12.0*** | | | |
| PCB-187 (2,2',3,4',5,5',6) | ***2.0*** | | | | 0.49 | U | U | | ***1.5*** | | | | 1.0 | J | U | + | 0.76 | U | U | |
| PCB-128 (2,2',3,3',4,4') | 0.67 | J | U | + | 0.34 | U | U | | ***0.18*** | ***J*** | ***J*** | | 0.71 | U | U | | 0.53 | U | U | |
| PCB-180 (2,2',3,4,4',5,5') | ***3.8*** | | | | 0.27 | J | U | + | ***1.2*** | | | | ***0.68*** | | | | ***0.56*** | | | |
| PCB-170 (2,2',3,3',4,4',5) | ***1.7*** | | | | 0.17 | U | U | | 0.22 | | UJ | B | ***0.18*** | ***J*** | ***J*** | | ***0.36*** | | | |
| PCB-195 (2,2',3,3',4,4',5,6) | ***0.39*** | ***J*** | ***J*** | | 0.24 | U | U | | ***0.37*** | | | | 0.50 | J | U | + | ***0.67*** | | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | ***0.34*** | ***J*** | ***J*** | | 0.20 | U | U | | ***0.21*** | | | | ***0.22*** | ***J*** | ***J*** | | ***2.6*** | | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.22 | NJ | U | + | 0.11 | U | U | | 0.11 | U | U | | 0.23 | NJ | U | + | 0.17 | N | U | + |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | ***0.15*** | ***J*** | ***J*** | | 0.11 | NJ | UJ | C,+ | ***0.21*** | | | | ***0.30*** | ***J*** | ***J*** | | 0.24 | N | U | + |
| 2,4'-DDE | ***0.95*** | | | | 0.25 | U | U | | 0.25 | U | U | | 0.52 | U | U | | ***4.7*** | | | |
| ENDOSULFAN I | 0.65 | U | U | | 0.33 | U | U | | ***0.17*** | ***J*** | ***J*** | | 0.69 | U | U | | ***1.3*** | | | |
| HEXACHLOROBENZENE | ***0.20*** | | | | 0.10 | NJ | U | + | ***0.40*** | | | | ***0.14*** | ***J*** | ***J*** | | 0.16 | U | U | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for
## Marine Tissues, Reference Sites

| EPA NO | MA714 | | | | MA716 | | | | MA717 | | | | MA718 | | | | MA719 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M00MT01D04 | | | | M00MT04S01 | | | | M00MT04S02 | | | | M00MT04S04 | | | | M00MT04S05 | | | |
| Date Sampled | 9/8/96 | | | | 9/10/96 | | | | 9/10/96 | | | | 9/10/96 | | | | 9/10/96 | | | |
| Depth | GOATFISH | | | | URCHINS | | | | STEGASTES | | | | GOATFISH | | | | DICTYOTA | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.24 | NJ | U | + | 0.12 | U | U | | 0.12 | N | U | + | 0.26 | U | U | | 0.19 | U | U | |
| GAMMA-BHC (LINDANE) | ***0.13*** | ***J*** | ***J*** | | 0.13 | N | U | + | 0.12 | N | U | + | 0.26 | NJ | U | + | 0.20 | N | U | + |
| DELTA-BHC | 0.20 | N | UJ | C,+ | 0.10 | U | UJ | C | ***0.45*** | | ***J*** | ***C*** | 0.21 | N | UJ | C,+ | 0.16 | U | UJ | C |
| HEPTACHLOR | 0.17 | U | U | | 0.08 | U | U | | 0.08 | U | U | | 0.17 | U | U | | 0.13 | U | U | |
| ALDRIN | 0.89 | U | U | | 0.45 | U | U | | 0.44 | U | U | | 0.93 | NJ | U | + | 0.70 | U | U | |
| GAMMA-CHLORDANE | 0.87 | U | U | | 0.44 | U | U | | 0.43 | U | U | | 0.92 | U | U | | 0.69 | U | U | |
| ALPHA-CHLORDANE | 0.49 | U | U | | 0.25 | U | U | | 0.24 | NJ | U | + | 0.52 | U | U | | 0.38 | N | U | + |
| TRANS-NONACHLOR | ***0.30*** | ***J*** | ***J*** | | 0.23 | U | U | | 0.23 | N | U | + | 0.48 | U | U | | 0.36 | U | U | |
| HEPTACHLOR EPOXIDE | 0.30 | U | U | | 0.15 | U | U | | 0.15 | U | U | | 0.32 | U | U | | 0.24 | U | U | |
| DIELDRIN | 0.32 | U | U | | 0.16 | U | U | | 0.16 | U | U | | 0.34 | U | U | | 0.25 | U | U | |
| 4,4'-DDE | ***2.1*** | ***J*** | ***J*** | | 1.1 | U | U | | 1.1 | NJ | U | + | 2.2 | NJ | U | + | 1.7 | U | U | |
| 2,4'-DDD | 0.54 | U | U | | 0.28 | U | U | | ***0.83*** | | | | 0.57 | U | U | | 0.43 | U | U | |
| ENDRIN | 0.18 | U | U | | 0.09 | U | U | | 0.09 | U | U | | 0.19 | U | U | | 0.14 | N | U | + |
| ENDRIN ALDEHYDE | 0.45 | U | U | | 0.23 | U | U | | 0.22 | U | U | | 0.47 | U | U | | 0.35 | U | U | |
| 4,4'-DDD | 1.3 | U | U | | 0.67 | U | U | | 0.66 | U | U | | 1.4 | U | U | | 1.0 | U | U | |
| 2,4'-DDT | ***0.54*** | | | | 0.16 | U | U | | 0.16 | N | U | + | ***0.37*** | | | | 0.25 | U | U | |
| ENDOSULFAN II | 0.65 | U | U | | 0.33 | U | U | | 0.32 | U | U | | 0.69 | U | U | | 0.51 | U | U | |
| ENDOSULFAN SULFATE | 0.65 | U | U | | 0.33 | U | U | | ***0.34*** | | | | 0.69 | U | U | | 0.51 | U | U | |
| 4,4'-DDT | ***0.46*** | ***J*** | ***J*** | | 0.24 | U | U | | ***0.29*** | | | | 0.51 | U | U | | 0.37 | N | U | + |
| ENDRIN KETONE | 0.45 | NJ | U | + | 0.23 | U | U | | 0.22 | U | U | | 0.47 | U | U | | 0.35 | U | U | |
| METHOXYCHLOR | 0.38 | U | U | | 0.19 | U | U | | 0.19 | U | U | | 0.40 | U | U | | 0.30 | U | U | |
| MIREX | ***0.24*** | ***J*** | ***J*** | | 0.16 | U | U | | 0.15 | U | U | | ***0.19*** | ***J*** | ***J*** | | ***1.8*** | | | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Reference Sites

| EPA NO | MA720 | | | | MA721 | | | | MA722 | | | | MA723 | | | | MA723RE | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M00MT04D05 | | | | M00MT04S07 | | | | M00MT04D07 | | | | M00MT01S08 | | | | M00MT01S08 | | | |
| Date Sampled | 9/10/96 | | | | 9/10/96 | | | | 9/10/96 | | | | 9/8/96 | | | | | | | |
| Depth | DICTYOTA | | | | CUCUMBER | | | | CUCUMBER | | | | OCTOPUS | | | | ? | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 0.34 | N | U | + | 0.45 | U | U | | 0.39 | U | U | | 0.24 | U | R | D | 0.17 | U | U | |
| PCB-18 (2,2',5) | 0.45 | U | U | | ***0.86*** | | | | ***2.0*** | | | | 0.31 | U | R | D | ***0.15*** | ***J*** | ***J*** | ***F*** |
| PCB-28 (2,4,4') | 0.43 | U | U | | 0.56 | U | U | | 0.49 | U | U | | 0.30 | U | R | D | 0.21 | U | U | |
| PCB-52 (2,2',5,5') | 0.78 | N | UJ | C,+ | 1.1 | N | U | + | 0.90 | NJ | U | + | 0.54 | U | R | D | 0.38 | U | U | |
| PCB-44 (2,2',3,5') | 0.36 | U | U | | 0.47 | U | U | | 0.41 | U | U | | 0.25 | U | R | D | 0.18 | U | U | |
| PCB-66 (2,3',4,4') | 0.60 | N | U | + | 0.79 | U | U | | 0.69 | U | U | | 0.42 | U | R | D | 0.29 | U | U | |
| PCB-101 (2,2',3,5,5') | 1.9 | U | U | | 2.4 | U | U | | 2.1 | U | U | | 1.3 | U | R | D | 0.90 | U | U | |
| PCB-77 (3,3',4,4') | 0.79 | N | U | + | 1.0 | U | U | | 0.91 | U | U | | 0.56 | U | R | D | 0.39 | U | U | |
| PCB-118 (2,3',4,4',5) | 2.2 | U | U | | 2.8 | U | U | | 2.4 | U | U | | 1.5 | U | R | D | 1.0 | U | U | |
| PCB-153 (2,2',4,4',5,5') | 3.4 | U | U | | 4.4 | NJ | U | + | 3.8 | J | U | + | 2.3 | U | R | D | 1.6 | J | U | + |
| PCB-105 (2,3,3',4,4') | 0.45 | U | U | | 0.58 | U | U | | ***1.3*** | | | | 0.16 | NJ | R | D | 0.22 | U | U | |
| PCB-138 (2,2',3,4,4',5') | 4.3 | U | U | | 5.5 | J | U | + | ***3.3*** | ***J*** | ***J*** | | 0.37 | J | R | D | 2.0 | J | U | + |
| PCB-126 (3,3',4,4',5) | ***23.0*** | | | | 0.85 | U | UJ | C | 0.74 | U | UJ | C | 0.46 | U | R | D | 0.32 | U | U | |
| PCB-187 (2,2',3,4',5,5',6) | 1.5 | U | U | | 2.0 | U | U | | 1.7 | U | U | | 1.1 | U | R | D | 0.74 | U | U | |
| PCB-128 (2,2',3,3',4,4') | 1.1 | U | U | | 1.4 | U | U | | 1.2 | U | U | | 0.73 | U | R | D | 0.51 | U | U | |
| PCB-180 (2,2',3,4,4',5,5') | 0.85 | U | U | | 1.1 | J | U | + | ***0.91*** | ***J*** | ***J*** | | 0.12 | J | R | D | ***0.24*** | ***J*** | ***J*** | |
| PCB-170 (2,2',3,3',4,4',5) | ***1.4*** | | | | 0.67 | U | U | | 0.57 | J | U | + | 0.36 | U | R | D | 0.25 | U | U | |
| PCB-195 (2,2',3,3',4,4',5,6) | ***0.95*** | | | | 0.97 | U | U | | 0.86 | NJ | U | + | 0.12 | NJ | R | D | 0.36 | U | U | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | ***1.6*** | | | | 0.80 | U | U | | 0.71 | NJ | U | + | 0.05 | NJ | R | D | 0.30 | U | U | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.34 | N | U | + | 0.45 | U | U | | 0.39 | NJ | U | + | 0.24 | U | R | D | 0.17 | U | U | |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 0.47 | U | U | + | 0.62 | U | UJ | C | 0.54 | U | UJ | C | 0.02 | NJ | R | D | 0.22 | J | U | + |
| 2,4'-DDE | ***4.7*** | | | | 1.0 | U | U | | 0.88 | U | U | | 0.54 | U | R | D | 0.38 | U | U | |
| ENDOSULFAN I | 1.0 | U | U | | 1.3 | U | U | | 1.2 | U | U | | 0.71 | U | R | D | 0.50 | NJ | U | + |
| HEXACHLOROBENZENE | 0.32 | U | U | | 0.41 | U | U | | 0.36 | J | U | + | 0.03 | J | R | D | 0.15 | J | U | + |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Reference Sites

| EPA NO | MA720 | | | | MA721 | | | | MA722 | | | | MA723 | | | | MA723RE | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M00MT04D05 | | | | M00MT04S07 | | | | M00MT04D07 | | | | M00MT01S08 | | | | M00MT01S08 | | | |
| Date Sampled | 9/10/96 | | | | 9/10/96 | | | | 9/10/96 | | | | 9/8/96 | | | | | | | |
| Depth | DICTYOTA | | | | CUCUMBER | | | | CUCUMBER | | | | OCTOPUS | | | | ? | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.39 | U | U | | 0.50 | U | U | | ***0.25*** | ***J*** | ***J*** | | 0.27 | U | R | D | 0.19 | U | U | |
| GAMMA-BHC (LINDANE) | 0.40 | U | U | | 0.51 | U | U | | ***0.32*** | ***J*** | ***J*** | | 0.27 | U | R | D | 0.19 | J | U | + |
| DELTA-BHC | 0.32 | U | UJ | C | 0.41 | U | UJ | C | 0.35 | U | UJ | C | 0.22 | U | R | D | 0.15 | NJ | U | + |
| HEPTACHLOR | 0.26 | U | U | | 0.34 | U | U | | 0.30 | U | U | | 0.18 | U | R | D | 0.13 | U | U | |
| ALDRIN | 1.4 | U | U | | 1.8 | U | U | | 1.6 | U | U | | 0.97 | U | R | D | 0.68 | U | U | |
| GAMMA-CHLORDANE | 1.4 | U | U | + | 1.8 | U | U | | 1.6 | U | U | | 0.95 | U | R | D | 0.67 | U | U | |
| ALPHA-CHLORDANE | 0.77 | U | U | + | 1.0 | U | U | | 0.88 | U | U | | 0.54 | U | R | D | 0.38 | U | U | |
| TRANS-NONACHLOR | 0.72 | U | U | + | 0.94 | U | U | | 0.82 | U | U | | 0.50 | U | R | D | 0.35 | U | U | |
| HEPTACHLOR EPOXIDE | 0.48 | U | U | | 0.62 | U | U | | 0.54 | U | U | | 0.33 | U | R | D | 0.23 | U | U | |
| DIELDRIN | 0.51 | U | U | | 0.66 | U | U | | 0.58 | U | U | | 0.35 | U | R | D | 0.25 | U | U | |
| 4,4'-DDE | 3.4 | U | U | | 4.3 | U | U | | 3.8 | U | U | | 2.3 | U | R | D | 1.6 | U | U | |
| 2,4'-DDD | 0.84 | U | U | + | 1.1 | U | U | | 0.97 | U | U | | 0.59 | U | R | D | 0.41 | U | U | |
| ENDRIN | 0.29 | U | U | | 0.37 | U | U | | 0.32 | U | U | | 0.20 | U | R | D | 0.14 | U | U | |
| ENDRIN ALDEHYDE | 0.71 | U | U | | 0.91 | U | U | | 0.80 | U | U | | 0.49 | U | R | D | 0.34 | U | U | |
| 4,4'-DDD | 2.1 | U | U | | 2.7 | U | U | | 2.4 | U | U | | 1.4 | U | R | D | 1.0 | U | U | |
| 2,4'-DDT | 0.50 | U | U | | 0.64 | U | U | | 0.56 | U | U | | 0.34 | U | R | D | 0.24 | U | U | |
| ENDOSULFAN II | 1.0 | U | U | | 1.3 | U | U | | 1.2 | U | U | | 0.71 | U | R | D | 0.50 | U | U | |
| ENDOSULFAN SULFATE | 1.0 | U | U | | 1.3 | U | U | | 1.2 | U | U | | 0.71 | U | R | D | 0.50 | U | U | |
| 4,4'-DDT | ***7.9*** | | | | 0.98 | U | U | | 0.86 | U | U | | 0.53 | U | R | D | 0.37 | U | U | |
| ENDRIN KETONE | 0.71 | U | U | | 0.91 | U | U | | 0.80 | U | U | | 0.49 | U | R | D | 0.34 | U | U | |
| METHOXYCHLOR | 0.60 | U | U | | 0.77 | U | UJ | C | 0.67 | U | UJ | C | 0.41 | U | R | D | 0.29 | U | U | |
| MIREX | ***2.2*** | | | | ***0.11*** | ***J*** | ***J*** | | ***0.54*** | ***J*** | ***J*** | | 0.17 | J | R | D | 0.23 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for
## Marine Tissues, Reference Sites

| EPA NO | MA724 | | | | MA725 | | | | MA726 | | | | MA727 | | | | MA728 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M00MT02S01 | | | | M00MT02S02 | | | | M00MT02S06 | | | | M00MT03S01 | | | | M00MT03S02 | | | |
| Date Sampled | 9/19/96 | | | | 9/19/96 | | | | 9/19/96 | | | | 9/25/96 | | | | 9/25/96 | | | |
| Depth | URCHINS | | | | STEGASTES | | | | HALIMEDA | | | | URCHINS | | | | STEGASTES | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 0.09 | NJ | U | + | ***1.5*** | | | | 0.22 | U | U | | 0.12 | N | U | + | ***2.7*** | | | |
| PCB-18 (2,2',5) | ***0.73*** | | ***J*** | ***F*** | ***2.6*** | | ***J*** | ***C*** | 0.28 | N | U | + | 0.16 | U | U | | 0.12 | U | UJ | C |
| PCB-28 (2,4,4') | 0.12 | U | U | | ***0.19*** | | | | 0.27 | U | U | | 0.15 | U | U | | 0.12 | U | U | |
| PCB-52 (2,2',5,5') | 0.21 | N | U | + | 0.22 | N | U | + | 0.50 | U | UJ | C | 0.28 | N | U | + | ***1.7*** | | | |
| PCB-44 (2,2',3,5') | 0.10 | U | U | | 0.10 | U | U | | 0.23 | U | U | | 0.13 | U | U | | 0.10 | U | U | |
| PCB-66 (2,3',4,4') | 0.16 | U | U | | 0.17 | U | U | | 0.38 | U | U | | 0.21 | U | U | | 0.16 | U | U | |
| PCB-101 (2,2',3,5,5') | 0.51 | U | U | | ***0.84*** | | | | 1.2 | U | U | | 0.65 | U | U | | ***1.7*** | | | |
| PCB-77 (3,3',4,4') | 0.22 | U | U | | 0.22 | U | U | | 0.51 | U | U | | 0.28 | U | U | | 0.22 | U | U | |
| PCB-118 (2,3',4,4',5) | 0.58 | U | U | | 0.59 | U | U | | 1.4 | U | U | | 0.75 | U | U | | ***1.4*** | | | |
| PCB-153 (2,2',4,4',5,5') | 0.92 | U | U | | ***2.0*** | | | | 2.1 | U | U | | 1.2 | U | U | | ***8.6*** | | | |
| PCB-105 (2,3,3',4,4') | 0.12 | U | U | | ***0.41*** | | | | 0.28 | U | U | | 0.16 | U | U | | ***0.24*** | | | |
| PCB-138 (2,2',3,4,4',5') | 1.2 | U | U | | ***1.2*** | | | | 2.7 | U | U | | 1.5 | J | U | + | ***4.8*** | | | |
| PCB-126 (3,3',4,4',5) | 0.18 | U | U | | 0.18 | U | U | | 0.41 | NJ | U | + | 0.23 | U | U | | 0.18 | U | U | |
| PCB-187 (2,2',3,4',5,5',6) | 0.41 | U | U | | ***3.0*** | | | | 0.96 | U | U | | 0.53 | U | U | | ***5.2*** | | | |
| PCB-128 (2,2',3,3',4,4') | 0.29 | U | U | | ***0.35*** | | | | 0.67 | U | U | | 0.37 | U | U | | ***0.25*** | ***J*** | ***J*** | |
| PCB-180 (2,2',3,4,4',5,5') | 0.23 | U | U | | ***1.0*** | | | | 0.53 | U | U | | 0.29 | J | U | + | ***7.8*** | | | |
| PCB-170 (2,2',3,3',4,4',5) | 0.14 | U | U | | ***0.28*** | | | | ***0.31*** | ***J*** | ***J*** | | 0.18 | U | U | | ***3.0*** | | | |
| PCB-195 (2,2',3,3',4,4',5,6) | 0.20 | U | U | | ***0.22*** | | | | 0.47 | U | U | | 0.26 | U | U | | ***0.84*** | | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 0.17 | U | U | | ***0.24*** | | | | 0.39 | U | U | | 0.22 | U | U | | ***0.56*** | | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.09 | U | U | | 0.10 | U | U | | 0.22 | U | U | | 0.12 | U | U | | ***0.11*** | | | |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 0.13 | U | UJ | C | ***0.43*** | | | | ***2.0*** | | | | 0.17 | NJ | UJ | C,+ | ***0.39*** | | | |
| 2,4'-DDE | 0.21 | U | U | | ***0.25*** | | | | 0.49 | U | U | | 0.27 | U | U | | ***0.17*** | ***J*** | ***J*** | |
| ENDOSULFAN I | 0.28 | U | U | | ***0.58*** | | | | 0.64 | N | U | + | 0.36 | U | U | | ***0.18*** | ***J*** | ***J*** | |
| HEXACHLOROBENZENE | 0.09 | U | U | | ***0.22*** | | | | 0.20 | U | U | | 0.11 | U | U | | ***0.49*** | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Reference Sites

| EPA NO | MA724 | | | | MA725 | | | | MA726 | | | | MA727 | | | | MA728 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M00MT02S01 | | | | M00MT02S02 | | | | M00MT02S06 | | | | M00MT03S01 | | | | M00MT03S02 | | | |
| Date Sampled | 9/19/96 | | | | 9/19/96 | | | | 9/19/96 | | | | 9/25/96 | | | | 9/25/96 | | | |
| Depth | URCHINS | | | | STEGASTES | | | | HALIMEDA | | | | URCHINS | | | | STEGASTES | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.10 | U | U | | 0.10 | NJ | U | + | 0.24 | N | U | + | ***0.06*** | ***J*** | ***J*** | | 0.10 | N | U | + |
| GAMMA-BHC (LINDANE) | 0.11 | U | U | | ***1.5*** | | | | 0.25 | N | U | + | ***0.10*** | ***J*** | ***J*** | ***F*** | 0.11 | N | U | + |
| DELTA-BHC | 0.09 | U | UJ | C | 0.09 | U | UJ | C | ***0.16*** | ***J*** | ***J*** | ***C*** | 0.11 | U | UJ | C | ***0.50*** | | ***J*** | ***C*** |
| HEPTACHLOR | 0.07 | U | U | | 0.07 | U | U | | 0.17 | U | U | | 0.09 | U | U | | 0.07 | U | U | |
| ALDRIN | 0.38 | U | U | | 0.38 | U | U | | 0.88 | U | U | | 0.49 | U | U | | 0.38 | U | U | |
| GAMMA-CHLORDANE | 0.37 | U | U | | 0.38 | U | U | | 0.87 | U | U | | 0.48 | U | U | | 0.37 | U | U | |
| ALPHA-CHLORDANE | 0.21 | U | U | | 0.21 | U | U | | 0.49 | U | U | | 0.27 | U | U | | 0.21 | U | U | |
| TRANS-NONACHLOR | 0.20 | U | U | | 0.20 | N | U | + | 0.46 | U | U | | 0.25 | U | U | | 0.19 | N | U | + |
| HEPTACHLOR EPOXIDE | 0.13 | U | U | | ***0.30*** | | | | ***1.0*** | | | | 0.17 | U | U | | ***0.29*** | | | |
| DIELDRIN | 0.14 | U | U | | 0.10 | N | U | + | 0.32 | U | U | | 0.18 | U | U | | 0.14 | U | U | |
| 4,4'-DDE | 0.91 | U | U | | ***1.3*** | | | | 2.1 | NJ | U | + | 1.2 | U | U | | ***1.3*** | | | |
| 2,4'-DDD | 0.23 | U | U | | ***6.8*** | | | | ***21.0*** | | | | 0.30 | U | U | | ***1.1*** | | | |
| ENDRIN | 0.08 | U | U | | 0.08 | U | U | | 0.18 | NJ | U | + | 0.10 | U | U | | ***0.08*** | ***J*** | ***J*** | |
| ENDRIN ALDEHYDE | 0.19 | U | U | | 0.19 | U | U | | 0.45 | U | U | | 0.25 | U | U | | 0.19 | U | U | |
| 4,4'-DDD | 0.57 | U | U | | 0.57 | U | U | | 1.3 | U | U | | 0.73 | U | U | | ***0.38*** | ***J*** | ***J*** | |
| 2,4'-DDT | 0.13 | U | U | | 0.14 | U | U | | 0.31 | U | U | | 0.17 | U | U | | 0.13 | U | U | |
| ENDOSULFAN II | 0.28 | U | U | | 0.28 | U | U | | 0.65 | U | U | | 0.36 | U | U | | 0.28 | U | U | |
| ENDOSULFAN SULFATE | 0.28 | U | U | | ***0.45*** | | | | 0.65 | U | U | | 0.36 | U | U | | 0.28 | U | U | |
| 4,4'-DDT | 0.21 | U | U | | 0.21 | U | U | | 0.48 | U | U | | 0.26 | U | U | | ***0.69*** | | | |
| ENDRIN KETONE | 0.19 | U | U | | 0.19 | U | U | | 0.45 | U | U | | 0.25 | U | U | | 0.19 | U | U | |
| METHOXYCHLOR | 0.16 | U | U | | 0.16 | NJ | U | + | 0.38 | U | U | | 0.21 | U | U | | 0.16 | U | U | |
| MIREX | ***0.56*** | | | | 0.13 | U | U | | ***12.0*** | | | | ***0.14*** | ***J*** | ***J*** | | ***0.48*** | | | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for
## Marine Tissues, Reference Sites

| EPA NO | MA729 | | | | MA730 | | | | ? | | | | ? | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M00MT03S05 | | | | M00MT03S06 | | | | | | | | | | | | | | | |
| Date Sampled | 9/25/96 | | | | 9/25/96 | | | | | | | | | | | | | | | |
| Depth | DICTYOTA | | | | HALIMEDA | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 0.35 | U | U | | 0.20 | U | U | | | | | | | | | | | | | |
| PCB-18 (2,2',5) | 0.46 | N | U | + | 0.26 | N | U | + | | | | | | | | | | | | |
| PCB-28 (2,4,4') | 0.44 | U | U | | 0.25 | U | U | | | | | | | | | | | | | |
| PCB-52 (2,2',5,5') | 0.81 | N | UJ | C,+ | 0.46 | N | UJ | C,+ | | | | | | | | | | | | |
| PCB-44 (2,2',3,5') | 0.37 | U | U | | 0.21 | U | U | | | | | | | | | | | | | |
| PCB-66 (2,3',4,4') | 0.62 | U | U | | 0.35 | U | U | | | | | | | | | | | | | |
| PCB-101 (2,2',3,5,5') | 1.9 | U | U | | 1.1 | U | U | | | | | | | | | | | | | |
| PCB-77 (3,3',4,4') | 0.82 | U | U | | 0.47 | U | U | | | | | | | | | | | | | |
| PCB-118 (2,3',4,4',5) | 2.2 | U | U | | 1.3 | U | U | | | | | | | | | | | | | |
| PCB-153 (2,2',4,4',5,5') | 3.4 | U | U | | 2.0 | U | U | | | | | | | | | | | | | |
| PCB-105 (2,3,3',4,4') | ***2.3*** | ***G*** | | | 0.26 | U | U | | | | | | | | | | | | | |
| PCB-138 (2,2',3,4,4',5') | 4.4 | J | U | B | 2.5 | J | U | B | | | | | | | | | | | | |
| PCB-126 (3,3',4,4',5) | ***9.4*** | | | | 0.38 | U | U | | | | | | | | | | | | | |
| PCB-187 (2,2',3,4',5,5',6) | 1.5 | U | U | | 0.89 | U | U | | | | | | | | | | | | | |
| PCB-128 (2,2',3,3',4,4') | 1.1 | U | U | | 0.62 | U | U | | | | | | | | | | | | | |
| PCB-180 (2,2',3,4,4',5,5') | ***2.3*** | | | | 0.49 | J | U | + | | | | | | | | | | | | |
| PCB-170 (2,2',3,3',4,4',5) | ***0.57*** | | | | ***0.42*** | | | | | | | | | | | | | | | |
| PCB-195 (2,2',3,3',4,4',5,6) | 0.77 | J | U | + | 0.43 | J | U | + | | | | | | | | | | | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | ***1.6*** | | | | ***0.13*** | ***J*** | ***J*** | | | | | | | | | | | | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.35 | NJ | U | + | 0.20 | U | U | | | | | | | | | | | | | |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | ***1.3*** | | | | ***1.2*** | | | | | | | | | | | | | | | |
| 2,4'-DDE | ***5.1*** | | | | 0.45 | U | U | + | | | | | | | | | | | | |
| ENDOSULFAN I | 1.0 | U | U | | ***0.55*** | ***J*** | ***J*** | | | | | | | | | | | | | |
| HEXACHLOROBENZENE | 0.33 | NJ | U | + | 0.19 | U | U | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Reference Sites

| EPA NO | MA729 | | | | MA730 | | | | ? | | | | ? | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M00MT03S05 | | | | M00MT03S06 | | | | | | | | | | | | | | | |
| Date Sampled | 9/25/96 | | | | 9/25/96 | | | | | | | | | | | | | | | |
| Depth | DICTYOTA | | | | HALIMEDA | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.40 | N | U | + | 0.22 | U | U | + | | | | | | | | | | | | |
| GAMMA-BHC (LINDANE) | 0.41 | N | U | + | 0.23 | U | U | + | | | | | | | | | | | | |
| DELTA-BHC | 0.32 | N | UJ | C,+ | ***0.11*** | ***J*** | ***J*** | ***C*** | | | | | | | | | | | | |
| HEPTACHLOR | 0.26 | N | U | + | 0.15 | U | U | | | | | | | | | | | | | |
| ALDRIN | 1.4 | U | U | | 0.82 | U | U | | | | | | | | | | | | | |
| GAMMA-CHLORDANE | 1.4 | N | U | + | 0.80 | U | U | | | | | | | | | | | | | |
| ALPHA-CHLORDANE | 0.80 | N | U | + | 0.45 | U | U | | | | | | | | | | | | | |
| TRANS-NONACHLOR | 0.75 | NJ | U | + | 0.42 | U | U | | | | | | | | | | | | | |
| HEPTACHLOR EPOXIDE | 0.49 | U | U | | ***0.84*** | | | | | | | | | | | | | | | |
| DIELDRIN | 0.52 | U | U | | 0.30 | U | U | | | | | | | | | | | | | |
| 4,4'-DDE | 3.4 | U | U | | 2.0 | U | U | | | | | | | | | | | | | |
| 2,4'-DDD | 0.88 | N | U | + | 0.23 | U | U | + | | | | | | | | | | | | |
| ENDRIN | 0.29 | U | U | | ***0.21*** | | | | | | | | | | | | | | | |
| ENDRIN ALDEHYDE | ***1.9*** | | | | 0.41 | U | U | | | | | | | | | | | | | |
| 4,4'-DDD | 2.2 | N | U | + | 1.2 | U | U | | | | | | | | | | | | | |
| 2,4'-DDT | 0.50 | U | U | | 0.29 | U | U | | | | | | | | | | | | | |
| ENDOSULFAN II | 1.0 | U | U | | 0.60 | U | U | | | | | | | | | | | | | |
| ENDOSULFAN SULFATE | 1.0 | U | U | | 0.60 | U | U | | | | | | | | | | | | | |
| 4,4'-DDT | 0.78 | N | U | + | 0.44 | U | U | | | | | | | | | | | | | |
| ENDRIN KETONE | 0.71 | U | U | | 0.41 | U | U | | | | | | | | | | | | | |
| METHOXYCHLOR | 0.62 | NJ | U | + | 0.35 | U | U | + | | | | | | | | | | | | |
| MIREX | ***3.3*** | | | | ***2.2*** | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for
# Groundwater, Bulky Waste Landfill

| EPA NO | MC158 | | | | MC159 | | | | MC160 | | | | MC161 | | | | MC161DL | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MW01D01 | | | | M01MW02S01 | | | | M01MW03S01 | | | | M01MW04S01 | | | | M01MW04S01 | | | |
| Date Sampled | 7/3/96 | | | | 7/3/96 | | | | 7/3/96 | | | | 7/3/96 | | | | 7/3/96 | | | |
| Depth | | | | | | | | | | | | | | | | | DILUTION | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141A - Semi-Voa (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| NAPHTHALENE | ***0.0160*** | | | | ***0.4000*** | | | | ***0.9300*** | | | | 4.40 | E | R | D | ***4.60*** | ***D*** | | |
| NAPHTHALENES, C1-ALKYL-S | ***0.0060*** | ***J*** | ***J*** | | ***0.1300*** | | | | ***0.5100*** | | | | 5.20 | E | R | D | ***1.70*** | ***D*** | | |
| NAPHTHALENES, C2-ALKYL-S | ***0.0110*** | | | | ***0.3300*** | | | | ***2.70*** | | | | ***7.60*** | | | | 1.50 | R | R | D |
| NAPHTHALENES, C3-ALKYL-S | ***0.0200*** | | | | ***0.4600*** | | | | ***3.70*** | | | | ***1.20*** | | | | 0.0840 | UR | R | D |
| NAPHTHALENES, C4-ALKYL-S | ***0.0190*** | | | | ***0.2600*** | | | | ***1.50*** | | | | ***0.2100*** | | | | 0.0840 | UR | R | D |
| 1,2,4-TRICHLOROBENZENE | 0.0088 | U | U | | 0.0047 | U | U | | 0.0047 | U | U | | 0.0048 | U | U | | 0.0960 | UR | R | D |
| 1,3,5-TRICHLOROBENZENE | ***0.0100*** | | | | 0.0048 | U | U | | ***0.0160*** | | | | ***0.5500*** | | | | 0.0980 | UR | R | D |
| HEXACHLOROBUTADIENE | 0.0082 | U | UJ | C | 0.0044 | U | UJ | C | 0.0044 | U | UJ | C | 0.0045 | U | UJ | C | 0.0890 | UR | R | D |
| 2,4,6-TRICHLOROPHENOL | 14.0 | U | U | | 7.60 | U | U | | 7.50 | U | U | | 7.70 | U | U | | 150 | UR | R | D |
| 2,4,5-TRICHLOROPHENOL | 14.0 | U | U | | 7.60 | U | U | | 7.50 | U | U | | 7.70 | U | U | | 150 | UR | R | D |
| 2,4-DINITROPHENOL | 70.0 | U | UJ | C | 38.0 | U | UJ | C | 38.0 | U | UJ | C | 38.0 | U | UJ | C | 770 | UR | R | D |
| ACENAPHTHYLENE | 0.0073 | U | U | | 0.0039 | U | U | | 0.0039 | U | U | | ***0.0270*** | | | | 0.0790 | UR | R | D |
| ACENAPHTHENE | ***0.0360*** | | | | ***0.2200*** | | | | ***0.6800*** | | | | ***0.8300*** | | | | 0.1800 | R | R | D |
| BIPHENYL | 0.0059 | U | U | | ***0.0150*** | | | | ***0.0260*** | | | | ***1.00*** | | | | 0.2400 | R | R | D |
| FLUORENE | ***0.0038*** | ***J*** | ***J*** | | ***0.0330*** | | | | ***0.2600*** | | | | ***0.8600*** | | | | 0.1800 | R | R | D |
| FLUORENES, C1-ALKYL-SUBST | ***0.0120*** | | | | ***0.0760*** | | | | ***0.3300*** | | | | ***0.1400*** | | | | 0.0600 | UR | R | D |
| FLUORENES, C2-ALKYL-SUBST | ***0.0170*** | | | | ***0.0840*** | | | | ***0.3500*** | | | | ***0.0510*** | | | | 0.0600 | UR | R | D |
| FLUORENES, C3-ALKYL-SUBST | 0.0055 | U | U | | ***0.0790*** | | | | ***0.2500*** | | | | 0.0030 | U | U | | 0.0600 | UR | R | D |
| PHENANTHRENE | ***0.0081*** | | | | ***0.0530*** | | | | ***0.4100*** | | | | ***1.30*** | | | | 0.2200 | R | R | D |
| ANTHRACENE | ***0.0067*** | ***J*** | ***J*** | ***Q*** | ***0.0450*** | | ***J*** | ***Q*** | ***0.1400*** | | ***J*** | ***Q*** | ***0.2200*** | | ***J*** | ***Q*** | 0.0450 | JR | R | D |
| PHENANTHRENES+ANTHRACE | ***0.0075*** | | | | ***0.0540*** | | | | ***0.2500*** | | | | ***0.1600*** | | | | 0.0350 | UR | R | D |
| PHENANTHRENES+ANTHRACE | ***0.0160*** | | | | ***0.0640*** | | | | ***0.2800*** | | | | ***0.0520*** | | | | 0.0350 | UR | R | D |
| PHENANTHRENES+ANTHRACE | ***0.0120*** | | | | ***0.0530*** | | | | ***0.1400*** | | | | ***0.0220*** | | | | 0.0350 | UR | R | D |
| PHENANTHRENES+ANTHRACE | 0.0032 | U | U | | ***0.0380*** | | | | ***0.0850*** | | | | 0.0017 | U | U | | 0.0350 | UR | R | D |
| DIBENZOTHIOPHENE | ***0.0110*** | | | | ***0.1000*** | | | | ***0.2500*** | | | | ***0.1600*** | | | | 0.0410 | UR | R | D |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for

## Groundwater, Bulky Waste Landfill

| EPA NO | MC158 | | | | MC159 | | | | MC160 | | | | MC161 | | | | MC161DL | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MW01D01 | | | | M01MW02S01 | | | | M01MW03S01 | | | | M01MW04S01 | | | | M01MW04S01 | | | |
| Date Sampled | 7/3/96 | | | | 7/3/96 | | | | 7/3/96 | | | | 7/3/96 | | | | 7/3/96 | | | |
| Depth | | | | | | | | | | | | | | | | | DILUTION | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141A - Semi-Voa (UG/L) Conti*** | | | | | | | | | | | | | | | | | | | | |
| DIBENZOTHIOPHENES, C1-ALK | ***0.0110*** | | | | ***0.1300*** | | | | ***1.00*** | | | | ***0.0570*** | | | | 0.0410 | UR | R | D |
| DIBENZOTHIOPHENES, C2-ALK | ***0.0220*** | | | | ***0.1500*** | | | | ***1.10*** | | | | ***0.0430*** | | | | 0.0410 | UR | R | D |
| DIBENZOTHIOPHENES, C3-ALK | ***0.0150*** | | | | ***0.1200*** | | | | ***0.5200*** | | | | ***0.0220*** | | | | 0.0410 | UR | R | D |
| FLUORANTHENE | ***0.0430*** | | | | ***0.0840*** | | | | ***0.2500*** | | | | ***0.4500*** | | | | 0.1000 | R | R | D |
| PYRENE | ***0.0470*** | | | | ***0.0730*** | | | | ***0.1900*** | | | | ***0.3100*** | | | | 0.0690 | JR | R | D |
| FLUORANTHENES+PYRENES, | ***0.0150*** | | | | ***0.2500*** | | | | ***0.0720*** | | | | ***0.0730*** | | | | 0.0480 | UR | R | D |
| FLUORANTHENES+PYRENES, | 0.0044 | U | U | | ***0.0790*** | | | | ***0.0470*** | | | | ***0.0260*** | | | | 0.0480 | UR | R | D |
| FLUORANTHENES+PYRENES, | 0.0044 | U | U | | ***0.0200*** | | | | ***0.0310*** | | | | ***0.0110*** | | | | 0.0480 | UR | R | D |
| BENZO(A)ANTHRACENE | 0.0150 | U | U | | ***0.0110*** | | | | ***0.0120*** | | | | ***0.0230*** | | | | 0.1700 | UR | R | D |
| CHRYSENE | ***0.0027*** | ***J*** | ***J*** | | ***0.0110*** | | | | ***0.0170*** | | | | ***0.0190*** | | | | 0.0620 | UR | R | D |
| CHRYSENES, C1-ALKYL-SUBST | 0.0057 | U | U | | ***0.0069*** | | | | ***0.0110*** | | | | ***0.0046*** | | | | 0.0620 | UR | R | D |
| CHRYSENES, C2-ALKYL-SUBST | 0.0057 | U | U | | ***0.0150*** | | | | ***0.0240*** | | | | 0.0031 | U | U | | 0.0620 | UR | R | D |
| CHRYSENES, C3-ALKYL-SUBST | 0.0057 | U | U | | 0.0030 | U | U | | ***0.0130*** | | | | 0.0031 | U | U | | 0.0620 | UR | R | D |
| CHRYSENES, C4-ALKYL-SUBST | 0.0057 | U | U | | 0.0030 | U | U | | 0.0030 | U | U | | 0.0031 | U | U | | 0.0620 | UR | R | D |
| BIS(2-ETHYLHEXYL)PHTHALA | 0.8300 | B | UJ | B,C | 2.40 | B | UJ | B,C | 0.9900 | B | UJ | B,C | 0.2600 | B | UJ | B,C | 2.40 | UBR | R | D |
| BENZO(B)FLUORANTHENE | ***0.0016*** | ***J*** | ***J*** | | ***0.0083*** | ***J*** | ***J*** | | ***0.0038*** | ***J*** | ***J*** | | ***0.0061*** | ***J*** | ***J*** | | 0.1700 | UR | R | D |
| BENZO(K)FLUORANTHENE | ***0.0018*** | ***J*** | ***J*** | | ***0.0037*** | ***J*** | ***J*** | | ***0.0015*** | ***J*** | ***J*** | | ***0.0023*** | ***J*** | ***J*** | | 0.1300 | UR | R | D |
| BENZO(E)PYRENE | 0.0130 | U | U | | ***0.0056*** | ***J*** | ***J*** | | ***0.0045*** | ***J*** | ***J*** | | ***0.0039*** | ***J*** | ***J*** | | 0.1400 | UR | R | D |
| BENZO(A)PYRENE | 0.0120 | U | U | | ***0.0054*** | ***J*** | ***J*** | | ***0.0026*** | ***J*** | ***J*** | | ***0.0034*** | ***J*** | ***J*** | | 0.1400 | UR | R | D |
| PERYLENE | 0.0120 | U | U | | ***0.0020*** | ***J*** | ***J*** | | ***0.0010*** | ***J*** | ***J*** | | ***0.0011*** | ***J*** | ***J*** | | 0.1300 | UR | R | D |
| INDENO(1,2,3-CD)PYRENE | 0.0120 | U | UJ | C | ***0.0036*** | ***J*** | ***J*** | | ***0.0013*** | ***J*** | ***J*** | | ***0.0019*** | ***J*** | ***J*** | | 0.1300 | UR | R | D |
| DIBENZO(A,H)ANTHRACENE | 0.0140 | U | U | | ***0.0015*** | ***J*** | ***J*** | | ***0.000860*** | ***J*** | ***J*** | | ***0.000750*** | ***J*** | ***J*** | | 0.1600 | UR | R | D |
| BENZO(G,H,I)PERYLENE | 0.0150 | U | U | | ***0.0034*** | ***J*** | ***J*** | | ***0.0012*** | ***J*** | ***J*** | | ***0.0016*** | ***J*** | ***J*** | | 0.1600 | UR | R | D |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for
# Groundwater, Bulky Waste Landfill

| EPA NO | MC158 | | | | MC159 | | | | MC160 | | | | MC161 | | | | MC161DL | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MW01D01 | | | | M01MW02S01 | | | | M01MW03S01 | | | | M01MW04S01 | | | | | | | |
| Date Sampled | 7/3/96 | | | | 7/3/96 | | | | 7/3/96 | | | | 7/3/96 | | | | | | | |
| Depth | | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 0.000610 | U | U | | 0.000330 | U | U | | ***0.0076*** | | | | ***0.0070*** | | | | | | | |
| PCB-18 (2,2',5) | 0.000820 | U | U | | ***0.0060*** | | | | ***0.0054*** | | | | 0.000450 | N | U | $,*10 | | | | |
| PCB-28 (2,4,4') | 0.0017 | N | U | $,*10 | 0.000920 | U | U | | ***0.000270*** | ***J*** | ***J*** | | 0.000920 | N | U | $,*10 | | | | |
| PCB-52 (2,2',5,5') | 0.000640 | N | U | $,*10 | ***0.0022*** | | | | 0.000340 | U | U | | 0.000350 | N | U | $,*10 | | | | |
| PCB-44 (2,2',3,5') | 0.000550 | N | U | $,*10 | ***0.0044*** | | | | 0.000290 | N | U | $,*10 | 0.000300 | U | U | | | | | |
| PCB-66 (2,3',4,4') | ***0.000840*** | | | | ***0.0026*** | | | | 0.000280 | U | U | | ***0.0120*** | | | | | | | |
| PCB-101 (2,2',3,5,5') | ***0.0016*** | | | | ***0.0021*** | | | | 0.000350 | JN | U | $,*10 | 0.000360 | U | U | | | | | |
| PCB-77 (3,3',4,4') | 0.000940 | U | U | | 0.000510 | U | U | | 0.000500 | U | U | | 0.000510 | U | U | | | | | |
| PCB-118 (2,3',4,4',5) | 0.000610 | U | U | | ***0.0023*** | | | | ***0.000530*** | | | | 0.000330 | U | U | | | | | |
| PCB-153 (2,2',4,4',5,5') | ***0.0011*** | | | | ***0.000710*** | | | | ***0.0010*** | | | | ***0.0081*** | | | | | | | |
| PCB-105 (2,3,3',4,4') | 0.000960 | U | U | | 0.000520 | U | U | | 0.000510 | U | U | | 0.000530 | U | U | | | | | |
| PCB-138 (2,2',3,4,4',5') | ***0.0017*** | | | | ***0.0024*** | | | | ***0.0020*** | | | | ***0.0220*** | | | | | | | |
| PCB-126 (3,3',4,4',5) | 0.000790 | U | U | | 0.000430 | U | U | | 0.000420 | U | U | | 0.000430 | U | U | | | | | |
| PCB-187 (2,2',3,4',5,5',6) | 0.000990 | U | U | | 0.000530 | N | U | $,*10 | ***0.000650*** | | | | 0.000540 | U | U | | | | | |
| PCB-128 (2,2',3,3',4,4') | 0.000530 | U | U | | 0.000290 | U | U | | 0.000280 | U | U | | 0.000290 | U | U | | | | | |
| PCB-180 (2,2',3,4,4',5,5') | ***0.000600*** | ***J*** | ***J*** | | ***0.0012*** | | | | ***0.000820*** | | | | ***0.0027*** | | | | | | | |
| PCB-170 (2,2',3,3',4,4',5) | 0.0047 | U | U | | 0.0025 | U | U | | ***0.000610*** | ***J*** | ***J*** | | ***0.0038*** | | | | | | | |
| PCB-195 (2,2',3,3',4,4',5,6) | 0.0010 | U | U | | ***0.000230*** | ***J*** | ***J*** | | 0.000530 | U | U | | ***0.000510*** | ***J*** | ***J*** | | | | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000770 | U | U | | 0.000410 | U | U | | 0.000410 | U | U | | 0.000420 | U | U | | | | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000920 | U | U | | ***0.0027*** | | | | 0.000490 | U | U | | 0.000500 | JN | U | $,*10 | | | | |
| ***STIV141E - Pesticides (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 0.000680 | U | UJ | C | 0.000370 | U | UJ | C | ***0.000180*** | ***J*** | ***J*** | ***C*** | 0.000370 | U | UJ | C | | | | |
| 2,4'-DDE | 0.000580 | U | U | | 0.000310 | U | U | | 0.000310 | U | U | | 0.000320 | U | U | | | | | |
| ENDOSULFAN I | 0.0010 | U | U | | ***0.000370*** | ***J*** | ***J*** | | ***0.000730*** | | | | 0.000550 | U | U | | | | | |
| HEXACHLOROBENZENE | 0.000610 | U | U | | ***0.000890*** | | | | ***0.000180*** | ***J*** | ***J*** | | 0.000330 | U | U | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for

## Groundwater, Bulky Waste Landfill

| EPA NO | MC158 | | | | MC159 | | | | MC160 | | | | MC161 | | | | MC161DL | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MW01D01 | | | | M01MW02S01 | | | | M01MW03S01 | | | | M01MW04S01 | | | | | | | |
| Date Sampled | 7/3/96 | | | | 7/3/96 | | | | 7/3/96 | | | | 7/3/96 | | | | | | | |
| Depth | | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/L) Conti*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.000450 | N | U | $,*10 | ***0.0032*** | | | | 0.000240 | U | U | | 0.000250 | N | U | $,*10 | | | | |
| GAMMA-BHC (LINDANE) | 0.000500 | N | U | $,*10 | ***0.0063*** | | | | ***0.0017*** | | | | 0.000270 | N | U | $,*10 | | | | |
| DELTA-BHC | 0.000520 | U | U | | 0.000280 | U | UJ | C | 0.000280 | U | UJ | C | 0.000290 | U | UJ | C | | | | |
| HEPTACHLOR | 0.000750 | U | U | | 0.000400 | U | U | | 0.000400 | N | U | $,*10 | 0.000410 | U | U | | | | | |
| ALDRIN | 0.000910 | U | U | | 0.000490 | U | U | | 0.000490 | U | U | | 0.000500 | U | U | | | | | |
| GAMMA-CHLORDANE | 0.000370 | U | U | | 0.000200 | U | U | | 0.000200 | U | U | | 0.000200 | U | U | | | | | |
| ALPHA-CHLORDANE | ***0.000190*** | ***J*** | ***J*** | | ***0.0011*** | | | | 0.000430 | U | U | | 0.000440 | U | U | | | | | |
| CIS-NONACHLOR | 0.000570 | U | U | | 0.000310 | U | U | | 0.000300 | U | U | | 0.000310 | U | U | | | | | |
| TRANS-NONACHLOR | 0.000570 | N | U | $,*10 | 0.000300 | N | U | $,*10 | 0.000300 | N | U | $,*10 | 0.000310 | N | U | $,*10 | | | | |
| HEPTACHLOR EPOXIDE | 0.0014 | JN | U | $,*10 | 0.000740 | U | U | | 0.000740 | U | U | | 0.000760 | U | U | | | | | |
| DIELDRIN | ***0.000700*** | | | | ***0.0012*** | | | | 0.000360 | U | U | | 0.000360 | U | U | | | | | |
| 4,4'-DDE | 0.000330 | U | U | | ***0.0032*** | | | | ***0.0018*** | | | | 0.000180 | U | U | | | | | |
| 2,4'-DDD | ***0.0014*** | | | | ***0.0020*** | | | | ***0.000890*** | | | | 0.000680 | U | U | | | | | |
| ENDRIN | 0.000950 | U | UJ | C | 0.000510 | U | U | | 0.000510 | U | U | | 0.000520 | U | UJ | C | | | | |
| ENDRIN ALDEHYDE | 0.000530 | U | U | | 0.000280 | U | U | | 0.000280 | U | U | | 0.000290 | U | U | | | | | |
| 4,4'-DDD | ***0.0045*** | | | | ***0.0040*** | | | | ***0.0037*** | | | | 0.000440 | U | U | | | | | |
| 2,4'-DDT | 0.000520 | U | U | | 0.000280 | U | U | | 0.000280 | U | U | | 0.000290 | U | U | | | | | |
| ENDOSULFAN II | 0.0010 | U | U | | 0.000540 | U | U | | 0.000540 | N | U | $,*10 | 0.000550 | U | U | | | | | |
| ENDOSULFAN SULFATE | 0.0010 | U | U | | 0.000540 | U | U | | 0.000540 | U | U | | 0.000550 | U | U | | | | | |
| 4,4'-DDT | 0.0012 | U | U | | 0.000650 | U | U | | 0.000650 | U | U | | 0.000660 | U | U | | | | | |
| ENDRIN KETONE | 0.000530 | U | U | | 0.000280 | U | U | | 0.000280 | U | U | | 0.000290 | U | U | | | | | |
| METHOXYCHLOR | 0.0014 | U | U | | 0.000730 | U | U | | 0.000730 | U | U | | 0.000740 | U | U | | | | | |
| MIREX | 0.000400 | U | U | | 0.000210 | U | U | | 0.000210 | U | U | | 0.000220 | U | U | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for
# Groundwater, Bulky Waste Landfill

| EPA NO | MC162 | | | | ? | | | | ? | | | | ? | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MW05S01 | | | | | | | | | | | | | | | | | | | |
| Date Sampled | 7/3/96 | | | | | | | | | | | | | | | | | | | |
| Depth | | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141A - Semi-Voa (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| NAPHTHALENE | ***0.4300*** | | | | | | | | | | | | | | | | | | | |
| NAPHTHALENES, C1-ALKYL-S | ***0.9300*** | | | | | | | | | | | | | | | | | | | |
| NAPHTHALENES, C2-ALKYL-S | ***0.5800*** | | | | | | | | | | | | | | | | | | | |
| NAPHTHALENES, C3-ALKYL-S | ***0.1200*** | | | | | | | | | | | | | | | | | | | |
| NAPHTHALENES, C4-ALKYL-S | ***0.0360*** | | | | | | | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 0.0048 | U | U | | | | | | | | | | | | | | | | | |
| 1,3,5-TRICHLOROBENZENE | 0.0049 | U | U | | | | | | | | | | | | | | | | | |
| HEXACHLOROBUTADIENE | 0.0044 | U | UJ | C | | | | | | | | | | | | | | | | |
| 2,4,6-TRICHLOROPHENOL | 7.60 | U | U | | | | | | | | | | | | | | | | | |
| 2,4,5-TRICHLOROPHENOL | 7.60 | U | U | | | | | | | | | | | | | | | | | |
| 2,4-DINITROPHENOL | 38.0 | U | UJ | C | | | | | | | | | | | | | | | | |
| ACENAPHTHYLENE | ***0.0052*** | | | | | | | | | | | | | | | | | | | |
| ACENAPHTHENE | ***1.50*** | | | | | | | | | | | | | | | | | | | |
| BIPHENYL | ***0.2700*** | | | | | | | | | | | | | | | | | | | |
| FLUORENE | ***0.1800*** | | | | | | | | | | | | | | | | | | | |
| FLUORENES, C1-ALKYL-SUBST | ***0.0740*** | | | | | | | | | | | | | | | | | | | |
| FLUORENES, C2-ALKYL-SUBST | ***0.0310*** | | | | | | | | | | | | | | | | | | | |
| FLUORENES, C3-ALKYL-SUBST | 0.0030 | U | U | | | | | | | | | | | | | | | | | |
| PHENANTHRENE | ***1.10*** | | | | | | | | | | | | | | | | | | | |
| ANTHRACENE | ***0.2400*** | | ***J*** | ***Q*** | | | | | | | | | | | | | | | | |
| PHENANTHRENES+ANTHRACE | ***0.2000*** | | | | | | | | | | | | | | | | | | | |
| PHENANTHRENES+ANTHRACE | ***0.0450*** | | | | | | | | | | | | | | | | | | | |
| PHENANTHRENES+ANTHRACE | ***0.0130*** | | | | | | | | | | | | | | | | | | | |
| PHENANTHRENES+ANTHRACE | 0.0017 | U | U | | | | | | | | | | | | | | | | | |
| DIBENZOTHIOPHENE | ***0.1700*** | | | | | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for
## Groundwater, Bulky Waste Landfill

| EPA NO | MC162 | | | | ? | | | | ? | | | | ? | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MW05S01 | | | | | | | | | | | | | | | | | | | |
| Date Sampled | 7/3/96 | | | | | | | | | | | | | | | | | | | |
| Depth | | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141A - Semi-Voa (UG/L) Conti*** | | | | | | | | | | | | | | | | | | | | |
| DIBENZOTHIOPHENES, C1-ALK | ***0.0420*** | | | | | | | | | | | | | | | | | | | |
| DIBENZOTHIOPHENES, C2-ALK | ***0.0190*** | | | | | | | | | | | | | | | | | | | |
| DIBENZOTHIOPHENES, C3-ALK | ***0.0096*** | | | | | | | | | | | | | | | | | | | |
| FLUORANTHENE | ***1.20*** | | | | | | | | | | | | | | | | | | | |
| PYRENE | ***0.7600*** | | | | | | | | | | | | | | | | | | | |
| FLUORANTHENES+PYRENES, | ***0.1200*** | | | | | | | | | | | | | | | | | | | |
| FLUORANTHENES+PYRENES, | ***0.0160*** | | | | | | | | | | | | | | | | | | | |
| FLUORANTHENES+PYRENES, | 0.0024 | U | U | | | | | | | | | | | | | | | | | |
| BENZO(A)ANTHRACENE | ***0.0260*** | | | | | | | | | | | | | | | | | | | |
| CHRYSENE | ***0.0260*** | | | | | | | | | | | | | | | | | | | |
| CHRYSENES, C1-ALKYL-SUBST | ***0.0032*** | | | | | | | | | | | | | | | | | | | |
| CHRYSENES, C2-ALKYL-SUBST | 0.0031 | U | U | | | | | | | | | | | | | | | | | |
| CHRYSENES, C3-ALKYL-SUBST | 0.0031 | U | U | | | | | | | | | | | | | | | | | |
| CHRYSENES, C4-ALKYL-SUBST | 0.0031 | U | U | | | | | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALA | 1.70 | B | UJ | B,C | | | | | | | | | | | | | | | | |
| BENZO(B)FLUORANTHENE | ***0.0043*** | ***J*** | ***J*** | | | | | | | | | | | | | | | | | |
| BENZO(K)FLUORANTHENE | ***0.0026*** | ***J*** | ***J*** | | | | | | | | | | | | | | | | | |
| BENZO(E)PYRENE | ***0.0024*** | ***J*** | ***J*** | | | | | | | | | | | | | | | | | |
| BENZO(A)PYRENE | ***0.0020*** | ***J*** | ***J*** | | | | | | | | | | | | | | | | | |
| PERYLENE | ***0.000990*** | ***J*** | ***J*** | | | | | | | | | | | | | | | | | |
| INDENO(1,2,3-CD)PYRENE | 0.0063 | U | U | | | | | | | | | | | | | | | | | |
| DIBENZO(A,H)ANTHRACENE | 0.0078 | U | U | | | | | | | | | | | | | | | | | |
| BENZO(G,H,I)PERYLENE | 0.0080 | U | U | | | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for
# Groundwater, Bulky Waste Landfill

| EPA NO | MC162 | | | | ? | | | | ? | | | | ? | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MW05S01 | | | | | | | | | | | | | | | | | | | |
| Date Sampled | 7/3/96 | | | | | | | | | | | | | | | | | | | |
| Depth | | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | ***0.000770*** | | | | | | | | | | | | | | | | | | | |
| PCB-18 (2,2',5) | 0.000440 | N | U | $,*10 | | | | | | | | | | | | | | | | |
| PCB-28 (2,4,4') | ***0.000320*** | ***J*** | ***J*** | | | | | | | | | | | | | | | | | |
| PCB-52 (2,2',5,5') | ***0.0033*** | | | | | | | | | | | | | | | | | | | |
| PCB-44 (2,2',3,5') | ***0.000900*** | | | | | | | | | | | | | | | | | | | |
| PCB-66 (2,3',4,4') | 0.000280 | U | U | | | | | | | | | | | | | | | | | |
| PCB-101 (2,2',3,5,5') | ***0.0046*** | | | | | | | | | | | | | | | | | | | |
| PCB-77 (3,3',4,4') | 0.000510 | U | U | | | | | | | | | | | | | | | | | |
| PCB-118 (2,3',4,4',5) | 0.000330 | U | U | | | | | | | | | | | | | | | | | |
| PCB-153 (2,2',4,4',5,5') | ***0.0028*** | | | | | | | | | | | | | | | | | | | |
| PCB-105 (2,3,3',4,4') | 0.000520 | U | U | | | | | | | | | | | | | | | | | |
| PCB-138 (2,2',3,4,4',5') | ***0.0016*** | | | | | | | | | | | | | | | | | | | |
| PCB-126 (3,3',4,4',5) | 0.000430 | U | U | | | | | | | | | | | | | | | | | |
| PCB-187 (2,2',3,4',5,5',6) | ***0.000790*** | | | | | | | | | | | | | | | | | | | |
| PCB-128 (2,2',3,3',4,4') | 0.000290 | U | U | | | | | | | | | | | | | | | | | |
| PCB-180 (2,2',3,4,4',5,5') | ***0.000480*** | ***J*** | ***J*** | | | | | | | | | | | | | | | | | |
| PCB-170 (2,2',3,3',4,4',5) | ***0.000290*** | ***J*** | ***J*** | | | | | | | | | | | | | | | | | |
| PCB-195 (2,2',3,3',4,4',5,6) | 0.000540 | U | U | | | | | | | | | | | | | | | | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000420 | U | U | | | | | | | | | | | | | | | | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000500 | U | U | | | | | | | | | | | | | | | | | |
| ***STIV141E - Pesticides (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 0.000370 | U | UJ | C | | | | | | | | | | | | | | | | |
| 2,4'-DDE | 0.000320 | U | U | | | | | | | | | | | | | | | | | |
| ENDOSULFAN I | 0.000550 | U | U | | | | | | | | | | | | | | | | | |
| HEXACHLOROBENZENE | ***0.000170*** | ***J*** | ***J*** | | | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for
# Groundwater, Bulky Waste Landfill

| EPA NO | MC162 | | | | ? | | | | ? | | | | ? | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MW05S01 | | | | | | | | | | | | | | | | | | | |
| Date Sampled | 7/3/96 | | | | | | | | | | | | | | | | | | | |
| Depth | | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/L) Conti*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.000240 | U | U | | | | | | | | | | | | | | | | | |
| GAMMA-BHC (LINDANE) | 0.000270 | N | U | $,*10 | | | | | | | | | | | | | | | | |
| DELTA-BHC | 0.000280 | U | UJ | C | | | | | | | | | | | | | | | | |
| HEPTACHLOR | 0.000410 | U | U | | | | | | | | | | | | | | | | | |
| ALDRIN | 0.000500 | U | U | | | | | | | | | | | | | | | | | |
| GAMMA-CHLORDANE | 0.000200 | U | U | | | | | | | | | | | | | | | | | |
| ALPHA-CHLORDANE | ***0.000580*** | | | | | | | | | | | | | | | | | | | |
| CIS-NONACHLOR | 0.000310 | U | U | | | | | | | | | | | | | | | | | |
| TRANS-NONACHLOR | 0.000310 | U | U | | | | | | | | | | | | | | | | | |
| HEPTACHLOR EPOXIDE | 0.000750 | U | U | | | | | | | | | | | | | | | | | |
| DIELDRIN | ***0.0020*** | | | | | | | | | | | | | | | | | | | |
| 4,4'-DDE | ***0.0026*** | | | | | | | | | | | | | | | | | | | |
| 2,4'-DDD | ***0.0350*** | | | | | | | | | | | | | | | | | | | |
| ENDRIN | 0.000510 | U | U | | | | | | | | | | | | | | | | | |
| ENDRIN ALDEHYDE | 0.000290 | U | U | | | | | | | | | | | | | | | | | |
| 4,4'-DDD | ***0.0980*** | | | | | | | | | | | | | | | | | | | |
| 2,4'-DDT | 0.000280 | U | U | | | | | | | | | | | | | | | | | |
| ENDOSULFAN II | 0.000550 | N | U | $,*10 | | | | | | | | | | | | | | | | |
| ENDOSULFAN SULFATE | 0.000550 | U | U | | | | | | | | | | | | | | | | | |
| 4,4'-DDT | 0.000660 | U | U | | | | | | | | | | | | | | | | | |
| ENDRIN KETONE | 0.000290 | U | U | | | | | | | | | | | | | | | | | |
| METHOXYCHLOR | 0.000740 | JN | U | $,*10 | | | | | | | | | | | | | | | | |
| MIREX | ***0.000160*** | ***J*** | ***J*** | | | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for

## Marine Sediment, Landfills

| EPA NO | MC165 | | | | MC165DL | | | | MC166 | | | | MC166DL | | | | MC167 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MS01S01 | | | | M01MS01S01 | | | | M01MS01D01 | | | | M01MS01D01 | | | | M01MS02S01 | | | |
| Date Sampled | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | |
| Depth | 0.5 | | | | DILUTION | | | | 0.5 | | | | DILUTION | | | | 0.5 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | ***0.2000*** | | | | 0.8500 | UR | R | D | ***0.2200*** | | | | 0.8400 | UR | R | D | 0.0420 | N | U | + |
| PCB-18 (2,2',5) | ***0.5400*** | | | | 0.6100 | JR | R | D | 0.0890 | N | U | + | 0.4600 | JR | R | D | 0.0880 | N | U | + |
| PCB-28 (2,4,4') | ***0.8100*** | | | | 0.3400 | JR | R | D | ***0.7200*** | | | | 1.30 | R | R | D | ***0.3200*** | | | |
| PCB-52 (2,2',5,5') | ***2.00*** | | | | 2.70 | R | R | D | ***2.00*** | | | | 2.70 | R | R | D | ***1.10*** | | | |
| PCB-44 (2,2',3,5') | ***0.7900*** | | | | 0.8000 | R | R | D | ***0.9900*** | | | | 1.00 | R | R | D | ***0.4600*** | | | |
| PCB-66 (2,3',4,4') | ***0.9700*** | | | | 0.6500 | UR | R | D | ***1.40*** | | | | 0.6400 | UR | R | D | ***0.8800*** | | | |
| PCB-101 (2,2',3,5,5') | 15.0 | E | R | D | ***28.0*** | ***D*** | | | 13.0 | E | R | D | ***21.0*** | ***D*** | ***J*** | ***C*** | ***5.80*** | | | |
| PCB-77 (3,3',4,4') | 0.0490 | U | U | | 0.9700 | UR | R | D | 0.0480 | U | U | | 19.0 | R | R | D | 0.0480 | U | U | |
| PCB-118 (2,3',4,4',5) | ***5.40*** | | | | 9.10 | R | R | D | ***4.60*** | | | | 7.00 | R | R | D | ***2.60*** | | | |
| PCB-153 (2,2',4,4',5,5') | 75.0 | E | R | D | ***110*** | ***D*** | | | 66.0 | E | R | D | ***100*** | ***D*** | | | 28.0 | E | R | D |
| PCB-105 (2,3,3',4,4') | 0.0280 | U | U | | 0.5600 | UR | R | D | ***1.70*** | | | | 0.5500 | UR | R | D | ***0.8800*** | | | |
| PCB-138 (2,2',3,4,4',5') | 55.0 | E | R | D | ***84.0*** | ***D*** | | | 48.0 | E | R | D | ***64.0*** | ***D*** | | | 22.0 | E | R | D |
| PCB-126 (3,3',4,4',5) | 0.0760 | U | U | | 1.50 | UR | R | D | 0.0750 | U | U | | 1.50 | UR | R | D | 0.0750 | U | U | |
| PCB-187 (2,2',3,4',5,5',6) | 45.0 | E | R | D | ***69.0*** | ***D*** | | | 40.0 | E | R | D | ***60.0*** | ***D*** | | | 16.0 | E | R | D |
| PCB-128 (2,2',3,3',4,4') | ***4.30*** | | | | 5.40 | R | R | D | ***3.20*** | | | | 3.90 | R | R | D | ***1.60*** | | | |
| PCB-180 (2,2',3,4,4',5,5') | 35.0 | E | R | D | ***120*** | ***D*** | | | 34.0 | E | R | D | ***93.0*** | ***D*** | | | 24.0 | E | R | D |
| PCB-170 (2,2',3,3',4,4',5) | 30.0 | E | R | D | ***63.0*** | ***D*** | | | 28.0 | E | R | D | ***48.0*** | ***D*** | | | 15.0 | E | R | D |
| PCB-195 (2,2',3,3',4,4',5,6) | 12.0 | E | R | D | ***14.0*** | ***D*** | | | 10.0 | E | R | D | ***13.0*** | ***D*** | | | ***3.40*** | | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | ***5.70*** | | | | 7.30 | R | R | D | ***5.40*** | | | | 6.50 | R | R | D | ***1.50*** | | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | ***0.1200*** | | | | 0.2500 | JR | R | D | 0.0270 | N | U | + | 0.1400 | JR | R | D | ***0.0450*** | | | |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 0.0270 | U | U | | 0.5400 | UR | R | D | 0.0270 | U | U | | 0.5300 | UR | R | D | 0.0270 | U | U | |
| 2,4'-DDE | ***2.30*** | | | | 1.40 | R | R | D | ***0.8500*** | | | | 1.00 | R | R | D | 0.0400 | U | U | |
| ENDOSULFAN I | 0.0520 | U | U | | 1.00 | UR | R | D | 0.0510 | U | U | | 1.00 | UR | R | D | 0.0510 | U | U | |
| HEXACHLOROBENZENE | 0.0400 | U | U | + | 0.8100 | UR | R | D | 0.0400 | U | U | | 0.8000 | UR | R | D | 0.0400 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for

## Marine Sediment, Landfills

| EPA NO | MC165 | | | | MC165DL | | | | MC166 | | | | MC166DL | | | | MC167 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MS01S01 | | | | M01MS01S01 | | | | M01MS01D01 | | | | M01MS01D01 | | | | M01MS02S01 | | | |
| Date Sampled | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | |
| Depth | 0.5 | | | | DILUTION | | | | 0.5 | | | | DILUTION | | | | 0.5 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.0490 | U | U | | 0.9800 | UR | R | D | 0.0480 | U | U | | 0.9700 | UR | R | D | 0.0490 | U | U | |
| GAMMA-BHC (LINDANE) | 0.0350 | U | U | + | 0.7000 | UR | R | D | 0.0350 | U | U | | 0.6900 | UR | R | D | 0.0350 | U | U | |
| DELTA-BHC | 0.0280 | U | U | + | 0.5700 | UR | R | D | 0.0280 | U | U | | 0.5600 | UR | R | D | 0.0280 | NJ | U | + |
| HEPTACHLOR | 0.0390 | U | UJ | +,C | 0.7800 | UR | R | D | 0.0380 | U | UJ | C | 0.7600 | UR | R | D | 0.0390 | NJ | UJ | +,C |
| ALDRIN | 0.0360 | U | U | | 0.7200 | UR | R | D | 0.0350 | U | U | | 0.7100 | UR | R | D | 0.0360 | U | U | |
| GAMMA-CHLORDANE | ***0.8400*** | | | | 1.30 | R | R | D | ***1.20*** | | | | 1.20 | R | R | D | ***0.3000*** | | | |
| ALPHA-CHLORDANE | ***0.8600*** | | | | 1.20 | R | R | D | ***1.00*** | | | | 1.10 | R | R | D | ***0.3000*** | | | |
| TRANS-NONACHLOR | ***0.6500*** | | | | 0.8300 | R | R | D | ***0.8500*** | | | | 0.8600 | R | R | D | ***0.2500*** | | | |
| HEPTACHLOR EPOXIDE | 0.0460 | U | U | | 0.9300 | UR | R | D | 0.0460 | U | U | | 0.9100 | UR | R | D | 0.0460 | U | U | |
| DIELDRIN | ***1.20*** | | | | 1.30 | R | R | D | ***2.10*** | | | | 1.80 | R | R | D | 0.0440 | N | U | + |
| 4,4'-DDE | ***9.00*** | | | | 7.20 | R | R | D | 9.70 | E | R | D | ***6.70*** | ***D*** | | | ***6.00*** | | | |
| 2,4'-DDD | 8.50 | E | R | D | ***11.0*** | ***D*** | | | 8.60 | E | R | D | ***7.70*** | ***D*** | | | ***2.20*** | | ***J*** | ***C*** |
| ENDRIN | 0.0130 | U | U | | 0.2500 | UR | R | D | 0.0120 | U | U | | 0.2500 | UR | R | D | 0.0120 | U | U | |
| ENDRIN ALDEHYDE | 0.0290 | U | U | | 0.5900 | UR | R | D | 0.0290 | U | U | | 0.5800 | UR | R | D | 0.0290 | U | U | |
| 4,4'-DDD | 20.0 | E | R | D | ***17.0*** | ***D*** | | | 23.0 | E | R | D | ***15.0*** | ***D*** | | | ***5.60*** | | ***J*** | ***C*** |
| 2,4'-DDT | ***3.30*** | | | | 5.00 | R | R | D | ***3.00*** | | | | 3.10 | R | R | D | ***2.50*** | | | |
| ENDOSULFAN II | 0.0520 | U | U | | 1.00 | UR | R | D | 0.0510 | U | U | | 1.00 | UR | R | D | 0.0510 | U | U | |
| ENDOSULFAN SULFATE | 0.0520 | U | U | | 1.00 | UR | R | D | 0.0510 | U | U | | 1.00 | UR | R | D | 0.0510 | U | U | |
| 4,4'-DDT | ***4.70*** | | | | 4.60 | R | R | D | ***5.40*** | | | | 4.30 | R | R | D | ***7.50*** | | | |
| ENDRIN KETONE | 0.0290 | U | U | | 0.5900 | UR | R | D | 0.0290 | U | U | | 0.5800 | UR | R | D | 0.0290 | U | U | |
| METHOXYCHLOR | 0.1800 | U | U | | 3.50 | UR | R | D | 0.1700 | U | U | | 3.50 | UR | R | D | 0.1700 | U | U | |
| MIREX | 0.0410 | U | U | | 0.8100 | UR | R | D | 0.0400 | U | U | | 0.8000 | UR | R | D | 0.0400 | U | U | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for

## Marine Sediment, Landfills

| EPA NO | MC167DL | | | | MC168 | | | | MC169 | | | | MC170 | | | | MC171 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MS02S01 | | | | M01MS03S01 | | | | M01MS04S01 | | | | M01MS05S01 | | | | M01MS06S01 | | | |
| Date Sampled | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | |
| Depth | DILUTION | | | | 0.5 | | | | 0.5 | | | | 0.5 | | | | 0.5 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 0.4200 | UR | R | D | 0.0440 | U | U | | 0.0420 | NJ | U | + | ***0.0610*** | | ***J*** | ***F*** | 0.0460 | U | U | |
| PCB-18 (2,2',5) | 0.1400 | JR | R | D | 0.0900 | NJ | U | + | 0.0890 | U | U | | 0.0970 | N | U | + | 0.0950 | U | U | |
| PCB-28 (2,4,4') | 0.1000 | JR | R | D | ***0.1100*** | | | | 0.0600 | NJ | U | + | ***0.1800*** | | | | 0.0640 | U | U | |
| PCB-52 (2,2',5,5') | 1.20 | R | R | D | ***0.3700*** | | | | ***0.1100*** | | | | ***0.1900*** | | | | 0.0270 | U | U | |
| PCB-44 (2,2',3,5') | 0.4800 | R | R | D | ***0.1400*** | | | | ***0.0380*** | | | | ***0.1100*** | | | | 0.0320 | U | U | |
| PCB-66 (2,3',4,4') | 0.3200 | UR | R | D | ***0.1400*** | | | | ***0.1200*** | | | | ***0.1500*** | | | | 0.0350 | U | U | |
| PCB-101 (2,2',3,5,5') | 7.80 | R | R | D | ***1.60*** | | | | ***1.00*** | | | | ***0.7900*** | | | | 0.0270 | U | U | |
| PCB-77 (3,3',4,4') | 0.4800 | UR | R | D | 0.0500 | U | U | | 0.0490 | U | U | | 0.0530 | U | U | | 0.0520 | U | U | |
| PCB-118 (2,3',4,4',5) | 3.50 | R | R | D | ***0.9600*** | | | | ***0.4200*** | | | | ***0.6900*** | | | | 0.0410 | U | U | |
| PCB-153 (2,2',4,4',5,5') | ***40.0*** | ***D*** | | | ***6.40*** | | | | ***6.30*** | | | | ***3.60*** | | | | ***0.0450*** | | | |
| PCB-105 (2,3,3',4,4') | 1.90 | R | R | D | ***0.2500*** | | | | ***0.2200*** | | | | ***0.3000*** | | | | 0.0300 | U | U | |
| PCB-138 (2,2',3,4,4',5') | ***27.0*** | ***D*** | | | ***4.60*** | | | | ***4.80*** | | | | ***2.60*** | | | | ***0.1400*** | | | |
| PCB-126 (3,3',4,4',5) | 0.7500 | UR | R | D | 0.0780 | U | U | | 0.0760 | U | U | | 0.0830 | U | U | | 0.0810 | U | U | |
| PCB-187 (2,2',3,4',5,5',6) | ***22.0*** | ***D*** | | | ***3.40*** | | | | ***3.20*** | | | | ***1.80*** | | | | ***0.0330*** | ***J*** | ***J*** | |
| PCB-128 (2,2',3,3',4,4') | 1.90 | R | R | D | ***0.3800*** | | | | ***0.3600*** | | | | ***0.2300*** | | | | 0.0350 | U | U | |
| PCB-180 (2,2',3,4,4',5,5') | ***35.0*** | ***D*** | | | ***4.80*** | | | | ***5.90*** | | | | ***2.60*** | | | | ***0.0660*** | | | |
| PCB-170 (2,2',3,3',4,4',5) | ***18.0*** | ***D*** | | | ***2.50*** | | | | ***3.80*** | | | | ***1.40*** | | | | ***0.0140*** | ***J*** | ***J*** | |
| PCB-195 (2,2',3,3',4,4',5,6) | 3.90 | R | R | D | ***0.5400*** | | | | ***0.7100*** | | | | ***0.4200*** | | | | ***0.0300*** | | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 1.80 | R | R | D | ***0.2600*** | | | | ***0.3200*** | | | | ***0.1200*** | | | | 0.0250 | N | U | + |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.1500 | JR | R | D | ***0.0720*** | | | | ***0.5200*** | | | | ***0.0063*** | ***J*** | ***J*** | | 0.0290 | U | U | |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 0.2700 | UR | R | D | 0.0280 | J | U | + | 0.0270 | NJ | U | + | 0.0300 | U | U | | ***0.0360*** | | | |
| 2,4'-DDE | 0.4000 | UR | R | D | ***0.1000*** | | | | 0.0410 | U | U | | 0.0450 | U | U | | 0.0430 | U | U | |
| ENDOSULFAN I | 0.5100 | UR | R | D | 0.0530 | U | U | | 0.0520 | U | U | | 0.0570 | U | U | | 0.0560 | U | U | |
| HEXACHLOROBENZENE | 0.4000 | UR | R | D | 0.0420 | U | U | | 0.0400 | NJ | U | + | 0.0450 | U | U | | 0.0430 | J | U | + |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for

## Marine Sediment, Landfills

| EPA NO | MC167DL | | | | MC168 | | | | MC169 | | | | MC170 | | | | MC171 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MS02S01 | | | | M01MS03S01 | | | | M01MS04S01 | | | | M01MS05S01 | | | | M01MS06S01 | | | |
| Date Sampled | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | |
| Depth | DILUTION | | | | 0.5 | | | | 0.5 | | | | 0.5 | | | | 0.5 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.4900 | UR | R | D | 0.0500 | U | U | | 0.0490 | U | U | | 0.0540 | U | U | | 0.0530 | NJ | U | + |
| GAMMA-BHC (LINDANE) | 0.3500 | UR | R | D | 0.0360 | NJ | U | + | 0.0350 | U | U | | 0.0390 | U | U | | 0.0380 | NJ | U | + |
| DELTA-BHC | 0.2800 | UR | R | D | 0.0290 | N | U | + | 0.0280 | NJ | U | + | 0.0310 | U | U | | 0.0300 | N | U | + |
| HEPTACHLOR | 0.3800 | UR | R | D | 0.0400 | U | UJ | C | 0.0390 | U | UJ | C | 0.0430 | U | UJ | C | 0.0420 | U | UJ | C |
| ALDRIN | 0.3600 | UR | R | D | 0.0370 | U | U | | 0.0360 | U | U | | 0.0400 | U | U | | 0.0390 | U | U | |
| GAMMA-CHLORDANE | 0.3000 | JR | R | D | ***0.0430*** | | | | ***0.0270*** | ***J*** | ***J*** | | ***0.0260*** | ***J*** | ***J*** | | 0.0390 | U | U | |
| ALPHA-CHLORDANE | 0.2200 | JR | R | D | ***0.0550*** | | | | 0.0340 | U | U | | 0.0370 | U | U | | 0.0360 | U | U | |
| TRANS-NONACHLOR | 0.2000 | UR | R | D | 0.0210 | N | U | + | 0.0200 | U | U | | ***0.0340*** | | | | 0.0220 | U | U | |
| HEPTACHLOR EPOXIDE | 0.4600 | UR | R | D | 0.0470 | U | U | | 0.0460 | U | U | | 0.0510 | U | U | | 0.0500 | U | U | |
| DIELDRIN | 0.4400 | UR | R | D | 0.0460 | U | U | | 0.0450 | U | U | | ***0.0270*** | ***J*** | ***J*** | | 0.0480 | U | U | |
| 4,4'-DDE | 4.60 | R | R | D | ***0.7700*** | | | | ***0.5800*** | | | | ***0.9300*** | | | | 0.0350 | U | U | |
| 2,4'-DDD | 2.30 | R | R | D | ***0.4100*** | | ***J*** | ***C*** | ***0.2000*** | | ***J*** | ***C*** | ***0.7500*** | | ***J*** | ***C*** | 0.0370 | U | UJ | C |
| ENDRIN | 0.1200 | UR | R | D | 0.0130 | U | U | | 0.0130 | U | U | | 0.0140 | U | U | | 0.0130 | U | U | |
| ENDRIN ALDEHYDE | 0.2900 | UR | R | D | 0.0300 | U | U | | 0.0290 | U | U | | 0.0320 | U | U | | 0.0310 | U | U | |
| 4,4'-DDD | 4.60 | R | R | D | ***0.4900*** | | ***J*** | ***C*** | ***0.2800*** | | ***J*** | ***C*** | ***1.40*** | | ***J*** | ***C*** | 0.0630 | U | UJ | C |
| 2,4'-DDT | 2.70 | R | R | D | ***0.2300*** | | | | ***0.2200*** | | | | ***0.1700*** | | | | 0.0580 | U | U | |
| ENDOSULFAN II | 0.5100 | UR | R | D | 0.0530 | U | U | | 0.0520 | U | U | | 0.0570 | U | U | | 0.0560 | N | U | + |
| ENDOSULFAN SULFATE | 0.5100 | UR | R | D | 0.0530 | U | U | | 0.0520 | U | U | | 0.0570 | U | U | | 0.0560 | U | U | |
| 4,4'-DDT | 6.10 | R | R | D | 0.0540 | N | U | + | 0.0470 | N | U | + | ***0.3700*** | | | | 0.0500 | U | U | |
| ENDRIN KETONE | 0.2900 | UR | R | D | 0.0300 | U | U | | 0.0290 | U | U | | 0.0320 | U | U | | 0.0310 | U | U | |
| METHOXYCHLOR | 1.70 | UR | R | D | 0.1800 | U | U | | 0.1800 | U | U | | 0.1900 | U | U | | 0.1900 | U | U | |
| MIREX | 0.4000 | UR | R | D | 0.0420 | U | U | | 0.0410 | U | U | | 0.0450 | U | U | | 0.0430 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for

## Marine Sediment, Landfills

| EPA NO | MC172 | | | | MC173 | | | | MC174 | | | | MC175 | | | | MC176 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MS07S01 | | | | M01MS08S01 | | | | M01MS09S01 | | | | M01MS10S01 | | | | M01MS11S01 | | | |
| Date Sampled | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | |
| Depth | 0.5 | | | | 0.5 | | | | 0.5 | | | | 0.5 | | | | 0.5 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 0.0490 | U | U | | ***0.4200*** | | | | 0.0590 | U | U | | 0.0480 | U | U | | 0.0440 | U | U | |
| PCB-18 (2,2',5) | 0.1000 | U | U | | ***0.5600*** | | | | 0.1200 | NJ | U | + | 0.1000 | N | U | + | 0.0920 | U | U | |
| PCB-28 (2,4,4') | 0.0690 | U | U | | ***0.9600*** | | | | 0.0840 | NJ | U | + | 0.0680 | N | U | + | 0.0620 | U | U | |
| PCB-52 (2,2',5,5') | 0.0290 | U | U | | ***1.90*** | | | | 0.0350 | NJ | U | + | ***0.0990*** | | | | 0.0270 | U | U | |
| PCB-44 (2,2',3,5') | 0.0340 | U | U | | ***1.20*** | | | | 0.0410 | U | U | | ***0.0460*** | | | | 0.0310 | U | U | |
| PCB-66 (2,3',4,4') | 0.0370 | U | U | | ***0.7900*** | | | | 0.0450 | U | U | | 0.0370 | U | U | | 0.0340 | U | U | |
| PCB-101 (2,2',3,5,5') | 0.0290 | N | U | + | ***5.00*** | | | | ***0.0820*** | | | | ***0.1700*** | | | | 0.0260 | U | U | |
| PCB-77 (3,3',4,4') | 0.0550 | N | U | + | 0.0550 | N | U | + | 0.0670 | N | U | + | 0.0550 | U | U | | 0.0500 | U | U | |
| PCB-118 (2,3',4,4',5) | 0.0440 | U | U | | ***1.90*** | | | | ***0.0500*** | ***J*** | ***J*** | | ***0.0710*** | | | | 0.0400 | U | U | |
| PCB-153 (2,2',4,4',5,5') | ***0.1100*** | | | | ***12.0*** | | | | ***0.3200*** | | | | ***0.5300*** | | | | 0.0330 | U | U | |
| PCB-105 (2,3,3',4,4') | 0.0320 | U | U | | ***0.6100*** | | | | 0.0390 | U | U | | ***0.0190*** | ***J*** | ***J*** | | 0.0290 | U | U | |
| PCB-138 (2,2',3,4,4',5') | ***0.1300*** | | | | ***7.30*** | | | | ***0.2900*** | | | | ***0.4000*** | | | | ***0.1100*** | | | |
| PCB-126 (3,3',4,4',5) | 0.0870 | U | U | | 0.0830 | U | U | | 0.1100 | U | U | | 0.0860 | U | U | | 0.0790 | U | U | |
| PCB-187 (2,2',3,4',5,5',6) | ***0.0890*** | | | | ***5.40*** | | | | ***0.2200*** | | | | ***0.2100*** | | | | 0.0600 | U | U | |
| PCB-128 (2,2',3,3',4,4') | 0.0380 | U | U | | ***0.5900*** | | | | 0.0460 | U | U | | ***0.0200*** | ***J*** | ***J*** | | 0.0340 | U | U | |
| PCB-180 (2,2',3,4,4',5,5') | ***0.1900*** | | | | ***7.20*** | | | | ***0.2600*** | | | | ***0.2700*** | | | | 0.0380 | U | U | |
| PCB-170 (2,2',3,3',4,4',5) | ***0.0470*** | ***J*** | ***J*** | | ***3.40*** | | | | ***0.1400*** | ***J*** | ***J*** | | ***0.1200*** | ***J*** | ***J*** | | 0.1300 | U | U | |
| PCB-195 (2,2',3,3',4,4',5,6) | ***0.0190*** | ***J*** | ***J*** | | ***0.7200*** | | | | ***0.0520*** | | | | ***0.0450*** | | | | 0.0270 | NJ | U | + |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 0.0260 | NJ | U | + | ***0.3600*** | | | | ***0.0270*** | ***J*** | ***J*** | | ***0.0360*** | | | | 0.0240 | U | U | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.0310 | U | U | | ***0.0770*** | | | | ***0.0073*** | ***J*** | ***J*** | | 0.0310 | U | U | | 0.0280 | U | U | |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 0.0310 | NJ | U | + | 0.0300 | U | U | | 0.0380 | NJ | U | + | 0.0310 | NJ | U | + | 0.0280 | NJ | U | + |
| 2,4'-DDE | 0.0470 | U | U | | 0.0440 | U | U | | 0.0560 | U | U | | ***0.0660*** | | | | 0.0420 | U | U | |
| ENDOSULFAN I | 0.0600 | U | U | | 0.0570 | U | U | | 0.0720 | U | U | | 0.0590 | U | U | | 0.0540 | U | U | |
| HEXACHLOROBENZENE | 0.0460 | J | U | + | 0.0440 | J | U | + | 0.0560 | J | U | + | 0.0460 | U | U | | 0.0420 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for

## Marine Sediment, Landfills

| EPA NO | MC172 | | | | MC173 | | | | MC174 | | | | MC175 | | | | MC176 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MS07S01 | | | | M01MS08S01 | | | | M01MS09S01 | | | | M01MS10S01 | | | | M01MS11S01 | | | |
| Date Sampled | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | |
| Depth | 0.5 | | | | 0.5 | | | | 0.5 | | | | 0.5 | | | | 0.5 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.0560 | NJ | U | + | 0.0540 | U | U | | 0.0680 | U | U | | 0.0550 | U | U | | 0.0510 | U | U | |
| GAMMA-BHC (LINDANE) | 0.0400 | NJ | U | + | 0.0380 | U | U | | 0.0490 | NJ | U | + | 0.0400 | NJ | U | + | 0.0370 | U | U | |
| DELTA-BHC | 0.0320 | N | U | + | 0.0310 | N | U | + | 0.0390 | N | U | + | 0.0320 | N | U | + | 0.0290 | N | U | + |
| HEPTACHLOR | 0.0440 | U | UJ | C | 0.0420 | U | UJ | C | 0.0540 | U | UJ | C | 0.0440 | U | UJ | C | 0.0400 | U | UJ | C |
| ALDRIN | 0.0410 | U | U | | 0.0390 | U | U | | 0.0500 | U | U | | 0.0410 | U | U | | 0.0370 | U | U | |
| GAMMA-CHLORDANE | 0.0420 | U | U | | ***0.6400*** | | | | ***0.0480*** | ***J*** | ***J*** | | 0.0410 | U | U | | 0.0380 | U | U | |
| ALPHA-CHLORDANE | 0.0390 | U | U | | ***0.7400*** | | | | ***0.0530*** | | | | ***0.1100*** | | | | 0.0350 | U | U | |
| TRANS-NONACHLOR | 0.0230 | U | U | | ***0.4200*** | | | | ***0.0450*** | | | | 0.0230 | U | U | | 0.0210 | U | U | |
| HEPTACHLOR EPOXIDE | 0.0530 | U | U | | 0.0510 | U | U | | 0.0640 | U | U | | 0.0520 | U | U | | 0.0480 | U | U | |
| DIELDRIN | 0.0510 | NJ | U | + | 0.0480 | N | U | + | 0.0620 | U | U | | 0.0500 | U | U | | 0.0460 | U | U | |
| 4,4'-DDE | ***0.2200*** | | | | ***4.90*** | | | | ***0.1700*** | | | | ***0.1600*** | | | | ***0.0520*** | | | |
| 2,4'-DDD | 0.0400 | U | UJ | C | ***2.20*** | | ***J*** | ***C*** | 0.0480 | U | UJ | C | 0.0390 | U | UJ | C | 0.0360 | N | U | + |
| ENDRIN | 0.0140 | U | U | | 0.0140 | U | U | | 0.0170 | UJ | U | | 0.0140 | U | U | | 0.0130 | U | U | |
| ENDRIN ALDEHYDE | 0.0330 | U | U | | 0.0320 | U | U | | 0.0410 | U | U | | 0.0330 | U | U | | 0.0300 | U | U | |
| 4,4'-DDD | ***0.0640*** | ***J*** | ***J*** | ***C*** | ***3.90*** | | ***J*** | ***C*** | ***0.1000*** | | ***J*** | ***C*** | ***0.1400*** | | ***J*** | ***C*** | ***0.0800*** | | | |
| 2,4'-DDT | 0.0610 | NJ | U | + | ***0.5700*** | | | | ***0.0300*** | ***J*** | ***J*** | | 0.0610 | U | U | | 0.0560 | U | U | |
| ENDOSULFAN II | 0.0600 | N | U | + | 0.0570 | N | U | + | 0.0720 | U | U | | 0.0590 | U | U | | 0.0540 | U | U | |
| ENDOSULFAN SULFATE | 0.0600 | U | U | | 0.0570 | U | U | | 0.0720 | U | U | | 0.0590 | U | U | | 0.0540 | U | U | |
| 4,4'-DDT | ***0.1100*** | | | | ***1.40*** | | | | ***0.1300*** | | | | 0.0530 | U | U | | 0.0490 | U | U | |
| ENDRIN KETONE | 0.0330 | U | U | | 0.0320 | U | U | | 0.0410 | U | U | | 0.0330 | U | U | | 0.0300 | U | U | |
| METHOXYCHLOR | 0.2000 | NJ | U | + | 0.1900 | U | U | | 0.2400 | U | U | | 0.2000 | U | U | | 0.1800 | U | U | |
| MIREX | 0.0470 | U | U | | 0.0440 | U | U | | 0.0560 | U | U | | 0.0460 | U | U | | 0.0420 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for

## Marine Sediment, Landfills

| EPA NO | MC177 | | | | ? | | | | ? | | | | ? | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MS12S01 | | | | | | | | | | | | | | | | | | | |
| Date Sampled | 9/9/96 | | | | | | | | | | | | | | | | | | | |
| Depth | 0.5 | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 0.0470 | U | U | | | | | | | | | | | | | | | | | |
| PCB-18 (2,2',5) | 0.0980 | U | U | | | | | | | | | | | | | | | | | |
| PCB-28 (2,4,4') | 0.0660 | U | U | | | | | | | | | | | | | | | | | |
| PCB-52 (2,2',5,5') | ***0.0200*** | ***J*** | ***J*** | | | | | | | | | | | | | | | | | |
| PCB-44 (2,2',3,5') | 0.0330 | U | U | | | | | | | | | | | | | | | | | |
| PCB-66 (2,3',4,4') | 0.0360 | U | U | | | | | | | | | | | | | | | | | |
| PCB-101 (2,2',3,5,5') | ***0.0750*** | | | | | | | | | | | | | | | | | | | |
| PCB-77 (3,3',4,4') | 0.0530 | N | U | + | | | | | | | | | | | | | | | | |
| PCB-118 (2,3',4,4',5) | 0.0420 | U | U | | | | | | | | | | | | | | | | | |
| PCB-153 (2,2',4,4',5,5') | ***1.20*** | | | | | | | | | | | | | | | | | | | |
| PCB-105 (2,3,3',4,4') | ***0.0270*** | ***J*** | ***J*** | | | | | | | | | | | | | | | | | |
| PCB-138 (2,2',3,4,4',5') | ***0.4800*** | | | | | | | | | | | | | | | | | | | |
| PCB-126 (3,3',4,4',5) | 0.0830 | U | U | | | | | | | | | | | | | | | | | |
| PCB-187 (2,2',3,4',5,5',6) | ***0.8200*** | | | | | | | | | | | | | | | | | | | |
| PCB-128 (2,2',3,3',4,4') | 0.0360 | U | U | | | | | | | | | | | | | | | | | |
| PCB-180 (2,2',3,4,4',5,5') | ***1.20*** | | | | | | | | | | | | | | | | | | | |
| PCB-170 (2,2',3,3',4,4',5) | ***0.3800*** | | | | | | | | | | | | | | | | | | | |
| PCB-195 (2,2',3,3',4,4',5,6) | ***0.2100*** | | | | | | | | | | | | | | | | | | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | ***0.1600*** | | | | | | | | | | | | | | | | | | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.0300 | U | U | | | | | | | | | | | | | | | | | |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 0.0300 | U | U | | | | | | | | | | | | | | | | | |
| 2,4'-DDE | 0.0450 | U | U | | | | | | | | | | | | | | | | | |
| ENDOSULFAN I | 0.0570 | U | U | | | | | | | | | | | | | | | | | |
| HEXACHLOROBENZENE | 0.0440 | NJ | U | + | | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for

## Marine Sediment, Landfills

| EPA NO | MC177 | | | | ? | | | | ? | | | | ? | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MS12S01 | | | | | | | | | | | | | | | | | | | |
| Date Sampled | 9/9/96 | | | | | | | | | | | | | | | | | | | |
| Depth | 0.5 | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.0540 | NJ | U | + | | | | | | | | | | | | | | | | |
| GAMMA-BHC (LINDANE) | ***0.0230*** | ***J*** | ***J*** | ***F*** | | | | | | | | | | | | | | | | |
| DELTA-BHC | 0.0310 | N | U | + | | | | | | | | | | | | | | | | |
| HEPTACHLOR | 0.0430 | U | UJ | C | | | | | | | | | | | | | | | | |
| ALDRIN | 0.0400 | U | U | | | | | | | | | | | | | | | | | |
| GAMMA-CHLORDANE | ***0.0200*** | ***J*** | ***J*** | | | | | | | | | | | | | | | | | |
| ALPHA-CHLORDANE | 0.0380 | NJ | U | + | | | | | | | | | | | | | | | | |
| TRANS-NONACHLOR | 0.0220 | U | U | | | | | | | | | | | | | | | | | |
| HEPTACHLOR EPOXIDE | 0.0510 | U | U | | | | | | | | | | | | | | | | | |
| DIELDRIN | 0.0490 | U | U | | | | | | | | | | | | | | | | | |
| 4,4'-DDE | 0.0360 | U | U | | | | | | | | | | | | | | | | | |
| 2,4'-DDD | 0.0380 | N | UJ | +,C | | | | | | | | | | | | | | | | |
| ENDRIN | 0.0140 | U | U | | | | | | | | | | | | | | | | | |
| ENDRIN ALDEHYDE | 0.0320 | U | U | | | | | | | | | | | | | | | | | |
| 4,4'-DDD | 0.0650 | U | UJ | C | | | | | | | | | | | | | | | | |
| 2,4'-DDT | 0.0590 | U | U | | | | | | | | | | | | | | | | | |
| ENDOSULFAN II | 0.0580 | N | U | + | | | | | | | | | | | | | | | | |
| ENDOSULFAN SULFATE | 0.0570 | U | U | | | | | | | | | | | | | | | | | |
| 4,4'-DDT | 0.0520 | NJ | U | + | | | | | | | | | | | | | | | | |
| ENDRIN KETONE | 0.0320 | U | U | | | | | | | | | | | | | | | | | |
| METHOXYCHLOR | 0.1900 | U | U | | | | | | | | | | | | | | | | | |
| MIREX | 0.0450 | U | U | | | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for

## Marine Sediment Elutriate, Landfills

| EPA NO | MC185 | | | | MC186 | | | | ? | | | | ? | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01EW01S01 | | | | M01EW01D01 | | | | | | | | | | | | | | | |
| Date Sampled | | | | | | | | | | | | | | | | | | | | |
| Depth | | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***ILM04.0 - Metals (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| ALUMINUM | 31.5 | U | U | | 31.5 | U | U | | | | | | | | | | | | | |
| ANTIMONY | 3.60 | U | U | | 3.60 | U | U | | | | | | | | | | | | | |
| ARSENIC | ***3.30*** | ***B*** | | | 2.80 | U | U | | | | | | | | | | | | | |
| BARIUM | 7.70 | U | U | | 7.70 | U | U | | | | | | | | | | | | | |
| BERYLLIUM | 0.3000 | U | U | | 0.3000 | U | U | | | | | | | | | | | | | |
| CADMIUM | ***0.6600*** | ***B*** | | | ***1.80*** | ***B*** | | | | | | | | | | | | | | |
| CALCIUM | ***416,000*** | | | | ***415,000*** | | | | | | | | | | | | | | | |
| CHROMIUM | 2.70 | B | UJ | B | 2.00 | B | UJ | B | | | | | | | | | | | | |
| COBALT | 2.30 | U | U | | 2.30 | U | U | | | | | | | | | | | | | |
| COPPER | ***7.50*** | ***B*** | | | ***7.20*** | ***B*** | | | | | | | | | | | | | | |
| IRON | ***103*** | | | | 87.7 | B | UJ | B | | | | | | | | | | | | |
| LEAD | 15.0 | U | UJ | B | 15.0 | U | UJ | B | | | | | | | | | | | | |
| MAGNESIUM | ***1,370,000*** | | | | ***1,360,000*** | | | | | | | | | | | | | | | |
| MANGANESE | 6.00 | U | U | | 6.00 | U | U | | | | | | | | | | | | | |
| MERCURY | 0.1000 | U | UJ | B | 0.1000 | U | UJ | B | | | | | | | | | | | | |
| NICKEL | ***3.90*** | ***B*** | | | ***3.80*** | ***B*** | | | | | | | | | | | | | | |
| POTASSIUM | ***513,000*** | | | | ***509,000*** | | | | | | | | | | | | | | | |
| SELENIUM | 4.20 | B | UJ | B | 5.00 | B | UJ | B | | | | | | | | | | | | |
| SILVER | ***2.00*** | ***B*** | | | ***1.80*** | ***B*** | | | | | | | | | | | | | | |
| SODIUM | ***11,400,000*** | | | | ***11,500,000*** | | | | | | | | | | | | | | | |
| THALLIUM | 3.60 | U | U | | 3.60 | U | U | | | | | | | | | | | | | |
| VANADIUM | ***2.50*** | ***B*** | | | 1.80 | U | U | | | | | | | | | | | | | |
| ZINC | ***21.7*** | | | | ***22.3*** | | | | | | | | | | | | | | | |
| CYANIDE | ***0.000000*** | | | | ***0.000000*** | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for

## Marine Sediment Elutriate, Landfills

| EPA NO | MC185 | | | | MC186 | | | | ? | | | | ? | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01EW01S01 | | | | M01EW01D01 | | | | | | | | | | | | | | | |
| Date Sampled | | | | | | | | | | | | | | | | | | | | |
| Depth | | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141A - Semi-Voa (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| NAPHTHALENE | 0.0054 | J | U | B | 0.0065 | | UJ | B | | | | | | | | | | | | |
| NAPHTHALENES, C1-ALKYL-S | 0.0054 | J | U | B | 0.0045 | J | U | B | | | | | | | | | | | | |
| NAPHTHALENES, C2-ALKYL-S | ***0.0030*** | ***J*** | ***J*** | | ***0.0044*** | ***J*** | ***J*** | | | | | | | | | | | | | |
| NAPHTHALENES, C3-ALKYL-S | 0.0054 | U | U | | 0.0045 | U | U | | | | | | | | | | | | | |
| NAPHTHALENES, C4-ALKYL-S | 0.0054 | U | U | | 0.0045 | U | U | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 0.0061 | U | U | | 0.0051 | U | U | | | | | | | | | | | | | |
| 1,3,5-TRICHLOROBENZENE | 0.0063 | U | U | | 0.0052 | U | U | | | | | | | | | | | | | |
| HEXACHLOROBUTADIENE | 0.0057 | U | U | | 0.0048 | U | U | | | | | | | | | | | | | |
| 2,4,6-TRICHLOROPHENOL | 9.90 | U | U | | 8.20 | U | U | | | | | | | | | | | | | |
| 2,4,5-TRICHLOROPHENOL | 9.90 | U | U | | 8.20 | U | U | | | | | | | | | | | | | |
| 2,4-DINITROPHENOL | 49.0 | U | UJ | C | 41.0 | U | UJ | C | | | | | | | | | | | | |
| ACENAPHTHYLENE | 0.0051 | U | U | | 0.0042 | U | U | | | | | | | | | | | | | |
| ACENAPHTHENE | ***0.0013*** | ***J*** | ***J*** | | ***0.0013*** | ***J*** | ***J*** | | | | | | | | | | | | | |
| BIPHENYL | 0.0042 | J | U | B | 0.0037 | J | U | B | | | | | | | | | | | | |
| FLUORENE | 0.0038 | J | U | + | 0.0032 | J | U | + | | | | | | | | | | | | |
| FLUORENES, C1-ALKYL-SUBST | 0.0038 | U | U | | 0.0032 | U | U | | | | | | | | | | | | | |
| FLUORENES, C2-ALKYL-SUBST | 0.0038 | U | U | | 0.0032 | U | U | | | | | | | | | | | | | |
| FLUORENES, C3-ALKYL-SUBST | 0.0038 | U | U | | 0.0032 | U | U | | | | | | | | | | | | | |
| PHENANTHRENE | 0.0022 | J | U | B | 0.0018 | J | U | B | | | | | | | | | | | | |
| ANTHRACENE | 0.0066 | J | UJ | B,*5 | 0.0056 | J | UJ | B,*5 | | | | | | | | | | | | |
| PHENANTHRENES+ANTHRACE | 0.0022 | U | U | | 0.0019 | U | U | | | | | | | | | | | | | |
| PHENANTHRENES+ANTHRACE | 0.0022 | U | U | | 0.0019 | U | U | | | | | | | | | | | | | |
| PHENANTHRENES+ANTHRACE | 0.0022 | U | U | | 0.0019 | U | U | | | | | | | | | | | | | |
| PHENANTHRENES+ANTHRACE | 0.0022 | U | U | | 0.0019 | U | U | | | | | | | | | | | | | |
| DIBENZOTHIOPHENE | 0.0027 | U | U | | 0.0022 | U | U | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for

## Marine Sediment Elutriate, Landfills

| EPA NO | MC185 | | | | MC186 | | | | ? | | | | ? | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01EW01S01 | | | | M01EW01D01 | | | | | | | | | | | | | | | |
| Date Sampled | | | | | | | | | | | | | | | | | | | | |
| Depth | | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141A - Semi-Voa (UG/L) Conti*** | | | | | | | | | | | | | | | | | | | | |
| DIBENZOTHIOPHENES, C1-ALK | 0.0027 | U | U | | 0.0022 | U | U | | | | | | | | | | | | | |
| DIBENZOTHIOPHENES, C2-ALK | 0.0027 | U | U | | 0.0022 | U | U | | | | | | | | | | | | | |
| DIBENZOTHIOPHENES, C3-ALK | 0.0027 | U | U | | 0.0022 | U | U | | | | | | | | | | | | | |
| FLUORANTHENE | 0.0031 | J | U | B | 0.0025 | J | U | B | | | | | | | | | | | | |
| PYRENE | 0.0054 | J | U | B | 0.0045 | J | U | B | | | | | | | | | | | | |
| FLUORANTHENES+PYRENES, | 0.0031 | J | U | + | 0.0026 | U | U | | | | | | | | | | | | | |
| FLUORANTHENES+PYRENES, | 0.0031 | U | U | | 0.0026 | U | U | | | | | | | | | | | | | |
| FLUORANTHENES+PYRENES, | 0.0031 | U | U | | 0.0026 | U | U | | | | | | | | | | | | | |
| BENZO(A)ANTHRACENE | 0.0100 | U | U | $ | 0.0082 | U | U | $ | | | | | | | | | | | | |
| CHRYSENE | 0.0040 | J | U | + | 0.0033 | U | U | | | | | | | | | | | | | |
| CHRYSENES, C1-ALKYL-SUBST | 0.0040 | U | U | | 0.0033 | U | U | | | | | | | | | | | | | |
| CHRYSENES, C2-ALKYL-SUBST | 0.0040 | U | U | | 0.0033 | U | U | | | | | | | | | | | | | |
| CHRYSENES, C3-ALKYL-SUBST | 0.0040 | U | U | | 0.0033 | U | U | | | | | | | | | | | | | |
| CHRYSENES, C4-ALKYL-SUBST | 0.0040 | U | U | | 0.0033 | U | U | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALA | ***1.60*** | | | | ***0.3700*** | | | | | | | | | | | | | | | |
| BENZO(B)FLUORANTHENE | 0.0011 | J | U | + | 0.0090 | J | U | + | | | | | | | | | | | | |
| BENZO(K)FLUORANTHENE | 0.0087 | J | U | + | 0.0072 | J | U | + | | | | | | | | | | | | |
| BENZO(E)PYRENE | 0.0090 | J | U | + | 0.0074 | J | U | + | | | | | | | | | | | | |
| BENZO(A)PYRENE | 0.0088 | J | U | + | 0.0072 | J | U | + | | | | | | | | | | | | |
| PERYLENE | 0.0086 | J | U | + | 0.0070 | J | U | + | | | | | | | | | | | | |
| INDENO(1,2,3-CD)PYRENE | 0.0083 | J | U | + | 0.0068 | J | U | + | | | | | | | | | | | | |
| DIBENZO(A,H)ANTHRACENE | 0.0100 | J | U | + | 0.0082 | U | U | $ | | | | | | | | | | | | |
| BENZO(G,H,I)PERYLENE | 0.0100 | J | U | + | 0.0082 | J | U | + | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for

## Marine Sediment Elutriate, Landfills

| EPA NO | MC185 | | | | MC186 | | | | ? | | | | ? | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01EW01S01 | | | | M01EW01D01 | | | | | | | | | | | | | | | |
| Date Sampled | | | | | | | | | | | | | | | | | | | | |
| Depth | | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | ***0.0016*** | | | | 0.000360 | U | U | | | | | | | | | | | | | |
| PCB-18 (2,2',5) | 0.000570 | U | U | | 0.000480 | U | U | | | | | | | | | | | | | |
| PCB-28 (2,4,4') | ***0.000250*** | ***J*** | ***J*** | | 0.0012 | NJ | U | + | | | | | | | | | | | | |
| PCB-52 (2,2',5,5') | 0.000450 | U | U | | 0.000370 | U | U | | | | | | | | | | | | | |
| PCB-44 (2,2',3,5') | 0.000380 | U | U | | 0.000320 | U | U | | | | | | | | | | | | | |
| PCB-66 (2,3',4,4') | 0.000370 | U | U | | 0.000310 | U | U | | | | | | | | | | | | | |
| PCB-101 (2,2',3,5,5') | ***0.000400*** | ***J*** | ***J*** | | ***0.000360*** | ***J*** | ***J*** | | | | | | | | | | | | | |
| PCB-77 (3,3',4,4') | 0.000660 | U | U | | 0.000550 | U | U | | | | | | | | | | | | | |
| PCB-118 (2,3',4,4',5) | 0.000430 | U | U | | 0.000360 | U | U | | | | | | | | | | | | | |
| PCB-153 (2,2',4,4',5,5') | ***0.0034*** | | | | ***0.0028*** | | | | | | | | | | | | | | | |
| PCB-105 (2,3,3',4,4') | 0.000670 | U | U | | 0.000560 | U | U | | | | | | | | | | | | | |
| PCB-138 (2,2',3,4,4',5') | 0.0140 | | UJ | B | 0.0120 | | UJ | B | | | | | | | | | | | | |
| PCB-126 (3,3',4,4',5) | 0.000560 | U | U | | 0.000460 | U | U | | | | | | | | | | | | | |
| PCB-187 (2,2',3,4',5,5',6) | ***0.0024*** | | | | ***0.0020*** | | | | | | | | | | | | | | | |
| PCB-128 (2,2',3,3',4,4') | 0.000370 | U | U | | 0.000310 | U | U | | | | | | | | | | | | | |
| PCB-180 (2,2',3,4,4',5,5') | ***0.0034*** | | | | ***0.0025*** | | | | | | | | | | | | | | | |
| PCB-170 (2,2',3,3',4,4',5) | ***0.0051*** | | | | ***0.0026*** | ***J*** | ***J*** | | | | | | | | | | | | | |
| PCB-195 (2,2',3,3',4,4',5,6) | 0.000700 | U | U | | 0.000590 | U | U | | | | | | | | | | | | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000540 | U | U | | 0.000450 | U | U | | | | | | | | | | | | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000640 | U | U | | 0.000540 | U | U | | | | | | | | | | | | | |
| ***STIV141E - Pesticides (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | ***0.000200*** | ***J*** | ***J*** | | ***0.0014*** | | | | | | | | | | | | | | | |
| 2,4'-DDE | 0.000410 | U | U | | 0.000340 | U | U | | | | | | | | | | | | | |
| ENDOSULFAN I | 0.000710 | U | U | | 0.000590 | U | U | | | | | | | | | | | | | |
| HEXACHLOROBENZENE | 0.000440 | N | U | + | 0.000440 | N | U | + | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for

## Marine Sediment Elutriate, Landfills

| EPA NO | MC185 | | | | MC186 | | | | ? | | | | ? | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01EW01S01 | | | | M01EW01D01 | | | | | | | | | | | | | | | |
| Date Sampled | | | | | | | | | | | | | | | | | | | | |
| Depth | | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/L) Conti*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.000320 | N | U | + | 0.000320 | N | U | + | | | | | | | | | | | | |
| GAMMA-BHC (LINDANE) | 0.000350 | N | U | + | 0.000350 | N | U | + | | | | | | | | | | | | |
| DELTA-BHC | ***0.000800*** | | | | ***0.0011*** | | | | | | | | | | | | | | | |
| HEPTACHLOR | 0.000520 | U | U | | 0.000530 | N | U | + | | | | | | | | | | | | |
| ALDRIN | 0.000640 | U | U | | 0.000530 | U | U | | | | | | | | | | | | | |
| GAMMA-CHLORDANE | 0.000260 | U | U | | 0.000210 | U | U | | | | | | | | | | | | | |
| ALPHA-CHLORDANE | 0.000560 | U | U | | 0.000470 | U | U | | | | | | | | | | | | | |
| CIS-NONACHLOR | ***0.000400*** | ***U*** | ***NV*** | | ***0.000330*** | ***U*** | ***NV*** | | | | | | | | | | | | | |
| TRANS-NONACHLOR | 0.000400 | U | U | | 0.000330 | U | U | | | | | | | | | | | | | |
| HEPTACHLOR EPOXIDE | 0.000970 | U | U | | 0.000810 | U | U | | | | | | | | | | | | | |
| DIELDRIN | 0.000470 | U | U | | 0.000390 | U | U | | | | | | | | | | | | | |
| 4,4'-DDE | 0.000230 | U | U | | 0.000190 | U | U | | | | | | | | | | | | | |
| 2,4'-DDD | 0.000870 | U | U | | 0.000730 | U | U | | | | | | | | | | | | | |
| ENDRIN | 0.000660 | U | UJ | C | 0.000550 | U | UJ | C | | | | | | | | | | | | |
| ENDRIN ALDEHYDE | 0.000370 | U | U | | 0.000310 | U | U | | | | | | | | | | | | | |
| 4,4'-DDD | 0.000560 | U | U | | 0.000470 | U | U | | | | | | | | | | | | | |
| 2,4'-DDT | 0.000370 | U | U | | 0.000310 | U | U | | | | | | | | | | | | | |
| ENDOSULFAN II | 0.000710 | U | U | | 0.000590 | U | U | | | | | | | | | | | | | |
| ENDOSULFAN SULFATE | 0.000710 | U | U | | 0.000590 | U | U | | | | | | | | | | | | | |
| 4,4'-DDT | 0.000850 | U | UJ | C | 0.000710 | U | UJ | C | | | | | | | | | | | | |
| ENDRIN KETONE | 0.000370 | U | U | | 0.000310 | U | U | | | | | | | | | | | | | |
| METHOXYCHLOR | 0.000950 | U | U | | 0.000800 | U | U | | | | | | | | | | | | | |
| MIREX | ***0.000740*** | | | | ***0.000860*** | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

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# Analytical Results Summary for

## Seawater, Landfills

| EPA NO | MC178 | | | | MC179 | | | | MC180 | | | | MC181 | | | | MC182 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01SW01S01 | | | | M01SW03S01 | | | | M01SW05S01 | | | | M01SW07S01 | | | | M01SW07D01 | | | |
| Date Sampled | 9/18/96 | | | | 9/18/96 | | | | 9/18/96 | | | | 9/18/96 | | | | 9/18/96 | | | |
| Depth | 5 | | | | 5 | | | | 5 | | | | 5 | | | | 5 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 0.000390 | U | U | | 0.000410 | U | U | | 0.000400 | U | U | | 0.000410 | N | U | + | 0.000400 | U | U | |
| PCB-18 (2,2',5) | 0.000520 | U | U | | 0.000550 | U | U | | 0.000540 | U | U | | 0.000540 | U | U | | 0.000530 | U | U | |
| PCB-28 (2,4,4') | 0.0011 | U | U | | 0.0012 | U | U | | 0.0011 | U | U | | 0.0011 | U | U | | 0.0011 | U | U | |
| PCB-52 (2,2',5,5') | 0.000400 | N | U | + | 0.000430 | U | U | | 0.000420 | N | U | + | 0.000420 | N | U | + | 0.000410 | U | U | |
| PCB-44 (2,2',3,5') | 0.000350 | U | U | | 0.000370 | U | U | | 0.000360 | U | U | | 0.000360 | U | U | | 0.000350 | U | U | |
| PCB-66 (2,3',4,4') | 0.000330 | U | U | | 0.000350 | U | U | | 0.000350 | U | U | | 0.000340 | U | U | | 0.000340 | U | U | |
| PCB-101 (2,2',3,5,5') | 0.000410 | N | U | + | 0.000440 | U | U | | 0.000430 | N | U | + | 0.000430 | U | U | | 0.000420 | N | U | + |
| PCB-77 (3,3',4,4') | 0.000600 | U | U | | 0.000640 | U | U | | 0.000620 | U | U | | 0.000620 | U | U | | 0.000610 | U | U | |
| PCB-118 (2,3',4,4',5) | 0.000390 | U | U | | 0.000410 | U | U | | 0.000400 | U | U | | 0.000400 | U | U | | 0.000400 | U | U | |
| PCB-153 (2,2',4,4',5,5') | ***0.0011*** | | | | 0.000290 | U | U | | 0.000280 | U | U | | 0.000280 | U | U | | 0.000270 | U | U | |
| PCB-105 (2,3,3',4,4') | 0.000610 | U | U | | 0.000640 | N | U | + | 0.000640 | U | U | | 0.000630 | U | U | | 0.000620 | U | U | |
| PCB-138 (2,2',3,4,4',5') | 0.0011 | | UJ | B | 0.000870 | | UJ | B | 0.000790 | | UJ | B | 0.000800 | | UJ | B | 0.000710 | | UJ | B |
| PCB-126 (3,3',4,4',5) | 0.000500 | U | U | | 0.000540 | U | U | | 0.000520 | U | U | | 0.000520 | U | U | | 0.000510 | U | U | |
| PCB-187 (2,2',3,4',5,5',6) | ***0.000470*** | ***J*** | ***J*** | | 0.000670 | U | U | | 0.000650 | U | U | | 0.000650 | U | U | | 0.000640 | U | U | |
| PCB-128 (2,2',3,3',4,4') | 0.000340 | U | U | | 0.000360 | U | U | | 0.000350 | U | U | | 0.000350 | U | U | | 0.000340 | U | U | |
| PCB-180 (2,2',3,4,4',5,5') | ***0.000830*** | | | | 0.000840 | U | U | | 0.000820 | N | U | + | 0.000810 | J | U | + | 0.000800 | J | U | + |
| PCB-170 (2,2',3,3',4,4',5) | 0.0029 | J | U | + | 0.0032 | U | U | | 0.0031 | U | U | | 0.0031 | U | U | | 0.0030 | U | U | |
| PCB-195 (2,2',3,3',4,4',5,6) | 0.000630 | U | U | | 0.000680 | U | U | | 0.000660 | U | U | | 0.000660 | U | U | | 0.000650 | U | U | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000490 | U | U | | 0.000520 | U | U | | 0.000510 | U | U | | 0.000510 | U | U | | 0.000500 | U | U | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000580 | U | U | | 0.000620 | U | U | | 0.000610 | U | U | | 0.000610 | U | U | | 0.000590 | U | U | |
| ***STIV141E - Pesticides (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 0.000430 | U | UJ | C | 0.000460 | U | UJ | C | 0.000460 | N | UJ | +,C | 0.000450 | N | UJ | +,C | 0.000440 | U | UJ | C |
| 2,4'-DDE | 0.000370 | U | U | | 0.000390 | U | U | | 0.000390 | U | U | | 0.000380 | U | U | | 0.000380 | U | U | |
| ENDOSULFAN I | 0.000640 | U | U | | 0.000680 | U | U | | 0.000670 | U | U | | 0.000660 | U | U | | 0.000650 | U | U | |
| HEXACHLOROBENZENE | ***0.000370*** | ***J*** | ***J*** | | ***0.000500*** | | | | ***0.000370*** | ***J*** | ***J*** | | ***0.000630*** | | | | ***0.000380*** | ***J*** | ***J*** | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for

## Seawater, Landfills

| EPA NO | MC178 | | | | MC179 | | | | MC180 | | | | MC181 | | | | MC182 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01SW01S01 | | | | M01SW03S01 | | | | M01SW05S01 | | | | M01SW07S01 | | | | M01SW07D01 | | | |
| Date Sampled | 9/18/96 | | | | 9/18/96 | | | | 9/18/96 | | | | 9/18/96 | | | | 9/18/96 | | | |
| Depth | 5 | | | | 5 | | | | 5 | | | | 5 | | | | 5 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/L) Conti*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.000290 | N | U | + | 0.000300 | N | U | + | 0.000300 | N | U | + | 0.000300 | N | U | + | 0.000290 | N | U | + |
| GAMMA-BHC (LINDANE) | 0.000310 | N | U | + | 0.000330 | U | U | | 0.000330 | N | U | + | 0.000320 | N | U | + | 0.000320 | N | U | + |
| DELTA-BHC | 0.000330 | U | U | | 0.000350 | U | U | | 0.000350 | U | U | | 0.000340 | U | U | | 0.000340 | U | U | |
| HEPTACHLOR | 0.000470 | N | U | + | 0.000500 | N | U | + | 0.000490 | N | U | + | 0.000490 | N | U | + | 0.000480 | N | U | + |
| ALDRIN | 0.000580 | U | U | | 0.000620 | U | U | | 0.000600 | U | U | | 0.000600 | U | U | | 0.000590 | U | U | |
| GAMMA-CHLORDANE | 0.000230 | U | U | | 0.000250 | U | U | | 0.000240 | U | U | | 0.000240 | U | U | | 0.000240 | U | U | |
| ALPHA-CHLORDANE | 0.000510 | U | U | | 0.000540 | U | U | | 0.000530 | U | U | | 0.000530 | U | U | | 0.000520 | U | U | |
| TRANS-NONACHLOR | 0.000360 | U | U | | 0.000390 | U | U | | 0.000380 | U | U | | 0.000380 | U | U | | 0.000370 | U | U | |
| HEPTACHLOR EPOXIDE | 0.000880 | U | U | | 0.000940 | U | U | | 0.000910 | U | U | | 0.000910 | U | U | | 0.000890 | U | U | |
| DIELDRIN | 0.000420 | U | U | | 0.000450 | U | U | | 0.000440 | U | U | | 0.000440 | U | U | | 0.000430 | U | U | |
| 4,4'-DDE | 0.000210 | U | U | | 0.000220 | U | U | | 0.000210 | U | U | | 0.000210 | U | U | | 0.000210 | U | U | |
| 2,4'-DDD | 0.000790 | U | U | | 0.000840 | U | U | | 0.000820 | U | U | | 0.000820 | U | U | | 0.000800 | U | U | |
| ENDRIN | 0.000600 | U | U | | 0.000640 | U | U | | 0.000630 | U | U | | 0.000620 | U | U | | 0.000610 | U | U | |
| ENDRIN ALDEHYDE | 0.000330 | U | U | | 0.000360 | U | U | | 0.000350 | U | U | | 0.000350 | U | U | | 0.000340 | U | U | |
| 4,4'-DDD | 0.000510 | U | U | | 0.000540 | U | U | | 0.000530 | U | U | | 0.000530 | U | U | | 0.000520 | U | U | |
| 2,4'-DDT | 0.000330 | U | U | | 0.000350 | U | U | | 0.000350 | U | U | | 0.000340 | U | U | | 0.000340 | U | U | |
| ENDOSULFAN II | 0.000640 | U | U | | 0.000680 | U | U | | 0.000670 | U | U | | 0.000660 | U | U | | 0.000650 | U | U | |
| ENDOSULFAN SULFATE | 0.000640 | U | U | | 0.000680 | U | U | | 0.000670 | U | U | | 0.000660 | U | U | | 0.000650 | U | U | |
| 4,4'-DDT | 0.000770 | U | UJ | C | 0.000820 | U | UJ | C | 0.000800 | U | UJ | C | 0.000800 | U | UJ | C | 0.000780 | U | UJ | C |
| ENDRIN KETONE | 0.000330 | U | U | | 0.000360 | U | U | | 0.000350 | U | U | | 0.000350 | U | U | | 0.000340 | U | U | |
| METHOXYCHLOR | 0.000860 | U | U | | 0.000920 | U | U | | 0.000900 | U | U | | 0.000900 | U | U | | 0.000880 | U | U | |
| MIREX | 0.000250 | U | U | | 0.000270 | U | U | | 0.000260 | U | U | | 0.000260 | U | U | | 0.000260 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for

## Seawater, Landfills

| EPA NO | MC183 | | | | MC184 | | | | MC187 | | | | ? | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01SW09S01 | | | | M01SW011S01 | | | | M01QW01E01 | | | | | | | | | | | |
| Date Sampled | 9/12/96 | | | | 9/12/96 | | | | 9/10/96 | | | | | | | | | | | |
| Depth | 5 | | | | 5 | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 0.000330 | U | U | | 0.000330 | N | U | + | ***0.000460*** | | | | | | | | | | | |
| PCB-18 (2,2',5) | ***0.0014*** | | | | 0.000440 | U | U | | ***0.000930*** | | | | | | | | | | | |
| PCB-28 (2,4,4') | 0.000920 | U | U | | 0.000920 | U | U | | 0.000940 | U | U | | | | | | | | | |
| PCB-52 (2,2',5,5') | 0.000340 | U | U | | 0.000340 | U | U | | 0.000350 | N | U | + | | | | | | | | |
| PCB-44 (2,2',3,5') | 0.000290 | U | U | | 0.000290 | U | U | | 0.000300 | U | U | | | | | | | | | |
| PCB-66 (2,3',4,4') | 0.000280 | U | U | | 0.000280 | U | U | | 0.000290 | U | U | | | | | | | | | |
| PCB-101 (2,2',3,5,5') | 0.000350 | U | U | | 0.000350 | U | U | | 0.000360 | U | U | | | | | | | | | |
| PCB-77 (3,3',4,4') | 0.000510 | U | U | | 0.000510 | U | U | | 0.000520 | U | U | | | | | | | | | |
| PCB-118 (2,3',4,4',5) | 0.000330 | U | U | | 0.000330 | U | U | | 0.000340 | U | U | | | | | | | | | |
| PCB-153 (2,2',4,4',5,5') | 0.000230 | U | U | | 0.000230 | U | U | | 0.000230 | U | U | | | | | | | | | |
| PCB-105 (2,3,3',4,4') | 0.000520 | U | U | | 0.000520 | U | U | | 0.000530 | U | U | | | | | | | | | |
| PCB-138 (2,2',3,4,4',5') | 0.000620 | | UJ | B | 0.000620 | | UJ | B | 0.000460 | | UJ | B | | | | | | | | |
| PCB-126 (3,3',4,4',5) | 0.000430 | U | U | | 0.000430 | U | U | | 0.000440 | U | U | | | | | | | | | |
| PCB-187 (2,2',3,4',5,5',6) | 0.000530 | U | U | | 0.000530 | U | U | | 0.000540 | U | U | | | | | | | | | |
| PCB-128 (2,2',3,3',4,4') | 0.000290 | U | U | | 0.000290 | U | U | | 0.000290 | U | U | | | | | | | | | |
| PCB-180 (2,2',3,4,4',5,5') | 0.000670 | N | U | + | 0.000670 | N | U | + | 0.000680 | U | U | | | | | | | | | |
| PCB-170 (2,2',3,3',4,4',5) | 0.0025 | N | U | + | 0.0025 | U | U | | 0.0026 | U | U | | | | | | | | | |
| PCB-195 (2,2',3,3',4,4',5,6) | 0.000540 | U | U | | 0.000540 | U | U | | 0.000550 | N | U | + | | | | | | | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000410 | U | U | | 0.000410 | U | U | | 0.000420 | U | U | | | | | | | | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000500 | U | U | | 0.000490 | N | U | + | 0.000510 | U | U | | | | | | | | | |
| ***STIV141E - Pesticides (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 0.000370 | U | UJ | C | 0.000370 | U | UJ | C | 0.000380 | U | U | | | | | | | | | |
| 2,4'-DDE | 0.000310 | U | U | | 0.000310 | U | U | | 0.000320 | U | U | | | | | | | | | |
| ENDOSULFAN I | 0.000540 | U | U | | 0.000540 | U | U | | 0.000550 | U | U | | | | | | | | | |
| HEXACHLOROBENZENE | ***0.000200*** | ***J*** | ***J*** | | ***0.000260*** | ***J*** | ***J*** | | ***0.000230*** | ***J*** | ***J*** | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

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# Analytical Results Summary for

## Seawater, Landfills

| EPA NO | MC183 | | | | MC184 | | | | MC187 | | | | ? | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01SW09S01 | | | | M01SW011S01 | | | | M01QW01E01 | | | | | | | | | | | |
| Date Sampled | 9/12/96 | | | | 9/12/96 | | | | 9/10/96 | | | | | | | | | | | |
| Depth | 5 | | | | 5 | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/L) Conti*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.000240 | U | U | | 0.000240 | U | U | | 0.000240 | U | U | | | | | | | | | |
| GAMMA-BHC (LINDANE) | 0.000260 | U | U | | 0.000260 | U | U | | ***0.000320*** | | | | | | | | | | | |
| DELTA-BHC | 0.000280 | U | U | | 0.000280 | U | U | | 0.000290 | N | U | + | | | | | | | | |
| HEPTACHLOR | 0.000400 | N | U | + | 0.000400 | N | U | + | 0.000410 | U | U | | | | | | | | | |
| ALDRIN | 0.000490 | U | U | | 0.000490 | U | U | | 0.000500 | U | U | | | | | | | | | |
| GAMMA-CHLORDANE | 0.000200 | U | U | | 0.000200 | U | U | | 0.000200 | U | U | | | | | | | | | |
| ALPHA-CHLORDANE | 0.000430 | U | U | | 0.000430 | U | U | | 0.000440 | U | U | | | | | | | | | |
| TRANS-NONACHLOR | 0.000310 | U | U | | 0.000310 | U | U | | 0.000310 | U | U | | | | | | | | | |
| HEPTACHLOR EPOXIDE | 0.000740 | U | U | | 0.000740 | U | U | | 0.000760 | U | U | | | | | | | | | |
| DIELDRIN | 0.000360 | U | U | | 0.000360 | U | U | | 0.000370 | U | U | | | | | | | | | |
| 4,4'-DDE | 0.000180 | U | U | | 0.000180 | U | U | | 0.000180 | U | U | | | | | | | | | |
| 2,4'-DDD | 0.000670 | U | U | | 0.000670 | U | U | | 0.000680 | U | U | | | | | | | | | |
| ENDRIN | 0.000510 | U | U | | 0.000510 | U | U | | 0.000520 | U | U | | | | | | | | | |
| ENDRIN ALDEHYDE | 0.000280 | U | U | | 0.000280 | U | U | | 0.000290 | U | U | | | | | | | | | |
| 4,4'-DDD | 0.000430 | U | U | | 0.000430 | U | U | | 0.000440 | U | U | | | | | | | | | |
| 2,4'-DDT | 0.000280 | U | U | | 0.000280 | U | U | | 0.000290 | N | U | + | | | | | | | | |
| ENDOSULFAN II | 0.000540 | U | U | | 0.000540 | U | U | | 0.000550 | U | U | | | | | | | | | |
| ENDOSULFAN SULFATE | 0.000540 | U | U | | 0.000540 | U | U | | 0.000550 | U | U | | | | | | | | | |
| 4,4'-DDT | 0.000650 | U | UJ | C | 0.000650 | U | UJ | C | 0.000660 | U | U | | | | | | | | | |
| ENDRIN KETONE | 0.000280 | U | U | | 0.000280 | U | U | | 0.000290 | N | U | + | | | | | | | | |
| METHOXYCHLOR | 0.000730 | U | U | | 0.000730 | U | U | | 0.000750 | U | U | | | | | | | | | |
| MIREX | 0.000210 | U | U | | 0.000210 | U | U | | 0.000220 | U | U | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC188 | | | | MC189 | | | | MC190 | | | | MC190DL | | | | MC191 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT05S01 | | | | M01MT05D01 | | | | M01MT05S02 | | | | M01MT05S02 | | | | M01MT05S04 | | | |
| Date Sampled | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | |
| Depth | URCHINS | | | | URCHINS | | | | STEGASTES | | | | DILUTION | | | | GOATFISH | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 0.11 | NJ | U | + | ***0.16*** | | ***J*** | ***F*** | ***1.7*** | | | | 3.2 | R | R | D | ***1.0*** | | | |
| PCB-18 (2,2',5) | 0.14 | N | U | + | ***0.30*** | | ***J*** | ***F*** | ***2.0*** | | | | 3.4 | R | R | D | ***0.97*** | | | |
| PCB-28 (2,4,4') | 0.13 | NJ | U | + | 0.14 | NJ | U | + | ***3.2*** | | | | 5.7 | R | R | D | ***1.7*** | | | |
| PCB-52 (2,2',5,5') | ***0.29*** | | | | ***0.35*** | | | | ***8.5*** | | ***J*** | ***C*** | 11.0 | R | R | D | ***2.6*** | | ***J*** | ***C*** |
| PCB-44 (2,2',3,5') | 0.11 | U | U | | 0.12 | U | U | | ***2.2*** | | | | 2.1 | UR | R | D | 0.25 | U | U | |
| PCB-66 (2,3',4,4') | ***0.42*** | | | | ***0.57*** | | | | ***5.2*** | | | | 3.5 | UR | R | D | ***2.4*** | | | |
| PCB-101 (2,2',3,5,5') | ***1.1*** | | | | ***1.5*** | | | | ***33.0*** | | | | 47.0 | R | R | D | ***9.9*** | | ***J*** | ***C*** |
| PCB-77 (3,3',4,4') | 0.25 | U | U | | 0.27 | U | U | | 0.46 | U | UJ | C | 4.6 | UR | R | D | 0.56 | u | U | |
| PCB-118 (2,3',4,4',5) | ***0.86*** | | | | ***1.0*** | | | | ***26.0*** | | | | 34.0 | R | R | D | ***15.0*** | | | |
| PCB-153 (2,2',4,4',5,5') | ***4.3*** | | | | ***5.3*** | | | | 180 | E | R | D | ***260*** | ***D*** | | | 110 | E | R | D |
| PCB-105 (2,3,3',4,4') | ***0.25*** | | | | ***0.29*** | | | | ***7.2*** | | | | 13.0 | R | R | D | ***4.3*** | | | |
| PCB-138 (2,2',3,4,4',5') | ***3.5*** | | | | ***4.1*** | | | | 110 | E | R | D | ***150*** | ***D*** | | | 70.0 | E | R | D |
| PCB-126 (3,3',4,4',5) | 0.21 | N | U | + | 0.22 | N | U | + | 0.38 | U | U | | 3.8 | UR | R | D | 0.45 | U | U | |
| PCB-187 (2,2',3,4',5,5',6) | ***3.5*** | | | | ***4.2*** | | | | 110 | E | R | D | ***160*** | ***D*** | | | 58.0 | E | R | D |
| PCB-128 (2,2',3,3',4,4') | ***0.28*** | ***J*** | ***J*** | | ***0.29*** | ***J*** | ***J*** | | ***10.0*** | | | | 12.0 | R | R | D | ***5.3*** | | | |
| PCB-180 (2,2',3,4,4',5,5') | ***1.3*** | | | | ***1.6*** | | | | 140 | E | R | D | ***260*** | ***D*** | | | 110 | E | R | D |
| PCB-170 (2,2',3,3',4,4',5) | ***0.50*** | | | | ***0.50*** | | | | 97.0 | E | R | D | ***120*** | ***D*** | | | ***49.0*** | | | |
| PCB-195 (2,2',3,3',4,4',5,6) | ***0.16*** | ***J*** | ***J*** | | ***0.17*** | ***J*** | ***J*** | | ***27.0*** | | | | 32.0 | R | R | D | ***12.0*** | | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 0.19 | U | U | | 0.10 | J | U | + | ***22.0*** | | | | 25.0 | R | R | D | ***8.6*** | | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.11 | U | U | | 0.12 | NJ | U | + | ***4.8*** | | | | 5.6 | R | R | D | ***3.0*** | | | |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 0.15 | NJ | UJ | C,+ | ***0.04*** | ***J*** | ***J*** | ***C*** | ***0.47*** | | | | 2.8 | UR | R | D | ***0.36*** | | | |
| 2,4'-DDE | 0.24 | U | U | | 0.26 | U | U | | ***1.5*** | | | | 1.1 | JR | R | D | 0.54 | NJ | U | + |
| ENDOSULFAN I | 0.32 | U | U | | 0.35 | U | U | | 0.59 | U | U | | 5.9 | UR | R | D | 0.71 | U | U | |
| HEXACHLOROBENZENE | ***0.01*** | ***J*** | ***J*** | ***F*** | 0.11 | NJ | U | + | ***0.39*** | | | | 0.16 | JR | R | D | ***0.45*** | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC188 | | | | MC189 | | | | MC190 | | | | MC190DL | | | | MC191 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT05S01 | | | | M01MT05D01 | | | | M01MT05S02 | | | | M01MT05S02 | | | | M01MT05S04 | | | |
| Date Sampled | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | |
| Depth | URCHINS | | | | URCHINS | | | | STEGASTES | | | | DILUTION | | | | GOATFISH | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.12 | U | U | | 0.13 | U | U | | 0.22 | NJ | U | + | 2.2 | UR | R | D | ***0.19*** | ***J*** | ***J*** | |
| GAMMA-BHC (LINDANE) | 0.12 | NJ | U | + | ***0.11*** | ***J*** | ***J*** | ***F*** | ***1.7*** | | | | 0.97 | JR | R | D | ***0.14*** | ***J*** | ***J*** | |
| DELTA-BHC | 0.10 | NJ | UJ | C,+ | 0.10 | NJ | UJ | C,+ | 0.18 | N | UJ | C,+ | 1.5 | JR | R | D | 0.64 | N | UJ | C,+ |
| HEPTACHLOR | 0.08 | U | U | | 0.09 | U | U | | 0.15 | N | U | + | 1.5 | UR | R | D | 0.18 | U | U | |
| ALDRIN | 0.44 | U | U | | 0.47 | U | U | | 0.80 | U | U | | 8.0 | UR | R | D | 0.96 | U | U | |
| GAMMA-CHLORDANE | 0.43 | U | U | | 0.46 | U | U | | ***0.39*** | ***J*** | ***J*** | | 7.9 | UR | R | D | 0.95 | J | U | + |
| ALPHA-CHLORDANE | 0.24 | U | U | | 0.26 | U | U | | ***1.5*** | | | | 1.3 | JR | R | D | ***0.50*** | ***J*** | ***J*** | |
| TRANS-NONACHLOR | 0.23 | U | U | | 0.24 | U | U | | ***2.0*** | | | | 2.1 | JR | R | D | ***0.85*** | | | |
| HEPTACHLOR EPOXIDE | 0.15 | U | U | | 0.16 | U | U | | 0.28 | U | U | | 2.8 | UR | R | D | 0.33 | U | U | |
| DIELDRIN | 0.16 | U | U | | 0.17 | U | U | | 0.29 | U | U | | 2.9 | UR | R | D | 0.35 | U | U | |
| 4,4'-DDE | ***0.55*** | ***J*** | ***J*** | | ***0.66*** | ***J*** | ***J*** | | ***38.0*** | | | | 29.0 | R | R | D | ***24.0*** | | | |
| 2,4'-DDD | 0.27 | U | U | | 0.29 | U | U | | ***5.2*** | | | | 5.9 | R | R | D | ***1.7*** | | | |
| ENDRIN | 0.09 | U | U | | 0.10 | U | U | | 0.16 | U | U | | 1.6 | UR | R | D | 0.20 | U | U | |
| ENDRIN ALDEHYDE | 0.22 | U | U | | 0.24 | U | U | | 0.41 | U | U | | 4.1 | UR | R | D | 0.49 | U | U | |
| 4,4'-DDD | 0.65 | U | U | | 0.70 | U | U | | ***4.8*** | | | | 5.2 | JR | R | D | ***1.8*** | | | |
| 2,4'-DDT | 0.15 | U | U | | 0.17 | NJ | U | + | 0.28 | N | U | + | 7.1 | R | R | D | 0.34 | N | U | + |
| ENDOSULFAN II | 0.32 | U | U | | 0.35 | U | U | | 0.59 | U | U | | 5.9 | UR | R | D | 0.71 | U | U | |
| ENDOSULFAN SULFATE | 0.32 | U | U | | 0.35 | U | U | | 0.59 | U | U | | 5.9 | UR | R | D | 0.71 | U | U | |
| 4,4'-DDT | 0.24 | U | U | | 0.25 | U | U | | ***5.8*** | | | | 4.4 | UR | R | D | ***1.8*** | | | |
| ENDRIN KETONE | 0.22 | U | U | | 0.24 | U | U | | 0.41 | U | U | | 7.2 | R | R | D | 0.49 | U | U | |
| METHOXYCHLOR | 0.19 | U | U | | 0.20 | U | U | | 0.34 | U | U | | 3.4 | UR | R | D | 0.41 | U | U | |
| MIREX | 0.15 | J | U | + | 0.16 | J | U | + | ***0.50*** | | | | 2.8 | UR | R | D | ***0.59*** | | | |
| CIS-NONACHLOR | | | | | | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC191DL | | | | MC192 | | | | MC192DL | | | | MC193 | | | | MC194 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT05S04 | | | | M01MT05D04 | | | | M01MT05D04 | | | | M01MT06S05 | | | | M01MT06S02 | | | |
| Date Sampled | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | | 9/13/96 | | | | 9/13/96 | | | |
| Depth | DILUTION | | | | GOATFISH | | | | DILUTION | | | | DICTYOTA | | | | STEGASTES | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 1.2 | UR | R | D | ***0.90*** | | | | 1.1 | UR | R | D | 0.57 | U | U | | ***2.8*** | | | |
| PCB-18 (2,2',5) | 1.6 | UR | R | D | ***0.98*** | | | | 1.4 | UR | R | D | ***8.0*** | | | | ***1.1*** | | | |
| PCB-28 (2,4,4') | 2.4 | R | R | D | ***0.78*** | | | | 1.1 | JR | R | D | ***6.8*** | | | | 0.23 | NJ | U | + |
| PCB-52 (2,2',5,5') | 3.4 | R | R | D | ***1.0*** | | ***J*** | ***C*** | 0.80 | JR | R | D | 1.3 | N | UJ | C,+ | ***5.0*** | | ***J*** | ***C*** |
| PCB-44 (2,2',3,5') | 1.2 | UR | R | D | ***0.18*** | ***J*** | ***J*** | | 1.1 | UR | R | D | 0.60 | U | U | | 0.20 | U | U | |
| PCB-66 (2,3',4,4') | 2.1 | UR | R | D | ***1.0*** | | | | 1.9 | UR | R | D | 1.0 | U | U | | 0.33 | U | U | |
| PCB-101 (2,2',3,5,5') | 13.0 | R | R | D | ***4.5*** | | ***J*** | ***C*** | 5.5 | JR | R | D | ***12.0*** | | | | ***1.9*** | | ***J*** | ***C*** |
| PCB-77 (3,3',4,4') | 2.8 | UR | R | D | 0.50 | U | U | | 2.5 | UR | R | D | ***13.0*** | | | | 0.43 | U | U | |
| PCB-118 (2,3',4,4',5) | 19.0 | R | R | D | ***10.0*** | | | | 13.0 | R | R | D | 3.6 | U | U | | 1.2 | U | U | |
| PCB-153 (2,2',4,4',5,5') | ***160*** | ***D*** | | | 73.0 | E | R | D | ***110*** | ***D*** | | | 5.6 | U | U | | ***15.0*** | | | |
| PCB-105 (2,3,3',4,4') | 7.3 | R | R | D | ***3.2*** | | | | 4.3 | R | R | D | ***5.6*** | | | | 0.24 | U | U | |
| PCB-138 (2,2',3,4,4',5') | ***92.0*** | ***D*** | | | 45.0 | E | R | D | ***59.0*** | ***D*** | | | 7.1 | U | U | | ***7.8*** | | | |
| PCB-126 (3,3',4,4',5) | 2.3 | UR | R | D | 0.41 | U | U | | 2.1 | UR | R | D | 1.1 | U | UJ | C | 0.36 | U | U | |
| PCB-187 (2,2',3,4',5,5',6) | ***79.0*** | ***D*** | | | 40.0 | E | R | D | ***54.0*** | ***D*** | | | 2.5 | U | U | | ***8.0*** | | | |
| PCB-128 (2,2',3,3',4,4') | 6.3 | R | R | D | ***3.9*** | | | | 4.7 | R | R | D | 1.8 | U | U | | ***0.46*** | ***J*** | ***J*** | |
| PCB-180 (2,2',3,4,4',5,5') | ***140*** | ***D*** | | | 67.0 | E | R | D | ***85.0*** | ***D*** | | | ***25.0*** | | | | ***14.0*** | | | |
| PCB-170 (2,2',3,3',4,4',5) | 60.0 | R | R | D | ***33.0*** | | | | 40.0 | R | R | D | ***17.0*** | | | | ***5.9*** | | | |
| PCB-195 (2,2',3,3',4,4',5,6) | 16.0 | R | R | D | ***7.2*** | | | | 9.5 | R | R | D | 1.2 | U | U | | ***1.8*** | | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 11.0 | R | R | D | ***4.3*** | | | | 5.4 | R | R | D | ***0.81*** | ***J*** | ***J*** | | ***1.3*** | | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 3.4 | R | R | D | ***0.81*** | | | | 0.99 | JR | R | D | 0.57 | U | U | | ***0.26*** | | | |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 0.37 | JR | R | D | ***0.21*** | ***J*** | ***J*** | | 1.5 | UR | R | D | 0.79 | U | U | | ***0.85*** | | | |
| 2,4'-DDE | 2.7 | UR | R | D | 0.49 | U | U | | 2.4 | UR | R | D | 1.3 | N | U | + | ***0.63*** | | | |
| ENDOSULFAN I | 3.6 | UR | R | D | 0.64 | U | U | | 3.2 | UR | R | D | 1.7 | NJ | U | + | 0.56 | U | U | |
| HEXACHLOROBENZENE | 0.49 | JR | R | D | ***0.17*** | ***J*** | ***J*** | | 0.12 | JR | R | D | 0.52 | N | U | + | ***0.43*** | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

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# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC191DL | | | | MC192 | | | | MC192DL | | | | MC193 | | | | MC194 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT05S04 | | | | M01MT05D04 | | | | M01MT05D04 | | | | M01MT06S05 | | | | M01MT06S02 | | | |
| Date Sampled | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | | 9/13/96 | | | | 9/13/96 | | | |
| Depth | DILUTION | | | | GOATFISH | | | | DILUTION | | | | DICTYOTA | | | | STEGASTES | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 1.3 | UR | R | D | ***0.13*** | ***J*** | ***J*** | | 0.13 | JR | R | D | 0.63 | N | U | + | 0.21 | N | U | + |
| GAMMA-BHC (LINDANE) | 1.4 | UR | R | D | ***0.14*** | ***J*** | ***J*** | | 1.2 | UR | R | D | ***4.4*** | | | | ***2.3*** | | | |
| DELTA-BHC | 0.81 | JR | R | D | 0.19 | N | UJ | C,+ | 0.59 | JR | R | D | ***2.3*** | | ***J*** | ***C*** | 0.17 | N | UJ | C,+ |
| HEPTACHLOR | 0.90 | UR | R | D | 0.16 | U | U | | 0.82 | UR | R | D | 0.43 | U | U | | 0.14 | U | U | |
| ALDRIN | 4.8 | UR | R | D | 0.87 | U | U | | 4.4 | UR | R | D | 2.3 | U | U | | 0.76 | U | U | |
| GAMMA-CHLORDANE | 4.8 | UR | R | D | 0.86 | U | U | | 4.3 | UR | R | D | 2.3 | U | U | | 0.74 | U | U | |
| ALPHA-CHLORDANE | 2.7 | UR | R | D | ***0.26*** | ***J*** | ***J*** | | 2.4 | UR | R | D | 1.3 | U | U | | 0.42 | J | U | + |
| TRANS-NONACHLOR | 0.85 | JR | R | D | ***0.59*** | | | | 0.62 | JR | R | D | 1.2 | U | U | | ***4.4*** | | | |
| HEPTACHLOR EPOXIDE | 1.7 | UR | R | D | 0.30 | U | U | | 1.5 | UR | R | D | 0.79 | U | U | | ***1.6*** | | | |
| DIELDRIN | 1.8 | UR | R | D | 0.32 | U | U | | 1.6 | UR | R | D | 0.85 | U | U | | 0.28 | U | U | |
| 4,4'-DDE | 22.0 | R | R | D | ***11.0*** | | | | 11.0 | R | R | D | ***4.6*** | ***J*** | ***J*** | | ***1.7*** | ***J*** | ***J*** | |
| 2,4'-DDD | 2.0 | JR | R | D | 0.53 | U | U | | 2.7 | UR | R | D | ***11.0*** | | | | 0.46 | N | U | + |
| ENDRIN | 0.98 | UR | R | D | 0.18 | U | U | | 0.89 | UR | R | D | ***5.6*** | | | | 0.15 | U | U | |
| ENDRIN ALDEHYDE | 2.4 | UR | R | D | 0.44 | U | U | | 2.2 | UR | R | D | 1.2 | U | U | | 0.38 | U | U | |
| 4,4'-DDD | 2.2 | JR | R | D | ***0.97*** | ***J*** | ***J*** | | 1.3 | JR | R | D | 3.5 | U | U | | ***0.75*** | ***J*** | ***J*** | |
| 2,4'-DDT | 7.4 | R | R | D | 0.31 | N | U | + | 5.5 | R | R | D | 0.82 | U | U | | 0.27 | U | U | |
| ENDOSULFAN II | 3.6 | UR | R | D | 0.64 | U | U | | 3.2 | UR | R | D | ***48.0*** | | | | 0.56 | U | U | |
| ENDOSULFAN SULFATE | 3.6 | UR | R | D | 0.64 | U | U | | 3.2 | UR | R | D | 1.7 | U | U | | 0.56 | U | U | |
| 4,4'-DDT | 1.3 | JR | R | D | 0.47 | N | U | + | 1.5 | JR | R | D | 1.3 | U | U | | ***10.0*** | | | |
| ENDRIN KETONE | 5.2 | R | R | D | 0.44 | U | U | | 3.4 | R | R | D | 1.2 | U | U | | 0.38 | U | U | |
| METHOXYCHLOR | 2.1 | UR | R | D | 0.37 | U | U | | 1.9 | UR | R | D | 0.99 | U | U | | 0.32 | U | U | |
| MIREX | 0.69 | JR | R | D | ***0.24*** | ***J*** | ***J*** | | 0.27 | JR | R | D | ***13.0*** | | | | ***0.97*** | | | |
| CIS-NONACHLOR | | | | | | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC195 | | | | MC196 | | | | MC197 | | | | MC198 | | | | MC198RE | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT06S01 | | | | M01MT09S01 | | | | M01MT09S06 | | | | M01MT09S07 | | | | M01MT09S07 | | | |
| Date Sampled | 9/13/96 | | | | 9/13/96 | | | | 9/13/96 | | | | 9/13/96 | | | | 9/13/96 | | | |
| Depth | URCHINS | | | | URCHINS | | | | HALIMEDA | | | | CUCUMBER | | | | REANALYSES | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 0.10 | U | U | | 0.10 | NJ | U | + | 0.18 | U | U | | 0.31 | U | R | D | 0.62 | U | U | |
| PCB-18 (2,2',5) | 0.13 | N | U | + | ***1.4*** | | | | 0.23 | N | U | + | 0.48 | | R | D | 0.80 | U | U | |
| PCB-28 (2,4,4') | 0.13 | U | U | | 0.13 | U | U | | 0.22 | U | U | | 0.39 | | R | D | 0.77 | U | U | |
| PCB-52 (2,2',5,5') | 0.23 | N | U | + | ***0.31*** | | | | ***1.2*** | | ***J*** | ***C*** | 0.68 | J | R | D | 1.4 | NJ | U | + |
| PCB-44 (2,2',3,5') | 0.11 | U | U | | 0.10 | U | U | | 0.19 | U | U | | 0.22 | NJ | R | D | 0.65 | U | U | |
| PCB-66 (2,3',4,4') | 0.18 | U | U | | 0.18 | NJ | U | + | 0.31 | U | U | | 0.29 | J | R | D | 1.1 | U | U | |
| PCB-101 (2,2',3,5,5') | 0.57 | J | U | + | ***0.27*** | ***J*** | ***J*** | | 0.96 | U | U | | 2.4 | | R | D | ***2.6*** | ***J*** | ***J*** | ***C*** |
| PCB-77 (3,3',4,4') | 0.24 | U | U | | 0.23 | U | U | | 0.42 | U | U | | 0.72 | U | R | D | 1.4 | U | U | |
| PCB-118 (2,3',4,4',5) | 0.63 | U | U | | ***0.52*** | ***J*** | ***J*** | | 1.1 | U | U | | 2.5 | | R | D | ***2.5*** | ***J*** | ***J*** | |
| PCB-153 (2,2',4,4',5,5') | 1.0 | J | U | + | ***1.0*** | | | | ***1.5*** | ***J*** | ***J*** | | 14.0 | | R | D | ***17.0*** | | | |
| PCB-105 (2,3,3',4,4') | 0.13 | U | U | | ***0.13*** | ***J*** | ***J*** | | 0.23 | U | U | | 1.3 | | R | D | ***1.2*** | | | |
| PCB-138 (2,2',3,4,4',5') | 1.3 | J | U | + | ***1.0*** | ***J*** | ***J*** | | 2.2 | U | U | | 10.0 | | R | D | ***16.0*** | | | |
| PCB-126 (3,3',4,4',5) | 0.20 | NJ | U | + | 0.19 | N | U | + | 0.34 | J | UJ | B,C | 0.59 | U | R | D | 1.2 | U | U | |
| PCB-187 (2,2',3,4',5,5',6) | ***0.40*** | ***J*** | ***J*** | | ***1.0*** | | | | ***0.38*** | ***J*** | ***J*** | | 11.0 | | R | D | ***13.0*** | | | |
| PCB-128 (2,2',3,3',4,4') | 0.31 | U | U | | 0.30 | J | U | + | 0.55 | U | U | | 0.93 | J | R | D | ***1.1*** | ***J*** | ***J*** | |
| PCB-180 (2,2',3,4,4',5,5') | ***2.2*** | | | | ***1.2*** | | | | ***1.8*** | | | | 9.8 | | R | D | ***9.5*** | | | |
| PCB-170 (2,2',3,3',4,4',5) | 0.15 | J | U | + | 0.15 | J | U | + | ***0.12*** | ***J*** | ***J*** | | 2.1 | | R | D | ***2.3*** | | | |
| PCB-195 (2,2',3,3',4,4',5,6) | 0.22 | U | U | | 0.22 | U | U | | 0.39 | U | U | | 2.0 | | R | D | ***1.9*** | | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 0.18 | U | U | | 0.18 | U | U | | 0.32 | U | U | | 0.69 | | R | D | ***0.75*** | ***J*** | ***J*** | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.10 | U | U | | 0.10 | U | U | | 0.18 | U | U | | 0.23 | NJ | R | D | 0.61 | NJ | U | + |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 0.14 | NJ | UJ | C,+ | 0.14 | NJ | UJ | C,+ | 0.25 | N | U | + | 0.43 | U | R | D | 0.86 | U | UJ | C |
| 2,4'-DDE | 0.23 | U | U | | 0.22 | U | U | | 0.40 | U | U | | 0.70 | U | R | D | 1.4 | U | U | |
| ENDOSULFAN I | 0.30 | U | U | | 0.30 | U | U | | 0.53 | U | U | | 0.92 | U | R | D | 1.8 | U | U | |
| HEXACHLOROBENZENE | 0.09 | U | U | | 0.09 | U | U | | 0.16 | N | U | + | 0.03 | J | R | D | 0.55 | J | U | + |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC195 | | | | MC196 | | | | MC197 | | | | MC198 | | | | MC198RE | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT06S01 | | | | M01MT09S01 | | | | M01MT09S06 | | | | M01MT09S07 | | | | M01MT09S07 | | | |
| Date Sampled | 9/13/96 | | | | 9/13/96 | | | | 9/13/96 | | | | 9/13/96 | | | | 9/13/96 | | | |
| Depth | URCHINS | | | | URCHINS | | | | HALIMEDA | | | | CUCUMBER | | | | REANALYSES | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.11 | U | U | | 0.11 | U | U | | 0.20 | U | U | | 0.34 | U | R | D | 0.69 | U | U | |
| GAMMA-BHC (LINDANE) | 0.12 | N | U | + | ***0.10*** | ***J*** | ***J*** | ***F*** | 0.20 | U | U | | 0.35 | U | R | D | 0.71 | U | U | |
| DELTA-BHC | 0.09 | U | UJ | C | 0.09 | U | UJ | C | 0.16 | U | UJ | C | 0.28 | U | R | D | 0.56 | U | UJ | C |
| HEPTACHLOR | 0.08 | U | U | | 0.08 | U | U | | ***1.0*** | | | | 0.23 | U | R | D | 0.47 | U | U | |
| ALDRIN | 0.41 | U | U | | 0.40 | U | U | | 0.72 | U | U | | 1.3 | U | R | D | 2.5 | U | U | |
| GAMMA-CHLORDANE | 0.41 | U | U | | 0.40 | U | U | | 0.71 | U | U | | 1.2 | U | R | D | 2.5 | U | U | |
| ALPHA-CHLORDANE | 0.23 | NJ | U | + | 0.22 | U | U | | 0.40 | U | U | | 0.21 | NJ | R | D | 1.4 | U | U | |
| TRANS-NONACHLOR | 0.21 | NJ | U | + | 0.21 | U | U | | 0.37 | N | U | + | 0.28 | J | R | D | 1.3 | U | U | |
| HEPTACHLOR EPOXIDE | 0.14 | U | U | | 0.14 | U | U | | 0.25 | U | U | | 0.43 | U | R | D | 0.86 | U | U | |
| DIELDRIN | 0.15 | U | U | | 0.15 | U | U | | 0.26 | U | U | | 0.46 | U | R | D | 0.91 | U | U | |
| 4,4'-DDE | 0.98 | J | U | + | ***1.1*** | | | | 1.7 | U | U | | 4.2 | | R | D | ***5.0*** | ***J*** | ***J*** | |
| 2,4'-DDD | 0.25 | U | U | | 0.25 | U | U | | 0.44 | N | U | + | 0.76 | J | R | D | ***0.95*** | ***J*** | ***J*** | |
| ENDRIN | 0.09 | N | U | + | ***0.21*** | | | | ***0.24*** | | | | 0.25 | U | R | D | 0.51 | U | U | |
| ENDRIN ALDEHYDE | 0.21 | U | U | | 0.20 | U | U | | 0.36 | U | U | | 0.63 | U | R | D | 1.3 | U | U | |
| 4,4'-DDD | 0.62 | U | U | | 0.60 | U | U | | 1.1 | U | U | | 0.89 | J | R | D | ***1.2*** | ***J*** | ***J*** | |
| 2,4'-DDT | 0.15 | U | U | | 0.14 | U | U | | 0.26 | U | U | | 0.97 | | R | D | 0.89 | N | U | + |
| ENDOSULFAN II | 0.30 | U | U | | 0.30 | U | U | | 0.53 | N | U | + | 0.92 | U | R | D | 1.8 | U | U | |
| ENDOSULFAN SULFATE | 0.30 | U | U | | 0.30 | U | U | | 0.53 | U | U | | 0.92 | U | R | D | 1.8 | U | U | |
| 4,4'-DDT | 0.22 | U | U | | 0.22 | U | U | | 0.39 | U | U | | 1.2 | | R | D | ***1.1*** | ***J*** | ***J*** | |
| ENDRIN KETONE | 0.21 | U | U | | 0.20 | U | U | | 0.36 | U | U | | 0.63 | U | R | D | 1.3 | U | U | |
| METHOXYCHLOR | 0.18 | U | U | | 0.17 | U | U | | 0.31 | U | U | | 0.53 | U | R | D | 1.1 | U | U | |
| MIREX | ***0.21*** | | | | 0.14 | U | U | | ***1.6*** | | | | 0.65 | | R | D | ***0.66*** | ***J*** | ***J*** | |
| CIS-NONACHLOR | | | | | | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC199 | | | | MC199DL | | | | MC200 | | | | MC201 | | | | MC202 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT09S02 | | | | M01MT09S02 | | | | M01MT09S04 | | | | M01MT04S01 | | | | M01MT04S02 | | | |
| Date Sampled | 9/13/96 | | | | 9/13/96 | | | | 9/13/96 | | | | 9/16/96 | | | | 9/16/96 | | | |
| Depth | STEGASTES | | | | DILUTION | | | | GOATFISH | | | | URCHINS | | | | STEGASTES | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | ***1.5*** | | | | 1.3 | R | R | D | ***1.2*** | | | | 0.13 | N | U | + | ***3.8*** | | | |
| PCB-18 (2,2',5) | ***1.9*** | | | | 2.0 | R | R | D | 0.30 | N | U | + | ***0.50*** | | ***J*** | ***F*** | ***2.3*** | | | |
| PCB-28 (2,4,4') | ***4.7*** | | | | 6.2 | R | R | D | ***0.51*** | | | | ***0.43*** | | | | ***6.2*** | | | |
| PCB-52 (2,2',5,5') | ***6.0*** | | ***J*** | ***C*** | 6.3 | R | R | D | ***0.54*** | | ***J*** | ***C*** | ***1.0*** | | | | ***14.0*** | | ***J*** | ***C*** |
| PCB-44 (2,2',3,5') | ***3.0*** | | | | 7.0 | R | R | D | 0.24 | U | U | | 0.01 | U | U | | ***4.9*** | | | |
| PCB-66 (2,3',4,4') | ***6.0*** | | | | 0.71 | UR | R | D | ***0.35*** | ***J*** | ***J*** | | ***2.3*** | | | | ***5.2*** | | | |
| PCB-101 (2,2',3,5,5') | ***14.0*** | | ***J*** | ***C*** | 14.0 | R | R | D | ***1.2*** | ***J*** | ***J*** | ***C*** | ***3.7*** | | | | 45.0 | E | R | D |
| PCB-77 (3,3',4,4') | 0.47 | U | U | | 0.94 | UR | R | D | 0.54 | U | U | | 0.03 | U | U | | 0.51 | U | U | |
| PCB-118 (2,3',4,4',5) | ***12.0*** | | | | 13.0 | R | R | D | ***3.1*** | | | | ***2.7*** | | | | ***32.0*** | | | |
| PCB-153 (2,2',4,4',5,5') | 51.0 | E | R | D | ***55.0*** | ***D*** | | | ***14.0*** | | | | ***12.0*** | | | | 200 | E | R | D |
| PCB-105 (2,3,3',4,4') | ***4.5*** | | | | 4.3 | R | R | D | ***1.1*** | | | | ***0.78*** | | | | ***7.9*** | | | |
| PCB-138 (2,2',3,4,4',5') | ***36.0*** | | | | 37.0 | D | R | D | ***11.0*** | | | | ***10.0*** | | | | 130 | E | R | D |
| PCB-126 (3,3',4,4',5) | 0.38 | U | U | | 0.77 | UR | R | D | 0.44 | U | U | | 0.26 | N | U | + | 0.41 | U | U | |
| PCB-187 (2,2',3,4',5,5',6) | ***35.0*** | | | | 37.0 | D | R | D | ***7.7*** | | | | ***9.8*** | | | | 120 | E | R | D |
| PCB-128 (2,2',3,3',4,4') | ***3.7*** | | | | 3.7 | R | R | D | ***0.65*** | ***J*** | ***J*** | | ***0.81*** | | | | ***12.0*** | | | |
| PCB-180 (2,2',3,4,4',5,5') | 51.0 | E | R | D | ***51.0*** | ***D*** | | | ***12.0*** | | | | ***3.6*** | | | | 150 | E | R | D |
| PCB-170 (2,2',3,3',4,4',5) | ***22.0*** | | | | 21.0 | R | R | D | ***4.5*** | | | | ***1.3*** | | | | 93.0 | E | R | D |
| PCB-195 (2,2',3,3',4,4',5,6) | ***5.6*** | | | | 5.6 | R | R | D | ***1.2*** | | | | 0.03 | U | U | | ***25.0*** | | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | ***4.5*** | | | | 4.6 | R | R | D | ***1.2*** | | | | 0.02 | U | U | | ***19.0*** | | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | ***0.67*** | | | | 0.55 | R | R | D | ***0.37*** | | | | 0.01 | U | U | | ***0.90*** | | | |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | ***0.24*** | ***J*** | ***J*** | | 0.25 | JR | R | D | ***0.31*** | ***J*** | ***J*** | | 0.19 | N | UJ | C,+ | ***0.84*** | | | |
| 2,4'-DDE | ***0.20*** | ***J*** | ***J*** | | 0.15 | JR | R | D | 0.52 | U | U | | 0.30 | N | U | + | ***2.1*** | | | |
| ENDOSULFAN I | 0.60 | U | U | | 1.2 | UR | R | D | 0.69 | U | U | | 0.04 | U | U | | 0.65 | U | U | |
| HEXACHLOROBENZENE | ***0.57*** | | | | 0.61 | R | R | D | ***0.55*** | | | | 0.01 | U | U | | ***0.42*** | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC199 | | | | MC199DL | | | | MC200 | | | | MC201 | | | | MC202 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT09S02 | | | | M01MT09S02 | | | | M01MT09S04 | | | | M01MT04S01 | | | | M01MT04S02 | | | |
| Date Sampled | 9/13/96 | | | | 9/13/96 | | | | 9/13/96 | | | | 9/16/96 | | | | 9/16/96 | | | |
| Depth | STEGASTES | | | | DILUTION | | | | GOATFISH | | | | URCHINS | | | | STEGASTES | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.22 | N | U | + | 0.47 | R | R | D | 0.26 | N | U | + | 0.01 | U | U | | 0.24 | N | U | + |
| GAMMA-BHC (LINDANE) | ***1.0*** | | | | 0.90 | R | R | D | 0.26 | N | U | + | ***0.30*** | | ***J*** | ***F*** | ***1.6*** | | | |
| DELTA-BHC | 0.18 | N | UJ | C,+ | 0.79 | R | R | D | 0.21 | N | UJ | C,+ | 0.12 | N | UJ | C,+ | 0.19 | N | UJ | C,+ |
| HEPTACHLOR | 0.15 | U | U | | 0.31 | UR | R | D | 0.17 | U | U | | 0.01 | U | U | | 0.16 | U | U | |
| ALDRIN | 0.82 | U | U | | 1.6 | UR | R | D | 0.93 | U | U | | 0.05 | U | U | | 0.88 | U | U | |
| GAMMA-CHLORDANE | ***0.65*** | ***J*** | ***J*** | | 0.63 | JR | R | D | 0.93 | J | U | + | 0.05 | U | U | | ***0.37*** | ***J*** | ***J*** | |
| ALPHA-CHLORDANE | ***1.9*** | | | | 1.7 | R | R | D | ***0.38*** | ***J*** | ***J*** | | 0.03 | U | U | | ***1.1*** | | | |
| TRANS-NONACHLOR | ***4.1*** | | | | 3.8 | R | R | D | ***0.74*** | | | | 0.03 | U | U | | ***1.7*** | | | |
| HEPTACHLOR EPOXIDE | 0.28 | U | U | | 0.56 | UR | R | D | 0.32 | U | U | | 0.02 | U | U | | 0.30 | U | U | |
| DIELDRIN | 0.30 | N | U | + | 0.60 | UR | R | D | 0.34 | NJ | U | + | 0.02 | U | U | | 0.32 | U | U | |
| 4,4'-DDE | ***37.0*** | | | | 32.0 | R | R | D | ***5.1*** | | | | ***5.7*** | | | | ***45.0*** | | | |
| 2,4'-DDD | ***1.5*** | | | | 1.4 | R | R | D | ***0.38*** | ***J*** | ***J*** | | 0.03 | U | U | | ***6.9*** | | | |
| ENDRIN | 0.17 | U | U | | 0.33 | UR | R | D | 0.19 | U | U | | 0.11 | N | U | + | 0.18 | U | U | |
| ENDRIN ALDEHYDE | 0.41 | U | U | | 0.82 | UR | R | D | 0.47 | U | U | | 0.03 | U | U | | 0.44 | U | U | |
| 4,4'-DDD | ***3.8*** | | | | 4.0 | R | R | D | ***0.89*** | ***J*** | ***J*** | | ***0.27*** | | | | ***8.7*** | | | |
| 2,4'-DDT | 0.29 | N | U | + | 2.2 | R | R | D | ***1.4*** | | | | ***0.60*** | | | | 0.31 | N | U | + |
| ENDOSULFAN II | 0.60 | U | U | | 1.2 | UR | R | D | 0.69 | U | U | | 0.04 | U | U | | 0.65 | U | U | |
| ENDOSULFAN SULFATE | 0.60 | U | U | | 1.2 | UR | R | D | 0.69 | U | U | | 0.04 | U | U | | 0.65 | U | U | |
| 4,4'-DDT | ***9.3*** | | | | 5.2 | R | R | D | ***2.8*** | | | | ***0.72*** | | | | ***8.6*** | | | |
| ENDRIN KETONE | 0.41 | U | U | | 1.1 | R | R | D | 0.47 | U | U | | 0.03 | U | U | | 0.44 | U | U | |
| METHOXYCHLOR | 0.35 | U | U | | 0.70 | UR | R | D | 0.40 | U | U | | 0.02 | U | U | | 0.37 | U | U | |
| MIREX | ***0.59*** | | | | 0.71 | R | R | D | ***0.43*** | | | | ***0.12*** | | | | ***0.23*** | ***J*** | ***J*** | |
| CIS-NONACHLOR | | | | | | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC202DL | | | | MC203 | | | | MC204 | | | | MC205 | | | | MC206 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT04S02 | | | | M01MT04S05 | | | | M01MT03S05 | | | | M01MT03D05 | | | | M01MT03S02 | | | |
| Date Sampled | 9/16/96 | | | | 9/16/96 | | | | 9/16/96 | | | | 9/16/96 | | | | 9/16/96 | | | |
| Depth | DILUTION | | | | DICTYOTA | | | | DICTYOTA | | | | DICTYOTA | | | | STEGASTES | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 2.9 | R | R | D | 0.58 | U | U | | ***0.70*** | | | | ***0.53*** | | | | ***4.6*** | | ***J*** | ***S*** |
| PCB-18 (2,2',5) | 2.7 | JR | R | D | ***4.3*** | | | | 0.33 | N | U | + | ***2.9*** | | | | ***3.2*** | | ***J*** | ***S*** |
| PCB-28 (2,4,4') | 9.0 | R | R | D | 0.72 | N | U | + | ***2.0*** | | | | 0.24 | U | U | | ***9.5*** | | ***J*** | ***S*** |
| PCB-52 (2,2',5,5') | 16.0 | R | R | D | ***13.0*** | | ***J*** | ***C*** | ***9.6*** | | ***J*** | ***C*** | ***3.1*** | | ***J*** | ***C*** | ***20.0*** | | ***J*** | ***C,S*** |
| PCB-44 (2,2',3,5') | 5.6 | R | R | D | ***7.4*** | | | | 0.27 | U | U | | 0.20 | U | U | | ***8.4*** | | ***J*** | ***S*** |
| PCB-66 (2,3',4,4') | 3.8 | UR | R | D | 1.0 | U | U | | 0.45 | U | U | | 0.34 | U | U | | ***14.0*** | | ***J*** | ***S*** |
| PCB-101 (2,2',3,5,5') | ***63.0*** | ***D*** | ***J*** | ***C*** | 3.3 | N | U | + | 1.4 | U | U | | 1.1 | U | U | | 94.0 | E | R | D |
| PCB-77 (3,3',4,4') | 5.1 | UR | R | D | 1.4 | U | U | | 0.60 | U | U | | ***2.6*** | | | | 0.49 | U | U | |
| PCB-118 (2,3',4,4',5) | 41.0 | R | R | D | ***12.0*** | | | | 1.6 | U | U | | 1.2 | U | U | | 99.0 | E | R | D |
| PCB-153 (2,2',4,4',5,5') | 300 | R | R | D | ***30.0*** | | | | 2.5 | U | U | | 1.9 | U | U | | 390 | E | R | D |
| PCB-105 (2,3,3',4,4') | 16.0 | R | R | D | ***7.0*** | | | | 0.33 | U | U | | 0.25 | U | U | | ***37.0*** | | ***J*** | ***S*** |
| PCB-138 (2,2',3,4,4',5') | ***180*** | ***D*** | | | ***22.0*** | | | | 3.2 | U | U | | 2.4 | J | U | + | 320 | E | R | D |
| PCB-126 (3,3',4,4',5) | 4.1 | UR | R | D | ***10.0*** | | ***J*** | ***C*** | 0.49 | U | UJ | C | 0.37 | U | UJ | C | 0.40 | U | U | |
| PCB-187 (2,2',3,4',5,5',6) | ***170*** | ***D*** | | | ***16.0*** | | | | ***1.1*** | ***I*** | ***J*** | ****11,$*** | ***2.7*** | ***I*** | ***J*** | ****11,$*** | 310 | E | R | D |
| PCB-128 (2,2',3,3',4,4') | 13.0 | R | R | D | ***1.1*** | ***J*** | ***J*** | | 0.79 | U | U | | 0.60 | U | U | | ***44.0*** | | ***J*** | ***S*** |
| PCB-180 (2,2',3,4,4',5,5') | ***250*** | ***D*** | | | ***29.0*** | | | | ***6.9*** | | | | ***11.0*** | | | | 190 | E | R | D |
| PCB-170 (2,2',3,3',4,4',5) | ***110*** | ***D*** | | | ***5.3*** | | | | ***1.2*** | | | | ***0.95*** | | | | 170 | E | R | D |
| PCB-195 (2,2',3,3',4,4',5,6) | 28.0 | R | R | D | ***2.9*** | | | | ***0.43*** | ***J*** | ***J*** | | 0.42 | U | U | | 99.0 | E | R | D |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 21.0 | R | R | D | ***4.9*** | | | | 0.46 | U | U | | 0.35 | U | U | | 83.0 | E | R | D |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.95 | JR | R | D | ***2.3*** | | | | 0.26 | U | U | | 0.20 | U | U | | ***3.9*** | | ***J*** | ***S*** |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 0.60 | JR | R | D | 0.81 | N | U | + | ***2.9*** | | | | ***2.4*** | | | | ***0.50*** | | | |
| 2,4'-DDE | 2.4 | JR | R | D | 1.3 | U | U | | 0.58 | U | U | | 0.44 | U | U | | 0.48 | N | U | + |
| ENDOSULFAN I | 6.5 | UR | R | D | 1.7 | N | U | + | 0.76 | U | U | | 0.58 | U | U | | 0.63 | U | U | |
| HEXACHLOROBENZENE | 0.23 | JR | R | D | 0.53 | U | U | | 0.24 | N | U | + | 0.18 | N | U | + | ***0.31*** | | ***J*** | ***S*** |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC202DL | | | | MC203 | | | | MC204 | | | | MC205 | | | | MC206 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT04S02 | | | | M01MT04S05 | | | | M01MT03S05 | | | | M01MT03D05 | | | | M01MT03S02 | | | |
| Date Sampled | 9/16/96 | | | | 9/16/96 | | | | 9/16/96 | | | | 9/16/96 | | | | 9/16/96 | | | |
| Depth | DILUTION | | | | DICTYOTA | | | | DICTYOTA | | | | DICTYOTA | | | | STEGASTES | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 1.3 | JR | R | D | 0.65 | U | U | | ***1.2*** | | | | 0.22 | N | U | + | 0.24 | NJ | U | + |
| GAMMA-BHC (LINDANE) | 1.1 | JR | R | D | 0.67 | U | U | | 0.29 | N | U | + | 0.22 | U | U | | ***2.8*** | | ***J*** | ***S*** |
| DELTA-BHC | 0.57 | JR | R | D | ***0.91*** | | ***J*** | ***C*** | 0.23 | U | UJ | C | 0.18 | U | UJ | C | 0.19 | N | UJ | C,+ |
| HEPTACHLOR | 1.6 | UR | R | D | 0.44 | U | U | | 0.19 | U | U | | 0.15 | U | U | | 0.16 | NJ | U | + |
| ALDRIN | 8.8 | UR | R | D | 2.4 | U | U | | 1.0 | U | U | | 0.79 | U | U | | 0.85 | N | U | + |
| GAMMA-CHLORDANE | 8.6 | UR | R | D | ***2.1*** | ***J*** | ***J*** | | ***8.7*** | | | | 0.78 | N | U | + | ***0.30*** | ***J*** | ***J*** | ***S*** |
| ALPHA-CHLORDANE | 4.9 | UR | R | D | 1.3 | U | U | | 0.58 | U | U | | 0.44 | U | U | | ***1.4*** | | ***J*** | ***S*** |
| TRANS-NONACHLOR | 1.5 | JR | R | D | ***2.2*** | | | | 0.54 | U | U | | 0.41 | U | U | | ***3.4*** | | ***J*** | ***S*** |
| HEPTACHLOR EPOXIDE | 3.0 | UR | R | D | 0.81 | U | U | | ***0.47*** | | | | ***0.56*** | | | | 0.29 | U | U | |
| DIELDRIN | 3.2 | UR | R | D | 0.86 | U | U | | 0.38 | N | U | + | 0.29 | N | U | + | 0.31 | U | U | |
| 4,4'-DDE | 36.0 | R | R | D | ***14.0*** | | | | 2.5 | N | U | + | 1.9 | N | U | + | 100 | E | R | D |
| 2,4'-DDD | 8.0 | R | R | D | ***31.0*** | | | | 0.63 | U | U | | 0.48 | U | U | | ***11.0*** | | ***J*** | ***S*** |
| ENDRIN | 1.8 | UR | R | D | 0.48 | U | U | | 0.21 | U | U | | 0.16 | U | U | | ***3.1*** | | ***J*** | ***S*** |
| ENDRIN ALDEHYDE | 4.4 | UR | R | D | ***3.9*** | | | | 0.52 | U | U | | 0.40 | U | U | | 0.43 | U | U | |
| 4,4'-DDD | 8.6 | JR | R | D | ***6.0*** | | | | 1.6 | U | U | | 1.2 | U | U | | ***14.0*** | | ***J*** | ***S*** |
| 2,4'-DDT | 9.8 | R | R | D | 0.83 | N | U | + | 0.37 | U | U | | 0.28 | U | U | | 0.30 | N | U | + |
| ENDOSULFAN II | 6.5 | UR | R | D | 1.7 | NJ | U | + | 0.76 | U | U | | 0.58 | U | U | | 0.63 | U | U | |
| ENDOSULFAN SULFATE | 6.5 | UR | R | D | 1.7 | U | U | | 0.76 | U | U | | 0.58 | N | U | + | 0.63 | U | U | |
| 4,4'-DDT | 4.0 | JR | R | D | 1.3 | N | U | + | 0.56 | U | U | | 0.43 | U | U | | ***14.0*** | | ***J*** | ***S*** |
| ENDRIN KETONE | 7.1 | R | R | D | 1.2 | U | U | | 0.52 | U | U | | 0.40 | U | U | | 0.43 | U | U | |
| METHOXYCHLOR | 3.7 | UR | R | D | 1.0 | U | U | | 0.44 | U | U | | 0.34 | U | U | | 0.37 | NJ | U | + |
| MIREX | 0.38 | JR | R | D | ***1.3*** | | | | 0.36 | U | U | | 0.27 | U | U | | ***1.3*** | | ***J*** | ***S*** |
| CIS-NONACHLOR | | | | | | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC206DL | | | | MC207 | | | | MC207DL | | | | MC208 | | | | MC209 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT03S02 | | | | M01MT03S04 | | | | M01MT03S04 | | | | M01MT03S01 | | | | M01MT05S08 | | | |
| Date Sampled | 9/16/96 | | | | 9/16/96 | | | | 9/16/96 | | | | 9/16/96 | | | | 9/16/96 | | | |
| Depth | DILUTION | | | | GOATFISH | | | | DILUTION | | | | URCHINS | | | | OCTOPUS | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 9.2 | UR | R | D | ***1.3*** | | | | 4.6 | UR | R | D | 0.11 | N | U | + | 0.27 | U | R | D |
| PCB-18 (2,2',5) | 12.0 | UR | R | D | ***1.4*** | | | | 6.0 | UR | R | D | 0.14 | U | U | | 0.22 | J | R | D |
| PCB-28 (2,4,4') | 12.0 | R | R | D | ***4.1*** | | | | 4.7 | JR | R | D | ***0.62*** | | | | 0.34 | U | R | D |
| PCB-52 (2,2',5,5') | 31.0 | R | R | D | ***9.6*** | | *J* | *C* | 12.0 | R | R | D | ***2.0*** | | | | 0.10 | NJ | R | D |
| PCB-44 (2,2',3,5') | 8.3 | JR | R | D | ***2.8*** | | | | 1.7 | JR | R | D | 0.11 | U | U | | 0.28 | U | R | D |
| PCB-66 (2,3',4,4') | 16.0 | UR | R | D | ***5.1*** | | | | 8.1 | UR | R | D | ***1.1*** | | | | 0.48 | U | R | D |
| PCB-101 (2,2',3,5,5') | ***170*** | *D* | | | ***36.0*** | | *J* | *C* | 56.0 | R | R | D | ***5.8*** | | | | 1.3 | J | R | D |
| PCB-77 (3,3',4,4') | 21.0 | UR | R | D | 0.54 | U | U | | 11.0 | UR | R | D | 0.25 | U | U | | 0.63 | U | R | D |
| PCB-118 (2,3',4,4',5) | ***150*** | *D* | | | 52.0 | E | R | D | ***79.0*** | *D* | | | ***4.3*** | | | | 2.5 | | R | D |
| PCB-153 (2,2',4,4',5,5') | ***1,100*** | *D* | | | 330 | E | R | D | ***660*** | *D* | | | ***18.0*** | | | | 25.0 | | R | D |
| PCB-105 (2,3,3',4,4') | 55.0 | R | R | D | ***17.0*** | | | | 31.0 | R | R | D | ***1.3*** | | | | 1.6 | | R | D |
| PCB-138 (2,2',3,4,4',5') | ***640*** | *D* | | | 260 | E | R | D | ***410*** | *D* | | | ***15.0*** | | | | 13.0 | | R | D |
| PCB-126 (3,3',4,4',5) | 18.0 | UR | R | D | 0.44 | U | U | | 8.8 | UR | R | D | 0.20 | N | U | + | 0.52 | U | R | D |
| PCB-187 (2,2',3,4',5,5',6) | ***750*** | *D* | | | 220 | E | R | D | ***370*** | *D* | | | ***13.0*** | | | | 17.0 | | R | D |
| PCB-128 (2,2',3,3',4,4') | 46.0 | R | R | D | ***25.0*** | | | | 31.0 | R | R | D | ***1.3*** | | | | 0.76 | J | R | D |
| PCB-180 (2,2',3,4,4',5,5') | ***1,100*** | *D* | | | 180 | | R | D | ***660*** | *D* | | | ***5.1*** | | | | 31.0 | | R | D |
| PCB-170 (2,2',3,3',4,4',5) | ***480*** | *D* | | | 150 | E | R | D | ***300*** | *D* | | | ***1.9*** | | | | 12.0 | | R | D |
| PCB-195 (2,2',3,3',4,4',5,6) | ***160*** | *D* | | | 53.0 | E | R | D | ***71.0*** | *D* | | | ***0.62*** | | | | 3.4 | | R | D |
| PCB-206 (2,2',3,3',4,4',5,5',6) | ***120*** | *D* | | | ***28.0*** | | | | 37.0 | R | R | D | ***0.24*** | | | | 1.5 | | R | D |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 4.1 | JR | R | D | ***1.2*** | | | | 1.3 | JR | R | D | 0.11 | U | U | | 0.09 | J | R | D |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 13.0 | UR | R | D | ***0.27*** | *J* | *J* | | 6.4 | UR | R | D | 0.15 | N | UJ | C,+ | 0.38 | U | R | D |
| 2,4'-DDE | 21.0 | UR | R | D | 0.52 | N | U | + | 10.0 | UR | R | D | 0.24 | N | U | + | 0.61 | U | R | D |
| ENDOSULFAN I | 28.0 | UR | R | D | 0.69 | U | U | | 14.0 | UR | R | D | 0.32 | U | U | | 0.81 | U | R | D |
| HEXACHLOROBENZENE | 8.5 | UR | R | D | ***0.29*** | | | | 0.18 | JR | R | D | 0.10 | N | U | + | 0.04 | J | R | D |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

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# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC206DL | | | | MC207 | | | | MC207DL | | | | MC208 | | | | MC209 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT03S02 | | | | M01MT03S04 | | | | M01MT03S04 | | | | M01MT03S01 | | | | M01MT05S08 | | | |
| Date Sampled | 9/16/96 | | | | 9/16/96 | | | | 9/16/96 | | | | 9/16/96 | | | | 9/16/96 | | | |
| Depth | DILUTION | | | | GOATFISH | | | | DILUTION | | | | URCHINS | | | | OCTOPUS | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 10.0 | UR | R | D | ***0.15*** | ***J*** | ***J*** | | 5.1 | UR | R | D | 0.12 | U | U | | 0.30 | U | R | D |
| GAMMA-BHC (LINDANE) | 11.0 | UR | R | D | ***0.14*** | ***J*** | ***J*** | | 5.3 | UR | R | D | ***0.03*** | ***J*** | ***J*** | ***F*** | 0.31 | U | R | D |
| DELTA-BHC | 8.4 | UR | R | D | 0.21 | N | UJ | C,+ | 4.2 | UR | R | D | 0.10 | NJ | UJ | C,+ | 0.25 | U | R | D |
| HEPTACHLOR | 7.0 | UR | R | D | 0.17 | U | U | | 3.5 | UR | R | D | 0.08 | U | U | | 0.21 | U | R | D |
| ALDRIN | 37.0 | UR | R | D | 0.93 | U | U | | 19.0 | UR | R | D | 0.43 | U | U | | 1.1 | U | R | D |
| GAMMA-CHLORDANE | 37.0 | UR | R | D | ***0.53*** | ***J*** | ***J*** | | 18.0 | UR | R | D | 0.43 | U | U | | 1.1 | U | R | D |
| ALPHA-CHLORDANE | 21.0 | UR | R | D | ***1.2*** | | | | 10.0 | UR | R | D | 0.24 | U | U | | 0.61 | U | R | D |
| TRANS-NONACHLOR | 19.0 | UR | R | D | ***1.9*** | | | | 2.0 | JR | R | D | 0.22 | U | U | | 0.57 | U | R | D |
| HEPTACHLOR EPOXIDE | 13.0 | UR | R | D | 0.32 | U | U | | 6.4 | UR | R | D | 0.15 | U | U | | 0.38 | U | R | D |
| DIELDRIN | 14.0 | UR | R | D | 0.34 | U | U | | 6.8 | UR | R | D | 0.16 | U | U | | 0.40 | U | R | D |
| 4,4'-DDE | ***72.0*** | ***DJ*** | ***J*** | ****11*** | ***54.0*** | | | | 44.0 | JR | R | D | ***2.0*** | | | | 2.6 | U | R | D |
| 2,4'-DDD | 15.0 | JR | R | D | ***5.3*** | | | | 5.8 | JR | R | D | 0.26 | U | U | | 0.43 | J | R | D |
| ENDRIN | 7.6 | UR | R | D | 0.19 | U | U | | 3.8 | UR | R | D | 0.09 | N | U | + | 0.22 | U | R | D |
| ENDRIN ALDEHYDE | 19.0 | UR | R | D | 0.47 | U | U | | 9.4 | UR | R | D | 0.22 | U | U | | 0.55 | U | R | D |
| 4,4'-DDD | 11.0 | JR | R | D | ***4.4*** | | | | 4.8 | JR | R | D | 0.66 | J | U | + | 1.6 | U | R | D |
| 2,4'-DDT | 29.0 | R | R | D | ***20.0*** | | | | 26.0 | R | R | D | 0.15 | N | U | + | 0.55 | N | R | D |
| ENDOSULFAN II | 28.0 | UR | R | D | 0.69 | U | U | | 14.0 | UR | R | D | 0.32 | U | U | | 0.81 | U | R | D |
| ENDOSULFAN SULFATE | 28.0 | UR | R | D | 0.69 | U | U | | 14.0 | UR | R | D | 0.32 | U | U | | 0.81 | U | R | D |
| 4,4'-DDT | 20.0 | UR | R | D | ***5.3*** | | | | 10.0 | UR | R | D | 0.23 | N | U | + | 0.60 | U | R | D |
| ENDRIN KETONE | 19.0 | UR | R | D | 0.47 | U | U | | 23.0 | R | R | D | 0.22 | U | U | | 0.55 | U | R | D |
| METHOXYCHLOR | 16.0 | UR | R | D | 0.40 | U | U | | 8.0 | UR | R | D | 0.18 | U | U | | 0.47 | U | R | D |
| MIREX | 13.0 | UR | R | D | ***1.4*** | | | | 0.87 | JR | R | D | 0.15 | U | U | | 0.38 | U | R | D |
| CIS-NONACHLOR | | | | | | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC209RE | | | | MC210 | | | | MC211 | | | | MC212 | | | | MC213 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT05S08 | | | | M01MT05S05 | | | | M01MT07S05 | | | | M01MT07S01 | | | | M01MT07S04 | | | |
| Date Sampled | 9/16/96 | | | | 9/16/96 | | | | 9/17/96 | | | | 9/17/96 | | | | 9/17/96 | | | |
| Depth | REANALYSES | | | | DICTYOTA | | | | DICTYOTA | | | | URCHINS | | | | GOATFISH | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 0.54 | U | U | | 0.48 | U | U | | ***0.76*** | | | | 0.12 | NJ | U | + | ***0.93*** | | | |
| PCB-18 (2,2',5) | 0.71 | U | U | | 0.63 | N | U | + | 0.42 | N | U | + | 0.16 | N | U | + | ***0.79*** | | | |
| PCB-28 (2,4,4') | 0.68 | U | U | | 0.60 | U | U | | 0.40 | U | U | | 0.15 | U | U | | ***0.67*** | | | |
| PCB-52 (2,2',5,5') | 1.2 | U | U | | 1.1 | N | UJ | C,+ | 0.73 | U | UJ | C | ***2.9*** | | | | ***0.69*** | | ***J*** | ***C*** |
| PCB-44 (2,2',3,5') | 0.57 | U | U | | 0.50 | U | U | | 0.34 | U | U | | 0.13 | U | U | | 0.20 | U | U | |
| PCB-66 (2,3',4,4') | 0.96 | U | U | | 0.84 | U | U | | 0.57 | U | U | | 0.21 | U | U | | ***0.80*** | | | |
| PCB-101 (2,2',3,5,5') | ***1.6*** | ***J*** | ***J*** | ***C*** | ***0.68*** | ***J*** | ***J*** | | 1.7 | U | U | | 0.68 | NJ | U | + | ***2.6*** | | ***J*** | ***C*** |
| PCB-77 (3,3',4,4') | 1.3 | U | U | | 1.1 | U | U | | 0.75 | U | U | | 0.28 | U | U | | 0.45 | U | U | |
| PCB-118 (2,3',4,4',5) | ***3.1*** | ***J*** | ***J*** | | 3.0 | N | U | + | 2.0 | U | U | | 0.76 | U | U | | ***8.9*** | | | |
| PCB-153 (2,2',4,4',5,5') | ***33.0*** | | | | 4.7 | U | U | | 3.2 | U | U | | 1.2 | J | U | + | 55.0 | E | R | D |
| PCB-105 (2,3,3',4,4') | ***1.7*** | | | | 0.62 | U | U | | 0.42 | U | U | | 0.16 | U | U | | ***2.9*** | | | |
| PCB-138 (2,2',3,4,4',5') | ***18.0*** | | | | 6.0 | U | U | | 4.0 | J | U | + | 1.5 | J | U | + | ***34.0*** | | | |
| PCB-126 (3,3',4,4',5) | 1.0 | U | U | | ***13.0*** | | ***J*** | ***C*** | 0.61 | U | UJ | C | 0.23 | U | U | | 0.37 | U | U | |
| PCB-187 (2,2',3,4',5,5',6) | ***21.0*** | | | | 2.1 | U | U | | ***3.8*** | ***I*** | ***J*** | ****11,$*** | ***0.44*** | ***J*** | ***J*** | | ***30.0*** | | | |
| PCB-128 (2,2',3,3',4,4') | ***0.87*** | ***J*** | ***J*** | | 1.5 | U | U | | 0.99 | U | U | | 0.38 | U | U | | ***3.2*** | | | |
| PCB-180 (2,2',3,4,4',5,5') | ***35.0*** | | | | ***6.9*** | | | | ***1.2*** | | | | ***3.2*** | | | | 48.0 | E | R | D |
| PCB-170 (2,2',3,3',4,4',5) | ***13.0*** | | | | ***5.5*** | | | | ***1.3*** | | | | 0.18 | U | U | | ***24.0*** | | | |
| PCB-195 (2,2',3,3',4,4',5,6) | ***4.0*** | | | | ***0.37*** | ***J*** | ***J*** | | ***0.34*** | ***J*** | ***J*** | | 0.26 | U | U | | ***5.9*** | | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | ***1.6*** | | | | ***1.9*** | | | | 0.58 | U | U | | 0.22 | U | U | | ***3.7*** | | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.55 | NJ | U | + | 0.48 | N | U | + | 0.32 | U | U | | 0.12 | U | U | | ***0.60*** | | | |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 0.75 | U | UJ | C | 0.67 | N | U | + | ***2.5*** | | | | 0.17 | NJ | UJ | C,+ | ***0.30*** | | | |
| 2,4'-DDE | 1.2 | U | U | | 1.1 | U | U | | 0.73 | U | U | | ***1.2*** | | | | 0.44 | U | U | |
| ENDOSULFAN I | 1.6 | U | U | | 1.4 | U | U | | 0.96 | U | U | | 0.36 | U | U | | 0.58 | U | U | |
| HEXACHLOROBENZENE | 0.50 | J | U | + | 0.45 | NJ | U | + | 0.30 | N | U | + | 0.11 | U | U | | ***0.40*** | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC209RE | | | | MC210 | | | | MC211 | | | | MC212 | | | | MC213 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT05S08 | | | | M01MT05S05 | | | | M01MT07S05 | | | | M01MT07S01 | | | | M01MT07S04 | | | |
| Date Sampled | 9/16/96 | | | | 9/16/96 | | | | 9/17/96 | | | | 9/17/96 | | | | 9/17/96 | | | |
| Depth | REANALYSES | | | | DICTYOTA | | | | DICTYOTA | | | | URCHINS | | | | GOATFISH | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.61 | U | U | | 0.54 | U | U | | ***1.0*** | | | | 0.14 | U | U | | ***0.17*** | ***J*** | ***J*** | |
| GAMMA-BHC (LINDANE) | 0.62 | U | U | | 0.55 | U | U | | 0.37 | U | U | | 0.14 | N | U | + | ***0.28*** | | | |
| DELTA-BHC | 0.49 | U | UJ | C | 0.44 | U | UJ | C | ***0.95*** | | ***J*** | ***C*** | 0.11 | U | UJ | C | 0.17 | N | UJ | C,+ |
| HEPTACHLOR | 0.41 | U | U | | 0.36 | U | U | | 0.24 | U | U | | 0.09 | U | U | | 0.15 | U | U | |
| ALDRIN | 2.2 | U | U | | 1.9 | U | U | | 1.3 | U | U | | 0.49 | U | U | | 0.79 | U | U | |
| GAMMA-CHLORDANE | 2.2 | U | U | | 1.9 | N | U | + | 1.3 | N | U | + | 0.49 | U | U | | 0.78 | NJ | U | + |
| ALPHA-CHLORDANE | 1.2 | U | U | | ***0.99*** | ***J*** | ***J*** | | 0.73 | U | U | | 0.28 | U | U | | ***0.36*** | ***J*** | ***J*** | |
| TRANS-NONACHLOR | 1.1 | U | U | | 1.0 | N | U | + | 0.68 | U | U | | 0.26 | U | U | | ***1.2*** | | | |
| HEPTACHLOR EPOXIDE | 0.75 | U | U | | 0.67 | U | U | | ***0.64*** | | | | 0.17 | U | U | | 0.27 | U | U | |
| DIELDRIN | 0.80 | U | U | | 0.71 | U | U | | 0.48 | N | U | + | 0.18 | U | U | | 0.29 | U | U | |
| 4,4'-DDE | 5.3 | U | U | | 4.7 | U | U | | 3.1 | N | U | + | 1.2 | U | U | | ***13.0*** | | | |
| 2,4'-DDD | 1.3 | U | U | | 1.2 | N | U | + | 0.80 | U | U | | 0.30 | N | U | + | ***0.43*** | ***J*** | ***J*** | |
| ENDRIN | 0.45 | U | U | | 0.39 | U | U | | ***2.6*** | | | | ***0.37*** | | | | 0.16 | U | U | |
| ENDRIN ALDEHYDE | 1.1 | U | U | | ***5.9*** | | | | 0.66 | U | U | | 0.25 | U | U | | 0.40 | U | U | |
| 4,4'-DDD | 3.3 | U | U | | 3.0 | NJ | U | + | 2.0 | U | U | | 0.74 | U | U | | ***0.90*** | ***J*** | ***J*** | |
| 2,4'-DDT | 0.78 | U | U | | 0.69 | U | U | | 0.46 | U | U | | 0.18 | U | U | | 0.28 | N | U | + |
| ENDOSULFAN II | 1.6 | U | U | | 1.4 | NJ | U | + | 0.96 | U | U | | 0.36 | U | U | | 0.58 | U | U | |
| ENDOSULFAN SULFATE | 1.6 | U | U | | 1.4 | U | U | | ***1.1*** | | | | 0.36 | U | U | | 0.58 | U | U | |
| 4,4'-DDT | 1.2 | U | UJ | C | 1.1 | N | U | + | 0.71 | U | U | | 0.27 | U | U | | ***2.7*** | | | |
| ENDRIN KETONE | 1.1 | U | U | | 0.98 | U | U | | 0.66 | U | U | | 0.25 | U | U | | 0.40 | U | U | |
| METHOXYCHLOR | 0.94 | U | U | | 0.83 | U | U | | 0.56 | U | U | | 0.21 | U | U | | 0.34 | U | U | |
| MIREX | 0.76 | U | U | | ***2.1*** | | | | ***4.0*** | | | | 0.17 | U | U | | ***0.50*** | | | |
| CIS-NONACHLOR | | | | | | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC213DL | | | | MC214 | | | | MC215 | | | | MC216 | | | | MC217 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT07S04 | | | | M01MT07S02 | | | | M01MT11S02 | | | | M01MT11D02 | | | | M01MT11S06 | | | |
| Date Sampled | 9/17/96 | | | | 9/17/96 | | | | 9/19/96 | | | | 9/19/96 | | | | 9/19/96 | | | |
| Depth | DILUTION | | | | STEGASTES | | | | STEGASTES | | | | STEGASTES | | | | HALIMEDA | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 0.53 | R | R | D | ***5.7*** | | | | ***2.4*** | | | | ***1.6*** | | | | 0.17 | U | U | |
| PCB-18 (2,2',5) | 0.51 | UR | R | D | 0.26 | U | U | | 0.22 | U | U | | ***1.0*** | | | | 0.23 | U | U | |
| PCB-28 (2,4,4') | 0.75 | R | R | D | 0.25 | N | U | + | 0.21 | U | U | | 0.24 | U | U | | 0.22 | U | U | |
| PCB-52 (2,2',5,5') | 0.44 | JR | R | D | 0.45 | U | UJ | C | 0.38 | U | UJ | C | 0.44 | U | UJ | C | 0.39 | U | UJ | C |
| PCB-44 (2,2',3,5') | 0.41 | UR | R | D | 0.21 | U | U | | 0.18 | U | U | | 0.20 | U | U | | 0.18 | U | U | |
| PCB-66 (2,3',4,4') | 0.68 | UR | R | D | 0.35 | U | U | | 0.30 | N | U | + | 0.34 | U | U | | 0.30 | NJ | U | + |
| PCB-101 (2,2',3,5,5') | 2.8 | R | R | D | ***1.5*** | | ***J*** | ***C*** | ***2.3*** | | ***J*** | ***C*** | ***1.1*** | | ***J*** | ***C*** | 0.94 | U | U | |
| PCB-77 (3,3',4,4') | 0.91 | UR | R | D | 0.47 | U | U | | 0.39 | U | U | | 0.45 | U | U | | ***0.48*** | | | |
| PCB-118 (2,3',4,4',5) | 9.6 | R | R | D | ***1.0*** | ***J*** | ***J*** | | ***2.5*** | | | | ***0.97*** | ***J*** | ***J*** | | 1.1 | U | U | |
| PCB-153 (2,2',4,4',5,5') | ***63.0*** | ***D*** | | | ***13.0*** | | | | ***15.0*** | | | | ***8.0*** | | | | 1.7 | NJ | U | + |
| PCB-105 (2,3,3',4,4') | 3.5 | R | R | D | ***0.86*** | | | | ***0.72*** | | | | ***0.42*** | | | | 0.22 | U | U | |
| PCB-138 (2,2',3,4,4',5') | 37.0 | R | R | D | ***7.2*** | | | | ***8.0*** | | | | ***4.6*** | | | | 2.2 | U | U | |
| PCB-126 (3,3',4,4',5) | 0.74 | UR | R | D | 0.38 | U | U | | 0.32 | U | U | | 0.37 | U | U | | 0.45 | | UJ | B,C |
| PCB-187 (2,2',3,4',5,5',6) | 32.0 | R | R | D | ***11.0*** | | | | ***11.0*** | | | | ***5.8*** | | | | ***0.51*** | ***J*** | ***J*** | |
| PCB-128 (2,2',3,3',4,4') | 3.3 | R | R | D | ***0.44*** | ***J*** | ***J*** | | ***0.51*** | ***J*** | ***J*** | | ***0.20*** | ***J*** | ***J*** | | 0.53 | U | U | |
| PCB-180 (2,2',3,4,4',5,5') | ***52.0*** | ***D*** | | | ***12.0*** | | | | ***17.0*** | | | | ***7.3*** | | | | ***1.6*** | | | |
| PCB-170 (2,2',3,3',4,4',5) | 25.0 | R | R | D | ***4.3*** | | | | ***5.2*** | | | | ***2.4*** | | | | ***1.3*** | | | |
| PCB-195 (2,2',3,3',4,4',5,6) | 5.9 | R | R | D | ***1.4*** | | | | ***1.6*** | | | | ***0.80*** | | | | 0.38 | U | U | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 4.0 | R | R | D | ***1.4*** | | | | ***2.7*** | | | | ***1.1*** | | | | 0.31 | U | U | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.63 | R | R | D | ***0.25*** | | | | ***0.66*** | | | | ***0.34*** | | | | 0.17 | U | U | |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 0.22 | JR | R | D | ***0.89*** | | | | ***0.54*** | | | | ***0.53*** | | | | 0.24 | N | U | + |
| 2,4'-DDE | 0.88 | UR | R | D | 0.45 | U | U | | ***0.05*** | ***J*** | ***J*** | | 0.43 | U | U | | 0.39 | U | U | |
| ENDOSULFAN I | 1.2 | UR | R | D | 0.60 | U | U | | 0.50 | NJ | U | + | 0.57 | N | U | + | 0.52 | U | U | |
| HEXACHLOROBENZENE | 0.44 | R | R | D | ***0.44*** | | | | ***0.44*** | | | | ***0.63*** | | | | 0.16 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

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# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC213DL | | | | MC214 | | | | MC215 | | | | MC216 | | | | MC217 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT07S04 | | | | M01MT07S02 | | | | M01MT11S02 | | | | M01MT11D02 | | | | M01MT11S06 | | | |
| Date Sampled | 9/17/96 | | | | 9/17/96 | | | | 9/19/96 | | | | 9/19/96 | | | | 9/19/96 | | | |
| Depth | DILUTION | | | | STEGASTES | | | | STEGASTES | | | | STEGASTES | | | | HALIMEDA | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.28 | JR | R | D | 0.22 | NJ | U | + | 0.19 | NJ | U | + | 0.21 | N | U | + | 0.19 | U | U | |
| GAMMA-BHC (LINDANE) | 0.24 | JR | R | D | ***1.9*** | | | | ***2.6*** | | | | ***1.7*** | | | | 0.20 | U | U | |
| DELTA-BHC | 0.37 | R | R | D | 0.18 | U | UJ | C | 0.15 | U | UJ | C | 0.17 | N | UJ | C,+ | 0.16 | U | UJ | C |
| HEPTACHLOR | 0.29 | UR | R | D | 0.15 | U | U | | 0.13 | U | U | | 0.15 | U | U | | ***0.48*** | | | |
| ALDRIN | 1.6 | UR | R | D | 0.81 | U | U | | 0.68 | U | U | | 0.78 | U | U | | 0.70 | U | U | |
| GAMMA-CHLORDANE | 1.6 | UR | R | D | 0.80 | U | U | | ***0.23*** | ***J*** | ***J*** | | 0.77 | J | U | + | 0.69 | U | U | |
| ALPHA-CHLORDANE | 0.38 | JR | R | D | ***0.10*** | ***J*** | ***J*** | | 0.38 | NJ | U | + | 0.43 | U | U | | 0.39 | U | U | |
| TRANS-NONACHLOR | 1.2 | R | R | D | 0.42 | N | U | + | ***0.80*** | | | | 0.40 | N | U | + | 0.36 | U | U | |
| HEPTACHLOR EPOXIDE | 0.54 | UR | R | D | ***0.73*** | | | | 0.23 | U | U | | 0.27 | U | U | | 0.24 | U | U | |
| DIELDRIN | 0.57 | UR | R | D | 0.30 | U | U | | 0.25 | N | U | + | 0.29 | N | U | + | 0.26 | U | U | |
| 4,4'-DDE | 11.0 | R | R | D | ***2.1*** | | | | ***8.2*** | | | | ***5.3*** | | | | 1.7 | U | U | |
| 2,4'-DDD | 0.96 | UR | R | D | ***4.4*** | | | | ***0.42*** | ***J*** | ***J*** | | ***0.61*** | | | | 0.43 | U | U | |
| ENDRIN | 0.32 | UR | R | D | 0.16 | U | U | | 0.14 | U | U | | 0.16 | U | U | | 0.14 | U | U | |
| ENDRIN ALDEHYDE | 0.79 | UR | R | D | 0.41 | U | U | | 0.34 | U | U | | 0.39 | U | U | | 0.35 | U | U | |
| 4,4'-DDD | 1.0 | JR | R | D | 1.2 | U | U | | ***0.97*** | ***J*** | ***J*** | | ***0.87*** | ***J*** | ***J*** | | 1.0 | U | U | |
| 2,4'-DDT | 3.7 | R | R | D | 0.28 | N | U | + | 0.24 | N | U | + | 0.27 | N | U | + | 0.25 | U | U | |
| ENDOSULFAN II | 1.2 | UR | R | D | 0.60 | U | U | | 0.50 | U | U | | 0.57 | U | U | | ***1.3*** | | | |
| ENDOSULFAN SULFATE | 1.2 | UR | R | D | 0.60 | U | U | | 0.50 | U | U | | 0.57 | U | U | | 0.52 | U | U | |
| 4,4'-DDT | 2.2 | R | R | D | ***2.1*** | | | | ***3.0*** | | | | ***3.0*** | | | | 0.38 | U | U | |
| ENDRIN KETONE | 0.79 | UR | R | D | 0.41 | U | U | | 0.34 | U | U | | 0.39 | U | U | | 0.35 | U | U | |
| METHOXYCHLOR | 0.67 | UR | R | D | 0.35 | U | U | | 0.29 | U | U | | 0.33 | U | U | | 0.30 | U | U | |
| MIREX | 0.49 | JR | R | D | ***2.7*** | | | | ***0.28*** | | | | ***0.49*** | | | | ***2.5*** | | | |
| CIS-NONACHLOR | | | | | | | | | | | | | 0.40 | U | U | | | | | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC218 | | | | MC219 | | | | MC220 | | | | MC221 | | | | MC222 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT11S01 | | | | M01MT11S04 | | | | M01MT12S06 | | | | M01MT12S02 | | | | M01MT12S01 | | | |
| Date Sampled | 9/19/96 | | | | 9/19/96 | | | | 9/19/96 | | | | 9/19/96 | | | | 9/19/96 | | | |
| Depth | URCHINS | | | | GOATFISH | | | | HALIMEDA | | | | STEGASTES | | | | URCHINS | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 0.10 | U | U | | ***1.1*** | | | | 0.19 | U | U | | ***2.8*** | | | | 0.11 | U | U | |
| PCB-18 (2,2',5) | ***0.30*** | | ***J*** | ***F*** | 0.28 | U | U | | 0.24 | U | U | | ***0.91*** | | | | ***0.32*** | | ***J*** | ***F*** |
| PCB-28 (2,4,4') | 0.13 | U | U | | 0.27 | U | U | | 0.23 | U | U | | 0.27 | U | U | | 0.14 | U | U | |
| PCB-52 (2,2',5,5') | 0.24 | NJ | U | + | ***0.23*** | ***J*** | ***J*** | ***C*** | 0.42 | U | UJ | C | 0.49 | U | UJ | C | 0.26 | U | U | |
| PCB-44 (2,2',3,5') | 0.11 | U | U | | 0.23 | U | U | | 0.19 | U | U | | 0.23 | U | U | | 0.12 | U | U | |
| PCB-66 (2,3',4,4') | 0.18 | U | U | | 0.38 | U | U | | 0.33 | U | U | | 0.38 | U | U | | 0.20 | U | U | |
| PCB-101 (2,2',3,5,5') | 0.58 | NJ | U | + | ***0.94*** | ***J*** | ***J*** | ***C*** | 1.0 | U | U | | ***1.3*** | | ***J*** | ***C*** | 0.63 | NJ | U | + |
| PCB-77 (3,3',4,4') | 0.24 | U | U | | 0.50 | U | U | | 0.43 | U | U | | 0.50 | U | U | | 0.26 | U | U | |
| PCB-118 (2,3',4,4',5) | 0.65 | U | U | | ***2.5*** | | | | 1.2 | U | U | | 1.3 | U | U | | 0.70 | U | U | |
| PCB-153 (2,2',4,4',5,5') | ***0.09*** | ***J*** | ***J*** | | ***13.0*** | | | | 1.8 | J | U | + | ***8.1*** | | | | 1.1 | J | U | + |
| PCB-105 (2,3,3',4,4') | 0.13 | U | U | | ***0.53*** | | | | 0.24 | U | U | | ***0.37*** | | | | 0.15 | NJ | U | + |
| PCB-138 (2,2',3,4,4',5') | 0.64 | J | U | + | ***7.0*** | | | | 2.3 | U | U | | ***4.5*** | | | | 1.4 | J | U | + |
| PCB-126 (3,3',4,4',5) | 0.20 | U | U | | 0.41 | U | U | | 0.35 | U | UJ | C | 0.41 | U | U | | 0.22 | NJ | U | + |
| PCB-187 (2,2',3,4',5,5',6) | 0.46 | U | U | | ***7.0*** | | | | ***0.26*** | ***J*** | ***J*** | | ***7.0*** | | | | ***0.47*** | ***J*** | ***J*** | |
| PCB-128 (2,2',3,3',4,4') | 0.32 | U | U | | ***0.68*** | | | | 0.57 | U | U | | 0.66 | J | U | + | 0.35 | U | U | |
| PCB-180 (2,2',3,4,4',5,5') | ***0.60*** | | | | ***11.0*** | | | | ***2.8*** | | | | ***8.3*** | | | | ***3.3*** | | | |
| PCB-170 (2,2',3,3',4,4',5) | 0.16 | U | U | | ***4.8*** | | | | ***0.38*** | | | | ***2.8*** | | | | 0.17 | U | U | |
| PCB-195 (2,2',3,3',4,4',5,6) | 0.22 | U | U | | ***1.5*** | | | | 0.40 | U | U | | ***0.94*** | | | | 0.24 | U | U | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 0.19 | U | U | | ***1.2*** | | | | 0.33 | U | U | | ***1.1*** | | | | 0.20 | U | U | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.10 | U | U | | ***0.34*** | | | | 0.18 | NJ | U | + | ***0.15*** | ***J*** | ***J*** | | 0.11 | U | U | |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 0.14 | U | UJ | C | ***0.17*** | ***J*** | ***J*** | | 0.26 | N | U | + | ***0.54*** | | | | 0.16 | NJ | UJ | C,+ |
| 2,4'-DDE | 0.23 | U | U | | 0.49 | U | U | | 0.42 | U | U | | 0.49 | U | U | | 0.25 | U | U | |
| ENDOSULFAN I | 0.31 | U | U | | 0.65 | U | U | | 0.55 | U | U | | 0.64 | U | U | | 0.34 | NJ | U | + |
| HEXACHLOROBENZENE | 0.10 | J | U | + | ***0.60*** | | | | ***1.9*** | | | | ***0.54*** | | | | 0.10 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC218 | | | | MC219 | | | | MC220 | | | | MC221 | | | | MC222 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT11S01 | | | | M01MT11S04 | | | | M01MT12S06 | | | | M01MT12S02 | | | | M01MT12S01 | | | |
| Date Sampled | 9/19/96 | | | | 9/19/96 | | | | 9/19/96 | | | | 9/19/96 | | | | 9/19/96 | | | |
| Depth | URCHINS | | | | GOATFISH | | | | HALIMEDA | | | | STEGASTES | | | | URCHINS | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.12 | U | U | | ***0.12*** | ***J*** | ***J*** | | 0.21 | U | U | | 0.24 | NJ | U | + | 0.13 | U | U | |
| GAMMA-BHC (LINDANE) | 0.12 | J | U | + | 0.25 | NJ | U | + | 0.21 | U | U | | ***1.6*** | | | | ***0.08*** | ***J*** | ***J*** | ***F*** |
| DELTA-BHC | 0.09 | U | UJ | C | 0.19 | N | UJ | C,+ | 0.17 | U | UJ | C | 0.19 | N | UJ | C,+ | 0.10 | NJ | UJ | C,+ |
| HEPTACHLOR | 0.08 | U | U | | 0.16 | U | U | | ***1.5*** | | | | ***0.20*** | | | | 0.09 | U | U | |
| ALDRIN | 0.42 | U | U | | 0.88 | U | U | | 0.75 | U | U | | 0.87 | U | U | | 0.46 | U | U | |
| GAMMA-CHLORDANE | 0.41 | U | U | | 0.86 | U | U | | 0.74 | U | U | | 0.86 | U | U | | 0.45 | U | U | |
| ALPHA-CHLORDANE | 0.23 | U | U | | 0.49 | J | U | + | 0.42 | U | U | | 0.49 | U | U | | 0.26 | N | U | + |
| TRANS-NONACHLOR | 0.22 | U | U | | ***0.52*** | | | | 0.39 | U | U | | ***0.91*** | | | | 0.24 | U | U | |
| HEPTACHLOR EPOXIDE | 0.14 | U | U | | 0.30 | U | U | | 0.26 | U | U | | 0.30 | U | U | | 0.16 | U | U | |
| DIELDRIN | 0.15 | U | U | | 0.32 | U | U | | 0.27 | U | U | | 0.32 | N | U | + | 0.17 | U | U | |
| 4,4'-DDE | 0.99 | J | U | + | ***9.9*** | | | | 1.8 | U | U | | ***2.1*** | | | | 1.1 | J | U | + |
| 2,4'-DDD | 0.26 | U | U | | ***0.45*** | ***J*** | ***J*** | | 0.45 | N | U | + | ***1.4*** | | | | ***0.20*** | ***J*** | ***J*** | |
| ENDRIN | 0.09 | U | U | | 0.18 | U | U | | 0.15 | U | U | | ***0.32*** | | | | ***0.88*** | | | |
| ENDRIN ALDEHYDE | 0.21 | U | U | | 0.44 | U | U | | 0.38 | U | U | | 0.44 | U | U | | 0.23 | U | U | |
| 4,4'-DDD | 0.63 | U | U | | ***2.0*** | | | | 1.1 | U | U | | 1.3 | U | U | | 0.68 | U | U | |
| 2,4'-DDT | 0.15 | U | U | | 0.31 | U | U | | 0.27 | U | U | | ***1.0*** | | | | 0.16 | U | U | |
| ENDOSULFAN II | 0.31 | U | U | | 0.65 | U | U | | 0.55 | N | U | + | 0.64 | U | U | | 0.34 | U | U | |
| ENDOSULFAN SULFATE | 0.31 | U | U | | 0.65 | U | U | | 0.55 | U | U | | 0.64 | U | U | | 0.34 | U | U | |
| 4,4'-DDT | 0.23 | U | U | | ***3.4*** | | | | 0.41 | U | U | | 0.47 | U | U | | 0.25 | U | U | |
| ENDRIN KETONE | 0.21 | U | U | | 0.44 | U | U | | 0.38 | U | U | | 0.44 | U | U | | 0.23 | U | U | |
| METHOXYCHLOR | 0.18 | U | U | | 0.37 | U | U | | 0.32 | U | U | | 0.37 | U | U | | 0.20 | U | U | |
| MIREX | ***0.20*** | | | | ***0.40*** | | | | ***2.9*** | | | | ***0.49*** | | | | 0.16 | U | U | |
| CIS-NONACHLOR | | | | | | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC223 | | | | MC223DL | | | | MC224 | | | | MC224DL | | | | MC225 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT02S01 | | | | M01MT02S01 | | | | M01MT02S02 | | | | M01MT02S02 | | | | M01MT02S06 | | | |
| Date Sampled | 9/20/96 | | | | 9/20/96 | | | | 9/20/96 | | | | 9/20/96 | | | | 9/20/96 | | | |
| Depth | URCHINS | | | | DILUTION | | | | STEGASTES | | | | DILUTION | | | | HALIMEDA | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | ***0.17*** | | ***J*** | ***F*** | 0.53 | UR | R | D | ***0.96*** | | | | 52.0 | UR | R | D | 0.19 | N | U | + |
| PCB-18 (2,2',5) | ***0.67*** | | | | 0.69 | UR | R | D | ***4.8*** | | ***J*** | ***C*** | 67.0 | UR | R | D | 0.25 | U | U | |
| PCB-28 (2,4,4') | ***1.1*** | | | | 0.31 | JR | R | D | ***15.0*** | | | | 23.0 | JR | R | D | 0.24 | U | U | |
| PCB-52 (2,2',5,5') | ***2.8*** | | | | 2.7 | R | R | D | 41.0 | E | R | D | ***120*** | ***D*** | | | ***9.7*** | | ***J*** | ***C*** |
| PCB-44 (2,2',3,5') | 0.11 | U | U | | 1.4 | R | R | D | ***16.0*** | | | | 24.0 | JR | R | D | 0.20 | U | U | |
| PCB-66 (2,3',4,4') | ***6.8*** | | | | 0.93 | UR | R | D | 34.0 | E | R | D | ***64.0*** | ***DJ*** | ***J*** | | 0.33 | U | U | |
| PCB-101 (2,2',3,5,5') | ***12.0*** | | | | 14.0 | R | R | D | 180 | E | R | D | ***800*** | ***D*** | ***J*** | ***C*** | 1.1 | N | U | + |
| PCB-77 (3,3',4,4') | 0.25 | N | U | + | 1.2 | UR | R | D | 0.24 | U | U | | 120 | UR | R | D | 0.44 | U | U | |
| PCB-118 (2,3',4,4',5) | ***8.7*** | | | | 9.3 | R | R | D | 180 | E | R | D | ***600*** | ***D*** | | | ***11.0*** | | | |
| PCB-153 (2,2',4,4',5,5') | 43.0 | E | R | D | ***54.0*** | ***D*** | | | 420 | E | R | D | ***5,700*** | ***D*** | | | 110 | E | R | D |
| PCB-105 (2,3,3',4,4') | ***2.4*** | | | | 0.69 | UR | R | D | 0.13 | U | U | | 160 | D | R | D | ***2.5*** | | | |
| PCB-138 (2,2',3,4,4',5') | 39.0 | E | R | D | ***41.0*** | ***D*** | | | 240 | E | R | D | ***3,500*** | ***D*** | | | 88.0 | E | R | D |
| PCB-126 (3,3',4,4',5) | 0.20 | N | U | + | 1.0 | UR | R | D | 0.20 | U | U | | 98.0 | UR | R | D | ***23.0*** | | ***J*** | ***C*** |
| PCB-187 (2,2',3,4',5,5',6) | 35.0 | E | R | D | ***40.0*** | ***D*** | | | 250 | E | R | D | ***3,700*** | ***D*** | | | 65.0 | E | R | D |
| PCB-128 (2,2',3,3',4,4') | ***3.2*** | | | | 2.9 | R | R | D | 120 | E | R | D | ***210*** | ***D*** | | | ***7.1*** | | | |
| PCB-180 (2,2',3,4,4',5,5') | ***14.0*** | | | | 13.0 | R | R | D | 200 | E | R | D | ***6,200*** | ***D*** | | | 92.0 | E | R | D |
| PCB-170 (2,2',3,3',4,4',5) | ***7.0*** | | | | 6.8 | R | R | D | 130 | E | R | D | ***2,600*** | ***D*** | | | 62.0 | E | R | D |
| PCB-195 (2,2',3,3',4,4',5,6) | ***1.9*** | | | | 1.7 | R | R | D | 84.0 | E | R | D | ***800*** | ***D*** | | | ***16.0*** | | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | ***0.65*** | | | | 0.74 | JR | R | D | 69.0 | E | R | D | ***590*** | ***D*** | | | ***7.9*** | | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.10 | J | U | + | 0.03 | JR | R | D | ***8.1*** | | | | 15.0 | JR | R | D | ***0.21*** | | | |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | ***0.37*** | | ***J*** | ***C*** | 0.16 | JR | R | D | ***0.13*** | ***J*** | ***J*** | | 72.0 | UR | R | D | 0.26 | N | U | + |
| 2,4'-DDE | 0.24 | U | U | | 0.56 | JR | R | D | ***13.0*** | | | | 120 | UR | R | D | 0.43 | N | U | + |
| ENDOSULFAN I | 0.32 | U | U | | 1.6 | UR | R | D | 0.31 | U | U | | 150 | UR | R | D | 0.57 | U | U | |
| HEXACHLOROBENZENE | 0.10 | U | U | | 0.49 | UR | R | D | ***0.54*** | | | | 48.0 | UR | R | D | 0.18 | N | U | + |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

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# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC223 | | | | MC223DL | | | | MC224 | | | | MC224DL | | | | MC225 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT02S01 | | | | M01MT02S01 | | | | M01MT02S02 | | | | M01MT02S02 | | | | M01MT02S06 | | | |
| Date Sampled | 9/20/96 | | | | 9/20/96 | | | | 9/20/96 | | | | 9/20/96 | | | | 9/20/96 | | | |
| Depth | URCHINS | | | | DILUTION | | | | STEGASTES | | | | DILUTION | | | | HALIMEDA | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.12 | U | U | | 0.59 | UR | R | D | 0.12 | N | U | + | 58.0 | UR | R | D | 0.21 | N | U | + |
| GAMMA-BHC (LINDANE) | ***0.06*** | ***J*** | ***J*** | ***F*** | 0.61 | UR | R | D | ***0.37*** | | | | 59.0 | UR | R | D | ***1.5*** | | | |
| DELTA-BHC | 0.10 | U | UJ | C | 0.48 | UR | R | D | 0.10 | N | UJ | +,C | 47.0 | UR | R | D | 0.17 | U | UJ | C |
| HEPTACHLOR | 0.08 | N | U | + | 0.40 | UR | R | D | 0.08 | U | U | | 39.0 | UR | R | D | 0.14 | U | U | |
| ALDRIN | 0.43 | U | U | | 2.2 | UR | R | D | 0.42 | U | U | | 210 | UR | R | D | 0.77 | U | U | |
| GAMMA-CHLORDANE | 0.42 | U | U | | 2.1 | UR | R | D | ***0.37*** | ***J*** | ***J*** | | 210 | UR | R | D | 0.76 | N | U | + |
| ALPHA-CHLORDANE | 0.24 | U | U | | 1.2 | UR | R | D | ***2.6*** | | | | 120 | UR | R | D | 0.43 | U | U | |
| TRANS-NONACHLOR | 0.22 | NJ | U | + | 1.1 | UR | R | D | ***7.0*** | | | | 110 | UR | R | D | 0.40 | NJ | U | + |
| HEPTACHLOR EPOXIDE | 0.15 | U | U | | 0.74 | UR | R | D | 0.14 | U | U | | 72.0 | UR | R | D | 0.26 | U | U | |
| DIELDRIN | 0.16 | U | U | | 0.79 | UR | R | D | 0.15 | N | U | + | 76.0 | UR | R | D | 0.28 | U | U | |
| 4,4'-DDE | ***5.0*** | | | | 4.1 | JR | R | D | 140 | E | R | D | ***170*** | ***DJ*** | ***J*** | ****11*** | ***5.3*** | | | |
| 2,4'-DDD | ***2.4*** | | | | 1.3 | UR | R | D | ***26.0*** | | | | 54.0 | JR | R | D | ***4.0*** | | | |
| ENDRIN | 0.09 | U | U | | 0.44 | UR | R | D | 0.09 | U | U | | 42.0 | UR | R | D | 0.16 | U | U | |
| ENDRIN ALDEHYDE | 0.22 | U | U | | 1.1 | UR | R | D | 0.21 | U | U | | 110 | UR | R | D | 0.39 | U | U | |
| 4,4'-DDD | 0.64 | U | U | | 0.83 | JR | R | D | 34.0 | E | R | D | ***24.0*** | ***DJ*** | ***J*** | ****11*** | ***3.0*** | | | |
| 2,4'-DDT | ***1.5*** | | | | 1.6 | NR | R | D | 37.0 | E | R | D | ***83.0*** | ***NR*** | | | 0.27 | N | U | + |
| ENDOSULFAN II | 0.32 | U | U | | 1.6 | UR | R | D | 0.31 | U | U | | 150 | UR | R | D | 0.56 | N | U | + |
| ENDOSULFAN SULFATE | 0.32 | U | U | | 1.6 | UR | R | D | 0.31 | U | U | | 150 | UR | R | D | 0.57 | U | U | |
| 4,4'-DDT | ***0.97*** | | | | 0.77 | JR | R | D | ***15.0*** | | | | 110 | UR | R | D | 0.42 | U | U | |
| ENDRIN KETONE | 0.22 | U | U | | 1.1 | UR | R | D | 0.21 | U | U | | 110 | UR | R | D | 0.39 | U | U | |
| METHOXYCHLOR | 0.18 | U | U | | 0.92 | UR | R | D | 0.18 | U | U | | 89.0 | UR | R | D | 0.33 | U | U | |
| MIREX | ***0.25*** | | | | 0.20 | JR | R | D | ***8.2*** | | | | 72.0 | UR | R | D | ***0.80*** | | | |
| CIS-NONACHLOR | | | | | | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

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# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC225DL | | | | MC226 | | | | MC227 | | | | MC227DL | | | | MC228 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT02S06 | | | | M01MT08S01 | | | | M01MT08S02 | | | | M01MT08S02 | | | | M01MT08S06 | | | |
| Date Sampled | 9/20/96 | | | | 9/20/96 | | | | 9/20/96 | | | | 9/20/96 | | | | 9/20/96 | | | |
| Depth | DILUTION | | | | URCHINS | | | | STEGASTES | | | | DILUTION | | | | HALIMEDA | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 7.3 | R | R | D | 0.10 | U | U | | ***2.0*** | | | | 1.5 | R | R | D | 0.19 | U | U | |
| PCB-18 (2,2',5) | 1.2 | UR | R | D | 0.13 | N | U | + | ***0.68*** | | | | 0.87 | R | R | D | 0.25 | N | U | + |
| PCB-28 (2,4,4') | 1.2 | UR | R | D | 0.13 | U | U | | ***1.1*** | | | | 1.1 | R | R | D | 0.24 | U | U | |
| PCB-52 (2,2',5,5') | 17.0 | R | R | D | 0.23 | N | U | + | ***0.87*** | | ***J*** | ***C*** | 1.0 | R | R | D | ***1.4*** | | ***J*** | ***C*** |
| PCB-44 (2,2',3,5') | 0.49 | JR | R | D | 0.11 | U | U | | 0.22 | U | U | | 0.44 | UR | R | D | 0.20 | U | U | |
| PCB-66 (2,3',4,4') | 1.7 | UR | R | D | 0.18 | U | U | | ***1.0*** | | | | 0.74 | UR | R | D | 0.34 | U | U | |
| PCB-101 (2,2',3,5,5') | 43.0 | R | R | D | 0.56 | J | U | + | ***7.0*** | | ***J*** | ***C*** | 7.4 | R | R | D | 1.0 | U | U | |
| PCB-77 (3,3',4,4') | 64.0 | R | R | D | ***0.30*** | | | | 0.49 | U | U | | 0.98 | UR | R | D | 0.45 | U | U | |
| PCB-118 (2,3',4,4',5) | 16.0 | R | R | D | 0.63 | U | U | | ***6.8*** | | | | 11.0 | R | R | D | 1.2 | U | U | |
| PCB-153 (2,2',4,4',5,5') | ***180*** | ***D*** | | | 0.99 | J | U | + | 50.0 | E | R | D | ***56.0*** | ***D*** | | | 1.9 | J | U | + |
| PCB-105 (2,3,3',4,4') | 1.2 | UR | R | D | 0.13 | U | U | | ***2.2*** | | | | 3.5 | R | R | D | 0.25 | U | U | |
| PCB-138 (2,2',3,4,4',5') | ***130*** | ***D*** | | | 1.2 | J | U | + | ***28.0*** | | | | 29.0 | R | R | D | ***0.86*** | ***J*** | ***J*** | |
| PCB-126 (3,3',4,4',5) | 30.0 | R | R | D | 0.19 | U | U | | 0.40 | U | U | | 0.80 | UR | R | D | 0.37 | U | UJ | C |
| PCB-187 (2,2',3,4',5,5',6) | ***99.0*** | ***D*** | | | ***0.57*** | | | | ***34.0*** | | | | 37.0 | R | R | D | ***0.83*** | ***J*** | ***J*** | |
| PCB-128 (2,2',3,3',4,4') | 8.5 | R | R | D | 0.31 | U | U | | ***1.9*** | | | | 2.0 | R | R | D | 0.59 | U | U | |
| PCB-180 (2,2',3,4,4',5,5') | ***130*** | ***D*** | | | ***2.5*** | | | | 51.0 | E | R | D | ***54.0*** | ***D*** | | | ***5.9*** | | | |
| PCB-170 (2,2',3,3',4,4',5) | ***74.0*** | ***D*** | | | 0.15 | U | U | | ***20.0*** | | | | 21.0 | R | R | D | ***0.53*** | | | |
| PCB-195 (2,2',3,3',4,4',5,6) | 19.0 | R | R | D | 0.22 | U | U | | ***5.9*** | | | | 5.4 | R | R | D | 0.42 | U | U | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 8.8 | R | R | D | 0.18 | U | U | | ***5.1*** | | | | 5.5 | R | R | D | 0.35 | NJ | U | + |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.25 | JR | R | D | 0.10 | U | U | | ***0.55*** | | | | 0.53 | R | R | D | 0.19 | U | U | |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 2.0 | R | R | D | 0.14 | U | UJ | C,+ | ***0.43*** | | | | 0.27 | JR | R | D | 0.27 | N | U | + |
| 2,4'-DDE | 1.5 | JR | R | D | 0.23 | U | U | + | ***0.24*** | ***J*** | ***J*** | | 0.95 | UR | R | D | 0.43 | U | U | |
| ENDOSULFAN I | 2.8 | UR | R | D | 0.30 | U | U | | 0.63 | U | U | | 1.3 | UR | R | D | 0.57 | U | U | |
| HEXACHLOROBENZENE | 4.5 | R | R | D | 0.09 | U | U | + | ***0.51*** | | | | 0.48 | R | R | D | 0.18 | N | U | + |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

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# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC225DL | | | | MC226 | | | | MC227 | | | | MC227DL | | | | MC228 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT02S06 | | | | M01MT08S01 | | | | M01MT08S02 | | | | M01MT08S02 | | | | M01MT08S06 | | | |
| Date Sampled | 9/20/96 | | | | 9/20/96 | | | | 9/20/96 | | | | 9/20/96 | | | | 9/20/96 | | | |
| Depth | DILUTION | | | | URCHINS | | | | STEGASTES | | | | DILUTION | | | | HALIMEDA | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.83 | JR | R | D | 0.11 | U | U | + | 0.23 | NJ | U | + | 0.30 | JR | R | D | 0.21 | NJ | U | + |
| GAMMA-BHC (LINDANE) | 1.5 | R | R | D | 0.12 | U | U | + | ***1.3*** | | | | 0.73 | R | R | D | 0.22 | U | U | |
| DELTA-BHC | 0.86 | UR | R | D | 0.09 | U | UJ | C,+ | 0.19 | N | UJ | C,+ | 0.79 | R | R | D | ***0.15*** | ***J*** | ***J*** | ***C*** |
| HEPTACHLOR | 0.72 | UR | R | D | 0.08 | U | U | | 0.16 | U | U | | 0.32 | UR | R | D | 0.15 | U | U | |
| ALDRIN | 3.8 | UR | R | D | 0.41 | U | U | | 0.85 | U | U | | 1.7 | UR | R | D | 0.78 | U | U | |
| GAMMA-CHLORDANE | 6.8 | R | R | D | 0.40 | U | U | | 0.84 | U | U | | 1.7 | UR | R | D | 0.76 | U | U | |
| ALPHA-CHLORDANE | 2.1 | UR | R | D | 0.23 | U | U | + | ***0.37*** | ***J*** | ***J*** | | 0.31 | JR | R | D | 0.43 | U | U | |
| TRANS-NONACHLOR | 2.0 | UR | R | D | 0.21 | U | U | | ***1.9*** | | | | 1.8 | R | R | D | 0.40 | NJ | U | + |
| HEPTACHLOR EPOXIDE | 1.3 | UR | R | D | 0.14 | U | U | | 0.29 | U | U | | 0.58 | UR | R | D | 0.27 | N | U | + |
| DIELDRIN | 1.4 | UR | R | D | 0.15 | U | U | | 0.31 | N | U | + | 0.62 | UR | R | D | 0.28 | U | U | |
| 4,4'-DDE | 6.2 | JR | R | D | 0.96 | U | U | + | ***18.0*** | | | | 14.0 | R | R | D | ***0.32*** | ***J*** | ***J*** | |
| 2,4'-DDD | 2.3 | UR | R | D | ***0.22*** | ***J*** | ***J*** | | ***3.0*** | | | | 3.3 | R | R | D | 0.48 | N | U | + |
| ENDRIN | 0.78 | UR | R | D | 0.08 | U | U | + | 0.17 | U | U | | 0.35 | UR | R | D | 0.16 | U | U | |
| ENDRIN ALDEHYDE | 1.9 | UR | R | D | 0.20 | U | U | | 0.43 | U | U | | 0.86 | UR | R | D | 0.39 | U | U | |
| 4,4'-DDD | 4.0 | JR | R | D | 0.62 | U | U | + | ***1.5*** | | | | 1.5 | JR | R | D | 1.2 | U | U | |
| 2,4'-DDT | 4.8 | R | R | D | 0.14 | U | U | | 0.30 | N | U | + | 2.1 | R | R | D | 0.28 | U | U | |
| ENDOSULFAN II | 2.8 | UR | R | D | 0.30 | U | U | | 0.63 | U | U | | 1.3 | UR | R | D | 0.57 | N | U | + |
| ENDOSULFAN SULFATE | 2.8 | UR | R | D | 0.30 | U | U | | 0.63 | U | U | | 1.3 | UR | R | D | 0.57 | U | U | |
| 4,4'-DDT | 0.89 | JR | R | D | 0.22 | U | U | | ***2.7*** | | | | 2.8 | R | R | D | 0.42 | U | U | |
| ENDRIN KETONE | 1.9 | UR | R | D | 0.20 | U | U | | 0.43 | U | U | | 0.86 | UR | R | D | 0.39 | U | U | |
| METHOXYCHLOR | 1.6 | UR | R | D | 0.17 | U | U | | 0.36 | U | U | | 0.73 | UR | R | D | 0.33 | U | U | |
| MIREX | 0.98 | JR | R | D | ***0.76*** | | | | ***1.0*** | | | | 0.88 | R | R | D | ***5.6*** | | | |
| CIS-NONACHLOR | | | | | | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC229 | | | | MC230 | | | | MC230DL | | | | MC231 | | | | MC231DL | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT08S07 | | | | M01MT01S01 | | | | M01MT01S01 | | | | M01MT01S02 | | | | M01MT01S02 | | | |
| Date Sampled | 9/20/96 | | | | 9/20/96 | | | | 9/20/96 | | | | 9/20/96 | | | | 9/20/96 | | | |
| Depth | CUCUMBER | | | | URCHINS | | | | DILUTION | | | | STEGASTES | | | | DILUTION | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 0.36 | U | U | | ***0.09*** | ***J*** | ***J*** | ***F*** | 0.49 | UR | R | D | ***1.5*** | | | | 51.0 | UR | R | D |
| PCB-18 (2,2',5) | 0.48 | N | U | + | 0.13 | N | U | + | 0.64 | UR | R | D | ***7.8*** | | ***J*** | ***C*** | 66.0 | UR | R | D |
| PCB-28 (2,4,4') | 0.45 | U | U | | ***1.0*** | | | | 0.35 | JR | R | D | ***21.0*** | | | | 42.0 | JR | R | D |
| PCB-52 (2,2',5,5') | 0.83 | N | U | + | ***2.1*** | | | | 2.1 | R | R | D | 97.0 | E | R | D | ***310*** | ***D*** | | |
| PCB-44 (2,2',3,5') | 0.38 | U | U | | ***0.39*** | | | | 0.26 | JR | R | D | 31.0 | E | R | D | ***62.0*** | ***D*** | | |
| PCB-66 (2,3',4,4') | 0.64 | U | U | | ***7.3*** | | | | 0.86 | UR | R | D | 190 | E | R | D | ***180*** | ***D*** | | |
| PCB-101 (2,2',3,5,5') | ***1.7*** | ***J*** | ***J*** | | ***15.0*** | | | | 18.0 | R | R | D | 240 | E | R | D | ***2,000*** | ***D*** | | |
| PCB-77 (3,3',4,4') | 0.84 | U | U | | 0.23 | N | U | + | 1.1 | UR | R | D | 0.24 | U | U | | 120 | UR | R | D |
| PCB-118 (2,3',4,4',5) | 2.3 | U | U | | ***6.6*** | | | | 7.5 | R | R | D | 470 | E | R | D | ***1,200*** | ***D*** | | |
| PCB-153 (2,2',4,4',5,5') | ***16.0*** | | | | 56.0 | E | R | D | ***67.0*** | ***D*** | | | 530 | E | R | D | ***9,400*** | ***D*** | | |
| PCB-105 (2,3,3',4,4') | ***1.6*** | | | | 0.13 | U | U | | 0.63 | UR | R | D | 100 | E | R | D | ***430*** | ***D*** | | |
| PCB-138 (2,2',3,4,4',5') | ***11.0*** | | | | 47.0 | E | R | D | ***51.0*** | ***D*** | | | 410 | E | R | D | ***6,300*** | ***D*** | | |
| PCB-126 (3,3',4,4',5) | 0.69 | U | UJ | C | 0.19 | N | U | + | 0.93 | UR | R | D | 0.19 | U | U | | 97.0 | UR | R | D |
| PCB-187 (2,2',3,4',5,5',6) | ***22.0*** | | | | 55.0 | E | R | D | ***64.0*** | ***D*** | | | 270 | E | R | D | ***5,800*** | ***D*** | | |
| PCB-128 (2,2',3,3',4,4') | ***0.88*** | ***J*** | ***J*** | | ***2.8*** | | | | 2.6 | R | R | D | 130 | E | R | D | ***440*** | ***D*** | | |
| PCB-180 (2,2',3,4,4',5,5') | ***46.0*** | | | | ***13.0*** | | | | 12.0 | R | R | D | 210 | E | R | D | ***9,800*** | ***D*** | | |
| PCB-170 (2,2',3,3',4,4',5) | ***0.83*** | | | | ***7.0*** | | | | 6.2 | R | R | D | 140 | E | R | D | ***4,300*** | ***D*** | | |
| PCB-195 (2,2',3,3',4,4',5,6) | ***2.1*** | | | | ***1.8*** | | | | 1.6 | R | R | D | 91.0 | E | R | D | ***1,300*** | ***D*** | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | ***0.77*** | | | | ***0.82*** | | | | 0.81 | JR | R | D | 80.0 | E | R | D | ***820*** | ***D*** | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.36 | N | U | + | ***0.05*** | ***J*** | ***J*** | | 0.04 | JR | R | D | ***11.0*** | | | | 20.0 | JR | R | D |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 0.50 | U | UJ | C | ***0.12*** | ***J*** | ***J*** | ***C*** | 0.68 | UR | R | D | ***0.37*** | | | | 71.0 | UR | R | D |
| 2,4'-DDE | 0.82 | U | U | | 0.22 | N | U | + | 1.8 | R | R | D | ***25.0*** | | | | 110 | UR | R | D |
| ENDOSULFAN I | 1.1 | U | U | | 0.29 | U | U | | 1.5 | UR | R | D | 0.30 | U | U | | 150 | UR | R | D |
| HEXACHLOROBENZENE | 0.33 | J | U | + | 0.09 | J | U | + | 0.45 | UR | R | D | ***0.75*** | | | | 47.0 | UR | R | D |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC229 | | | | MC230 | | | | MC230DL | | | | MC231 | | | | MC231DL | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT08S07 | | | | M01MT01S01 | | | | M01MT01S01 | | | | M01MT01S02 | | | | M01MT01S02 | | | |
| Date Sampled | 9/20/96 | | | | 9/20/96 | | | | 9/20/96 | | | | 9/20/96 | | | | 9/20/96 | | | |
| Depth | CUCUMBER | | | | URCHINS | | | | DILUTION | | | | STEGASTES | | | | DILUTION | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.40 | U | U | | 0.11 | U | U | | 0.55 | UR | R | D | 0.11 | N | U | + | 57.0 | UR | R | D |
| GAMMA-BHC (LINDANE) | 0.42 | U | U | | 0.11 | N | U | + | 0.56 | UR | R | D | ***1.1*** | | | | 58.0 | UR | R | D |
| DELTA-BHC | 0.33 | U | UJ | C | 0.09 | U | UJ | C | 0.45 | UR | R | D | 0.09 | N | UJ | +,C | 46.0 | UR | R | D |
| HEPTACHLOR | 0.27 | U | U | | ***0.27*** | | | | 0.37 | UR | R | D | 0.08 | U | U | | 39.0 | UR | R | D |
| ALDRIN | 1.5 | U | U | | 0.40 | U | U | | 2.0 | UR | R | D | 0.41 | U | U | | 210 | UR | R | D |
| GAMMA-CHLORDANE | 1.4 | U | U | | 0.39 | U | U | | 2.0 | UR | R | D | ***0.81*** | | | | 200 | UR | R | D |
| ALPHA-CHLORDANE | 0.82 | U | U | | 0.22 | U | U | | 1.1 | UR | R | D | ***6.1*** | | | | 110 | UR | R | D |
| TRANS-NONACHLOR | ***0.27*** | ***J*** | ***J*** | | 0.21 | N | U | + | 1.0 | UR | R | D | ***14.0*** | | | | 110 | UR | R | D |
| HEPTACHLOR EPOXIDE | 0.50 | U | U | | 0.14 | U | U | | 0.68 | UR | R | D | 0.14 | U | U | | 71.0 | UR | R | D |
| DIELDRIN | 0.54 | U | U | | 0.14 | U | U | | 0.72 | UR | R | D | 0.15 | N | U | + | 75.0 | UR | R | D |
| 4,4'-DDE | ***2.0*** | ***J*** | ***J*** | | ***11.0*** | | | | 7.9 | R | R | D | 190 | E | R | D | ***320*** | ***DJ*** | ***J*** | ****11*** |
| 2,4'-DDD | ***0.67*** | ***J*** | ***J*** | | ***6.7*** | | | | 7.4 | R | R | D | 62.0 | E | R | D | ***130*** | ***D*** | | |
| ENDRIN | 0.30 | U | U | | 0.08 | N | U | + | 0.40 | UR | R | D | 0.08 | U | U | | 42.0 | UR | R | D |
| ENDRIN ALDEHYDE | 0.74 | U | U | | 0.20 | U | U | | 1.0 | UR | R | D | 0.21 | U | U | | 100 | UR | R | D |
| 4,4'-DDD | 2.2 | U | U | | ***2.1*** | | | | 2.1 | JR | R | D | 84.0 | E | R | D | ***62.0*** | ***DJ*** | ***J*** | ****11*** |
| 2,4'-DDT | 0.52 | U | U | | ***1.9*** | | | | 2.2 | R | R | D | ***11.0*** | | | | 170 | NR | R | D |
| ENDOSULFAN II | 1.1 | U | U | | 0.29 | U | U | | 1.5 | UR | R | D | 0.30 | U | U | | 150 | UR | R | D |
| ENDOSULFAN SULFATE | 1.1 | U | U | | 0.29 | U | U | | 1.5 | UR | R | D | 0.30 | U | U | | 150 | UR | R | D |
| 4,4'-DDT | ***0.59*** | ***J*** | ***J*** | | ***1.2*** | | | | 0.96 | JR | R | D | 0.15 | N | U | + | 110 | UR | R | D |
| ENDRIN KETONE | 0.74 | U | U | | 0.20 | U | U | | 1.0 | UR | R | D | 0.21 | U | U | | 100 | UR | R | D |
| METHOXYCHLOR | 0.63 | U | UJ | C | 0.17 | U | U | | 0.85 | UR | R | D | 0.18 | U | U | | 88.0 | UR | R | D |
| MIREX | ***0.88*** | | | | ***0.11*** | ***J*** | ***J*** | | 0.18 | JR | R | D | ***3.8*** | | | | 5.7 | JR | R | D |
| CIS-NONACHLOR | | | | | | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC232 | | | | MC232DL | | | | MC233 | | | | MC233DL | | | | MC234 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT01S04 | | | | M01MT01S04 | | | | M01MT01S05 | | | | M01MT01S05 | | | | M01MT01S06 | | | |
| Date Sampled | 9/20/96 | | | | 9/20/96 | | | | 9/20/96 | | | | 9/20/96 | | | | 9/20/96 | | | |
| Depth | GOATFISH | | | | DILUTION | | | | DICTYOTA | | | | DILUTION | | | | HALIMEDA | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | ***2.2*** | | ***J*** | ***S*** | 34.0 | UR | R | D | ***1.1*** | | | | 3.3 | R | R | D | 0.22 | N | U | + |
| PCB-18 (2,2',5) | ***14.0*** | | ***J*** | ***C,S*** | 22.0 | JR | R | D | ***5.0*** | | | | 6.3 | R | R | D | 0.28 | U | U | |
| PCB-28 (2,4,4') | 30.0 | E | R | D | ***44.0*** | ***D*** | | | ***4.1*** | | | | 6.0 | R | R | D | 0.27 | U | U | |
| PCB-52 (2,2',5,5') | 53.0 | E | R | D | ***130*** | ***D*** | ***J*** | ***C*** | ***8.4*** | | ***J*** | ***C*** | 15.0 | R | R | D | ***11.0*** | | ***J*** | ***C*** |
| PCB-44 (2,2',3,5') | ***15.0*** | | ***J*** | ***S*** | 21.0 | JR | R | D | 0.12 | U | U | | 8.8 | R | R | D | 0.23 | U | U | |
| PCB-66 (2,3',4,4') | 56.0 | E | R | D | ***79.0*** | ***D*** | | | ***4.8*** | | | | 2.1 | UR | R | D | 0.38 | U | U | |
| PCB-101 (2,2',3,5,5') | 200 | E | R | D | ***630*** | ***D*** | | | 27.0 | E | R | D | ***46.0*** | ***D*** | | | 1.2 | U | U | |
| PCB-77 (3,3',4,4') | 0.40 | U | U | | 79.0 | UR | R | D | 0.28 | U | U | | 54.0 | R | R | D | 0.51 | U | U | |
| PCB-118 (2,3',4,4',5) | 170 | E | R | D | ***420*** | ***D*** | | | ***8.4*** | | | | 15.0 | R | R | D | ***4.2*** | | | |
| PCB-153 (2,2',4,4',5,5') | 380 | E | R | D | ***4,800*** | ***D*** | | | 120 | E | R | D | ***210*** | ***D*** | | | 52.0 | E | R | D |
| PCB-105 (2,3,3',4,4') | 60.0 | E | R | D | ***190*** | ***D*** | | | 0.15 | U | U | | 5.5 | R | R | D | ***1.8*** | | | |
| PCB-138 (2,2',3,4,4',5') | 300 | E | R | D | ***2,400*** | ***D*** | | | 78.0 | E | R | D | ***120*** | ***D*** | | | 36.0 | E | R | D |
| PCB-126 (3,3',4,4',5) | 0.32 | U | U | | 65.0 | UR | R | D | 0.23 | U | U | | 2.3 | UR | R | D | 0.42 | U | UJ | C |
| PCB-187 (2,2',3,4',5,5',6) | 290 | E | R | D | ***2,800*** | ***D*** | | | 88.0 | E | R | D | ***130*** | ***D*** | | | 36.0 | E | R | D |
| PCB-128 (2,2',3,3',4,4') | 82.0 | E | R | D | ***120*** | ***D*** | | | ***5.6*** | | | | 7.4 | R | R | D | ***2.9*** | | | |
| PCB-180 (2,2',3,4,4',5,5') | 250 | E | R | D | ***4,800*** | ***D*** | | | 83.0 | E | R | D | ***160*** | ***D*** | | | 33.0 | E | R | D |
| PCB-170 (2,2',3,3',4,4',5) | 150 | E | R | D | ***1,900*** | ***D*** | | | 72.0 | E | R | D | ***89.0*** | ***D*** | | | ***20.0*** | | | |
| PCB-195 (2,2',3,3',4,4',5,6) | 100 | E | R | D | ***600*** | ***D*** | | | ***16.0*** | | | | 20.0 | R | R | D | ***6.5*** | | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 83.0 | E | R | D | ***420*** | ***D*** | | | ***10.0*** | | | | 13.0 | R | R | D | ***2.8*** | | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | ***5.4*** | | ***J*** | ***S*** | 7.0 | JR | R | D | ***0.53*** | | | | 0.37 | JR | R | D | ***0.11*** | ***J*** | ***J*** | |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | ***0.19*** | ***J*** | ***J*** | ***S*** | 47.0 | UR | R | D | ***0.78*** | | | | 1.3 | JR | R | D | 0.30 | N | U | + |
| 2,4'-DDE | ***28.0*** | | ***J*** | ***S*** | 44.0 | JR | R | D | 0.27 | N | U | + | 4.0 | R | R | D | 0.49 | N | U | + |
| ENDOSULFAN I | 0.51 | U | U | | 100 | UR | R | D | 0.35 | U | U | | 3.5 | UR | R | D | 0.65 | U | U | |
| HEXACHLOROBENZENE | ***0.43*** | | ***J*** | ***S*** | 31.0 | UR | R | D | 0.11 | N | U | + | 1.1 | UR | R | D | ***7.6*** | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC232 | | | | MC232DL | | | | MC233 | | | | MC233DL | | | | MC234 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT01S04 | | | | M01MT01S04 | | | | M01MT01S05 | | | | M01MT01S05 | | | | M01MT01S06 | | | |
| Date Sampled | 9/20/96 | | | | 9/20/96 | | | | 9/20/96 | | | | 9/20/96 | | | | 9/20/96 | | | |
| Depth | GOATFISH | | | | DILUTION | | | | DICTYOTA | | | | DILUTION | | | | HALIMEDA | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | ***0.11*** | ***J*** | ***J*** | ***S*** | 38.0 | UR | R | D | ***0.50*** | | | | 1.3 | UR | R | D | 0.24 | U | U | |
| GAMMA-BHC (LINDANE) | ***0.26*** | | ***J*** | ***S*** | 39.0 | UR | R | D | ***1.3*** | | | | 1.2 | JR | R | D | ***1.4*** | | | |
| DELTA-BHC | 0.15 | N | UJ | C,+ | 31.0 | UR | R | D | ***0.46*** | | ***J*** | ***C*** | 1.1 | UR | R | D | 0.20 | N | UJ | C,+ |
| HEPTACHLOR | 0.13 | U | U | | 26.0 | UR | R | D | 0.09 | U | U | | 0.90 | UR | R | D | 0.17 | U | U | |
| ALDRIN | 0.69 | U | U | | 140 | UR | R | D | 0.48 | U | U | | 4.8 | UR | R | D | 0.88 | N | U | + |
| GAMMA-CHLORDANE | ***2.0*** | | ***J*** | ***S*** | 140 | UR | R | D | ***3.0*** | | | | 3.8 | JR | R | D | 0.87 | U | U | |
| ALPHA-CHLORDANE | ***6.8*** | | ***J*** | ***S*** | 77.0 | UR | R | D | ***3.3*** | | | | 4.9 | R | R | D | 0.49 | U | U | |
| TRANS-NONACHLOR | ***11.0*** | | ***J*** | ***S*** | 72.0 | UR | R | D | 0.25 | N | U | + | 3.3 | R | R | D | 0.46 | NJ | U | + |
| HEPTACHLOR EPOXIDE | 0.24 | U | U | | 47.0 | UR | R | D | 0.17 | NJ | U | + | 1.6 | UR | R | D | ***2.1*** | | | |
| DIELDRIN | 0.25 | N | U | + | 50.0 | UR | R | D | 38.0 | E | R | D | ***28.0*** | ***D*** | | | 0.32 | U | U | |
| 4,4'-DDE | 200 | E | R | D | ***230*** | ***DJ*** | ***J*** | ****11*** | 71.0 | E | R | D | ***60.0*** | ***D*** | | | ***5.6*** | | | |
| 2,4'-DDD | 62.0 | E | R | D | ***140*** | ***D*** | | | 35.0 | E | R | D | ***40.0*** | ***D*** | | | ***4.3*** | | | |
| ENDRIN | 0.14 | U | U | | 28.0 | UR | R | D | ***3.0*** | | | | 3.2 | R | R | D | 0.18 | U | U | |
| ENDRIN ALDEHYDE | 0.35 | U | U | | 70.0 | UR | R | D | 0.24 | U | U | | 2.4 | UR | R | D | 0.45 | U | U | |
| 4,4'-DDD | 65.0 | E | R | D | ***52.0*** | ***DJ*** | ***J*** | ****11*** | 75.0 | E | R | D | ***66.0*** | ***D*** | | | ***5.3*** | | | |
| 2,4'-DDT | ***3.9*** | | ***J*** | ***S*** | 150 | NR | R | D | ***12.0*** | | | | 1.7 | UR | R | D | 0.31 | N | U | + |
| ENDOSULFAN II | 0.51 | U | U | | 100 | UR | R | D | 0.35 | U | U | | 3.5 | UR | R | D | 0.65 | N | U | + |
| ENDOSULFAN SULFATE | 0.51 | U | U | | 100 | UR | R | D | 0.35 | U | U | | 3.5 | UR | R | D | 0.65 | U | U | |
| 4,4'-DDT | ***16.0*** | | ***J*** | ***S*** | 75.0 | UR | R | D | 53.0 | E | R | D | ***37.0*** | ***D*** | | | ***1.8*** | | | |
| ENDRIN KETONE | 0.35 | N | U | + | 70.0 | UR | R | D | 0.24 | U | U | | 2.4 | UR | R | D | 0.45 | U | U | |
| METHOXYCHLOR | 0.29 | U | U | | 59.0 | UR | R | D | ***0.13*** | ***J*** | ***J*** | | 0.30 | JR | R | D | 0.38 | U | U | |
| MIREX | ***4.4*** | | ***J*** | ***S*** | 48.0 | UR | R | D | ***0.84*** | | | | 1.7 | UR | R | D | ***1.5*** | | | |
| CIS-NONACHLOR | | | | | | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC234DL | | | | MC235 | | | | MC237 | | | | MC237RE | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT01S06 | | | | M01MT10S01 | | | | M01MT10S07 | | | | M01MT10S07 | | | | | | | |
| Date Sampled | 9/20/96 | | | | 9/23/96 | | | | 9/24/96 | | | | 9/24/96 | | | | | | | |
| Depth | DILUTION | | | | URCHINS | | | | CUCUMBER | | | | REANALYSES | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 9.2 | R | R | D | 0.11 | U | U | | 0.14 | J | R | D | 0.56 | U | U | | | | | |
| PCB-18 (2,2',5) | 0.57 | UR | R | D | ***0.98*** | | ***J*** | ***F*** | 0.36 | U | R | D | 0.72 | U | U | | | | | |
| PCB-28 (2,4,4') | 0.55 | UR | R | D | 0.14 | U | U | | 0.35 | U | R | D | 0.69 | U | U | | | | | |
| PCB-52 (2,2',5,5') | 13.0 | R | R | D | 0.26 | U | U | | 0.35 | NJ | R | D | 1.3 | U | U | | | | | |
| PCB-44 (2,2',3,5') | 0.46 | UR | R | D | 0.12 | U | U | | 0.29 | U | R | D | 0.58 | U | U | | | | | |
| PCB-66 (2,3',4,4') | 0.77 | UR | R | D | 0.20 | U | U | | 0.49 | U | R | D | 0.98 | U | U | | | | | |
| PCB-101 (2,2',3,5,5') | 14.0 | R | R | D | 0.61 | U | U | | 0.22 | NJ | R | D | 3.0 | U | UJ | C | | | | |
| PCB-77 (3,3',4,4') | 30.0 | R | R | D | 0.26 | NJ | U | + | 0.65 | U | R | D | 1.3 | U | U | | | | | |
| PCB-118 (2,3',4,4',5) | 5.9 | R | R | D | 0.71 | U | U | | 1.7 | U | R | D | 3.5 | U | U | | | | | |
| PCB-153 (2,2',4,4',5,5') | ***53.0*** | ***D*** | | | 1.1 | J | U | + | 1.6 | J | R | D | 2.7 | J | U | + | | | | |
| PCB-105 (2,3,3',4,4') | 0.56 | UR | R | D | 0.15 | U | U | | 0.69 | N | R | D | 0.72 | U | U | | | | | |
| PCB-138 (2,2',3,4,4',5') | ***36.0*** | ***D*** | | | 1.4 | J | U | + | 1.2 | J | R | D | 3.3 | J | U | + | | | | |
| PCB-126 (3,3',4,4',5) | 13.0 | R | R | D | 0.22 | U | U | | 0.53 | U | R | D | 1.1 | U | U | | | | | |
| PCB-187 (2,2',3,4',5,5',6) | ***38.0*** | ***D*** | | | ***0.46*** | ***J*** | ***J*** | | 2.0 | | R | D | ***2.4*** | ***J*** | ***J*** | | | | | |
| PCB-128 (2,2',3,3',4,4') | 2.7 | R | R | D | 0.35 | U | U | | 0.85 | U | R | D | 1.7 | U | U | | | | | |
| PCB-180 (2,2',3,4,4',5,5') | ***30.0*** | ***D*** | | | ***2.5*** | | | | 6.2 | | R | D | ***0.74*** | ***J*** | ***J*** | | | | | |
| PCB-170 (2,2',3,3',4,4',5) | 17.0 | R | R | D | 0.17 | J | U | + | 0.06 | J | R | D | 0.84 | U | U | | | | | |
| PCB-195 (2,2',3,3',4,4',5,6) | 5.5 | R | R | D | 0.25 | U | U | | 1.2 | N | R | D | 1.2 | N | U | + | | | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 2.3 | R | R | D | 0.20 | U | U | | 0.31 | NJ | R | D | ***0.59*** | ***J*** | ***J*** | | | | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.09 | JR | R | D | 0.11 | U | U | | 0.28 | U | R | D | 0.56 | U | U | | | | | |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 2.7 | R | R | D | 0.16 | NJ | UJ | C,+ | 0.39 | U | R | D | 0.77 | U | UJ | C | | | | |
| 2,4'-DDE | 0.63 | JR | R | D | 0.26 | U | U | | 0.63 | U | R | D | 1.3 | U | U | | | | | |
| ENDOSULFAN I | 1.3 | UR | R | D | 0.34 | U | U | | 0.83 | U | R | D | 1.7 | U | U | | | | | |
| HEXACHLOROBENZENE | 5.3 | R | R | D | 0.10 | U | U | | 0.06 | J | R | D | 0.50 | J | U | + | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Landfills

| EPA NO | MC234DL | | | | MC235 | | | | MC237 | | | | MC237RE | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M01MT01S06 | | | | M01MT10S01 | | | | M01MT10S07 | | | | M01MT10S07 | | | | | | | |
| Date Sampled | 9/20/96 | | | | 9/23/96 | | | | 9/24/96 | | | | 9/24/96 | | | | | | | |
| Depth | DILUTION | | | | URCHINS | | | | CUCUMBER | | | | REANALYSES | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 1.1 | R | R | D | 0.13 | U | U | | 0.31 | U | R | D | 0.62 | U | U | | | | | |
| GAMMA-BHC (LINDANE) | 1.2 | R | R | D | 0.13 | U | U | | 0.03 | J | R | D | 0.64 | U | U | | | | | |
| DELTA-BHC | 0.43 | R | R | D | 0.10 | U | UJ | C | 0.25 | U | R | D | 0.50 | U | UJ | C | | | | |
| HEPTACHLOR | 0.33 | UR | R | D | 0.09 | U | U | | 0.21 | U | R | D | 0.42 | U | U | | | | | |
| ALDRIN | 1.8 | UR | R | D | 0.46 | U | U | | 1.1 | U | R | D | 2.2 | U | U | | | | | |
| GAMMA-CHLORDANE | 28.0 | R | R | D | 0.45 | U | U | | 1.1 | U | R | D | 2.2 | U | U | | | | | |
| ALPHA-CHLORDANE | 0.99 | UR | R | D | 0.26 | U | U | | 0.63 | U | R | D | 1.3 | U | U | | | | | |
| TRANS-NONACHLOR | 0.92 | UR | R | D | 0.24 | U | U | | 0.58 | U | R | D | 1.2 | U | U | | | | | |
| HEPTACHLOR EPOXIDE | 0.61 | UR | R | D | 0.16 | U | U | | 0.39 | U | R | D | 0.77 | U | U | | | | | |
| DIELDRIN | 1.4 | R | R | D | 0.17 | U | U | | 0.41 | U | R | D | 0.82 | U | U | | | | | |
| 4,4'-DDE | 5.1 | R | R | D | 1.1 | J | U | + | 0.81 | J | R | D | 5.3 | J | U | + | | | | |
| 2,4'-DDD | 4.4 | R | R | D | ***0.33*** | | | | 0.69 | U | R | D | 1.4 | U | U | | | | | |
| ENDRIN | 0.36 | UR | R | D | ***0.66*** | | | | 0.23 | U | R | D | 0.46 | U | U | | | | | |
| ENDRIN ALDEHYDE | 0.89 | UR | R | D | 0.23 | U | U | | 0.57 | U | R | D | 1.1 | U | U | | | | | |
| 4,4'-DDD | 5.3 | R | R | D | 0.69 | U | U | | 1.7 | U | R | D | 3.4 | U | U | | | | | |
| 2,4'-DDT | 1.7 | R | R | D | 0.16 | U | U | | 0.40 | U | R | D | 0.80 | U | U | | | | | |
| ENDOSULFAN II | 1.3 | UR | R | D | 0.34 | N | U | + | 0.83 | U | R | D | 1.7 | U | U | | | | | |
| ENDOSULFAN SULFATE | 1.3 | UR | R | D | 0.34 | U | U | | 0.83 | U | R | D | 1.7 | U | U | | | | | |
| 4,4'-DDT | 1.3 | R | R | D | 0.25 | U | U | | 0.61 | U | R | D | 1.2 | U | UJ | C | | | | |
| ENDRIN KETONE | 0.89 | UR | R | D | 0.23 | U | U | | 0.57 | U | R | D | 1.1 | U | U | | | | | |
| METHOXYCHLOR | 0.03 | JR | R | D | 0.20 | U | U | | 0.48 | U | R | D | 0.96 | U | U | | | | | |
| MIREX | 1.6 | R | R | D | ***0.54*** | | | | 0.30 | J | R | D | 0.78 | U | U | | | | | |
| CIS-NONACHLOR | | | | | | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Seawater, Inner Harbor

| EPA NO | MV005 | | | | MV006 | | | | MV007 | | | | MV008 | | | | MV009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M99SW01S01 | | | | M99SW03S01 | | | | M99SW03D01 | | | | M99SW05S01 | | | | M99SW07S01 | | | |
| Date Sampled | 9/18/96 | | | | 9/18/96 | | | | 9/18/96 | | | | 9/18/96 | | | | 9/18/96 | | | |
| Depth | | | | | 5 | | | | 5 | | | | 5 | | | | 5 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 0.000400 | U | U | | 0.000400 | U | U | | 0.000410 | U | U | | 0.000380 | U | U | | 0.000400 | U | U | |
| PCB-18 (2,2',5) | 0.000530 | U | U | | 0.000540 | U | U | | 0.000540 | U | U | | 0.000510 | U | U | | 0.000530 | U | U | |
| PCB-28 (2,4,4') | 0.0011 | U | U | | 0.0011 | U | U | | 0.0011 | U | U | | 0.0011 | U | U | | 0.0011 | U | U | |
| PCB-52 (2,2',5,5') | 0.000410 | U | U | | 0.000420 | U | U | | 0.000420 | U | U | | 0.000400 | U | U | | 0.000410 | U | U | |
| PCB-44 (2,2',3,5') | 0.000350 | U | U | | 0.000360 | U | U | | 0.000360 | U | U | | 0.000340 | U | U | | 0.000350 | U | U | |
| PCB-66 (2,3',4,4') | 0.000340 | U | U | | 0.000340 | U | U | | 0.000350 | U | U | | 0.000330 | U | U | | 0.000340 | U | U | |
| PCB-101 (2,2',3,5,5') | 0.000420 | U | U | | 0.000430 | U | U | | 0.000430 | U | U | | 0.000410 | U | U | | 0.000420 | U | U | |
| PCB-77 (3,3',4,4') | 0.000610 | U | U | | 0.000620 | U | U | | 0.000630 | U | U | | 0.000590 | U | U | | 0.000610 | U | U | |
| PCB-118 (2,3',4,4',5) | 0.000400 | U | U | | 0.000400 | U | U | | 0.000410 | U | U | | 0.000380 | U | U | | 0.000400 | U | U | |
| PCB-153 (2,2',4,4',5,5') | 0.000270 | U | U | | 0.000280 | U | U | | 0.000280 | U | U | | 0.000260 | U | U | | 0.000270 | U | U | |
| PCB-105 (2,3,3',4,4') | 0.000620 | N | U | + | 0.000630 | U | U | | 0.000640 | U | U | | 0.000600 | U | U | | 0.000620 | U | U | |
| PCB-138 (2,2',3,4,4',5') | 0.000730 | | UJ | B | 0.000750 | | UJ | B | 0.000760 | | UJ | B | 0.000660 | | UJ | B | 0.000770 | | UJ | B |
| PCB-126 (3,3',4,4',5) | 0.000510 | U | U | | 0.000520 | U | U | | 0.000530 | U | U | | 0.000490 | U | U | | 0.000510 | U | U | |
| PCB-187 (2,2',3,4',5,5',6) | 0.000640 | U | U | | 0.000650 | U | U | | 0.000660 | U | U | | 0.000620 | U | U | | 0.000640 | U | U | |
| PCB-128 (2,2',3,3',4,4') | 0.000340 | U | U | | 0.000350 | U | U | | 0.000350 | U | U | | 0.000330 | U | U | | 0.000340 | U | U | |
| PCB-180 (2,2',3,4,4',5,5') | 0.000800 | J | U | + | 0.000810 | J | U | + | 0.000820 | J | U | + | 0.000770 | J | U | + | 0.000800 | J | U | + |
| PCB-170 (2,2',3,3',4,4',5) | 0.0030 | U | U | | 0.0031 | J | U | + | 0.0031 | U | U | | 0.0029 | J | U | + | 0.0030 | U | U | |
| PCB-195 (2,2',3,3',4,4',5,6) | 0.000650 | U | U | | 0.000660 | U | U | | 0.000660 | U | U | | 0.000620 | N | U | + | 0.000650 | U | U | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000500 | U | U | | 0.000510 | U | U | | 0.000510 | U | U | | 0.000480 | U | U | | 0.000500 | U | U | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000590 | N | U | + | 0.000610 | U | U | | 0.000610 | U | U | | ***0.000051*** | ***J*** | ***J*** | | 0.000590 | N | U | + |
| ***STIV141E - Pesticides (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 0.000440 | U | UJ | C | 0.000450 | U | UJ | C | 0.000450 | U | UJ | C | 0.000430 | N | UJ | +,C | 0.000440 | U | UJ | C |
| 2,4'-DDE | 0.000380 | U | U | | 0.000380 | U | U | | 0.000390 | U | U | | 0.000360 | U | U | | 0.000380 | U | U | |
| ENDOSULFAN I | 0.000650 | U | U | | 0.000660 | U | U | | 0.000670 | U | U | | 0.000630 | U | U | | 0.000650 | U | U | |
| HEXACHLOROBENZENE | ***0.000360*** | ***J*** | ***J*** | | ***0.000370*** | ***J*** | ***J*** | | ***0.000340*** | ***J*** | ***J*** | | ***0.000410*** | | | | ***0.000450*** | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for

## Seawater, Inner Harbor

| EPA NO | MV005 | | | | MV006 | | | | MV007 | | | | MV008 | | | | MV009 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M99SW01S01 | | | | M99SW03S01 | | | | M99SW03D01 | | | | M99SW05S01 | | | | M99SW07S01 | | | |
| Date Sampled | 9/18/96 | | | | 9/18/96 | | | | 9/18/96 | | | | 9/18/96 | | | | 9/18/96 | | | |
| Depth | | | | | 5 | | | | 5 | | | | 5 | | | | 5 | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/L) Conti*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.000290 | U | U | | 0.000300 | N | U | + | 0.000300 | N | U | + | 0.000280 | N | U | + | 0.000290 | N | U | + |
| GAMMA-BHC (LINDANE) | 0.000320 | N | U | + | 0.000320 | U | U | | 0.000330 | U | U | | 0.000310 | U | U | | 0.000320 | U | U | |
| DELTA-BHC | 0.000340 | U | U | | 0.000340 | U | U | | 0.000350 | U | U | | 0.000330 | U | U | | 0.000340 | U | U | |
| HEPTACHLOR | 0.000480 | N | U | + | 0.000490 | N | U | + | 0.000500 | N | U | + | 0.000460 | N | U | + | 0.000480 | N | U | + |
| ALDRIN | 0.000590 | U | U | | 0.000600 | U | U | | 0.000610 | U | U | | 0.000570 | U | U | | 0.000590 | U | U | |
| GAMMA-CHLORDANE | 0.000240 | U | U | | 0.000240 | U | U | | 0.000240 | U | U | | 0.000230 | U | U | | 0.000240 | U | U | |
| ALPHA-CHLORDANE | 0.000520 | U | U | | 0.000530 | U | U | | 0.000530 | U | U | | 0.000500 | U | U | | 0.000520 | U | U | |
| TRANS-NONACHLOR | 0.000370 | U | U | | 0.000370 | N | U | + | 0.000380 | U | U | | 0.000350 | N | U | + | 0.000360 | N | U | + |
| HEPTACHLOR EPOXIDE | 0.000890 | U | U | | 0.000910 | U | U | | 0.000920 | U | U | | 0.000860 | U | U | | 0.000890 | U | U | |
| DIELDRIN | 0.000430 | U | U | | 0.000440 | U | U | | 0.000440 | U | U | | 0.000420 | U | U | | 0.000430 | U | U | |
| 4,4'-DDE | 0.000210 | U | U | | 0.000210 | U | U | | 0.000220 | U | U | | 0.000200 | U | U | | 0.000210 | U | U | |
| 2,4'-DDD | 0.000800 | U | U | | 0.000820 | U | U | | 0.000820 | U | U | | 0.000770 | U | U | | 0.000800 | U | U | |
| ENDRIN | 0.000610 | U | U | | 0.000620 | U | U | | 0.000630 | U | U | | 0.000590 | U | U | | 0.000610 | U | U | |
| ENDRIN ALDEHYDE | 0.000340 | U | U | | 0.000350 | U | U | | 0.000350 | U | U | | 0.000330 | U | U | | 0.000340 | U | U | |
| 4,4'-DDD | 0.000520 | U | U | | 0.000530 | U | U | | 0.000530 | U | U | | 0.000500 | U | U | | 0.000520 | U | U | |
| 2,4'-DDT | 0.000340 | U | U | | 0.000340 | U | U | | 0.000350 | U | U | | 0.000330 | U | U | | 0.000340 | U | U | |
| ENDOSULFAN II | 0.000650 | U | U | | 0.000660 | U | U | | 0.000670 | U | U | | 0.000630 | U | U | | 0.000650 | U | U | |
| ENDOSULFAN SULFATE | 0.000650 | U | U | | 0.000660 | U | U | | 0.000670 | U | U | | 0.000630 | U | U | | 0.000650 | U | U | |
| 4,4'-DDT | 0.000780 | U | UJ | C | 0.000800 | U | UJ | C | 0.000800 | U | UJ | C | 0.000750 | U | UJ | C | 0.000780 | U | UJ | C |
| ENDRIN KETONE | 0.000340 | U | U | | 0.000350 | U | U | | 0.000350 | U | U | | 0.000330 | U | U | | 0.000340 | U | U | |
| METHOXYCHLOR | 0.000880 | U | U | | 0.000900 | U | U | | 0.000900 | U | U | | 0.000850 | U | U | | 0.000880 | U | U | |
| MIREX | 0.000260 | U | U | | 0.000260 | U | U | | 0.000260 | U | U | | 0.000250 | U | U | | 0.000260 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for

## Seawater, Inner Harbor

| EPA NO | MV010 | | | | MV011 | | | | MV012 | | | | MV013 | | | | MV015 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M99QW01F01 | | | | M99QW01E01 | | | | M99QW02E01 | | | | M99QW03E01 | | | | M99PW02S01 | | | |
| Date Sampled | 9/10/96 | | | | 9/10/96 | | | | 9/17/96 | | | | 9/19/96 | | | | 9/13/96 | | | |
| Depth | | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | ***0.0011*** | | | | ***0.000650*** | | | | 0.000370 | U | U | | 0.000410 | U | U | | 0.000430 | U | U | |
| PCB-18 (2,2',5) | ***0.000910*** | | | | ***0.0011*** | | | | 0.000490 | U | U | | 0.000540 | U | U | | 0.000570 | U | U | |
| PCB-28 (2,4,4') | 0.000980 | U | U | | 0.000940 | U | U | | 0.0010 | N | U | + | 0.0011 | N | U | + | 0.9000 | E | R | D |
| PCB-52 (2,2',5,5') | 0.000360 | N | U | + | 0.000350 | U | U | | 0.000380 | U | U | | 0.000420 | U | U | | 0.9400 | E | R | D |
| PCB-44 (2,2',3,5') | 0.000310 | U | U | | 0.000300 | U | U | | 0.000330 | U | U | | 0.000360 | U | U | | ***0.1500*** | ***E*** | ***J*** | ****11*** |
| PCB-66 (2,3',4,4') | 0.000300 | U | U | | 0.000290 | U | U | | 0.000310 | U | U | | 0.000350 | U | U | | 0.000360 | U | U | |
| PCB-101 (2,2',3,5,5') | 0.000370 | U | U | | 0.000360 | U | U | | 0.000390 | U | U | | 0.000430 | U | U | | 0.8600 | E | R | D |
| PCB-77 (3,3',4,4') | 0.000540 | U | U | | 0.000510 | U | U | | 0.000560 | U | U | | 0.000630 | U | U | | ***0.0160*** | | | |
| PCB-118 (2,3',4,4',5) | 0.000350 | U | U | | 0.000330 | U | U | | 0.000370 | U | U | | 0.000410 | U | U | | 1.00 | E | R | D |
| PCB-153 (2,2',4,4',5,5') | 0.000240 | U | U | | 0.000230 | U | U | | 0.000250 | U | U | | 0.000280 | U | U | | 0.9400 | E | R | D |
| PCB-105 (2,3,3',4,4') | 0.000540 | N | U | + | ***0.000260*** | ***J*** | ***J*** | | 0.000570 | U | U | | 0.000640 | U | U | | 0.000670 | U | U | |
| PCB-138 (2,2',3,4,4',5') | 0.000570 | | UJ | B | 0.000460 | | UJ | B | 0.0027 | | UJ | B | 0.000810 | | UJ | B | 0.8800 | E | R | D |
| PCB-126 (3,3',4,4',5) | 0.000450 | U | U | | 0.000430 | U | U | | 0.000470 | U | U | | 0.000530 | U | U | | 0.000550 | U | U | |
| PCB-187 (2,2',3,4',5,5',6) | 0.000560 | U | U | | 0.000540 | U | U | | 0.000590 | U | U | | 0.000660 | U | U | | 0.4300 | E | R | D |
| PCB-128 (2,2',3,3',4,4') | 0.000300 | U | U | | 0.000290 | U | U | | 0.000320 | U | U | | 0.000350 | U | U | | 0.000370 | U | U | |
| PCB-180 (2,2',3,4,4',5,5') | 0.000700 | U | U | | 0.000670 | J | U | + | 0.000740 | U | U | | 0.000820 | U | U | | 0.5300 | E | R | D |
| PCB-170 (2,2',3,3',4,4',5) | 0.0027 | U | U | | 0.0026 | U | U | | 0.0028 | U | U | | 0.0031 | U | U | | 0.0032 | | U | + |
| PCB-195 (2,2',3,3',4,4',5,6) | 0.000570 | N | U | + | 0.000550 | U | U | | 0.000600 | U | U | | 0.000660 | U | U | | 0.000700 | U | U | + |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000440 | U | U | | 0.000420 | U | U | | 0.000460 | U | U | | 0.000510 | U | U | | ***0.000760*** | | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000520 | U | U | | 0.000500 | U | U | | 0.000550 | U | U | | 0.000610 | U | U | | 0.000640 | | U | + |
| ***STIV141E - Pesticides (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 0.000390 | U | U | | 0.000370 | U | U | | 0.000410 | U | U | | 0.000450 | U | U | | 0.6600 | E | R | D |
| 2,4'-DDE | 0.000330 | U | U | | 0.000320 | U | U | | 0.000350 | U | U | | 0.000390 | U | U | | ***0.0120*** | | | |
| ENDOSULFAN I | 0.000570 | U | U | | 0.000550 | N | U | + | 0.000600 | U | U | | 0.000670 | U | U | | 0.8900 | E | R | D |
| HEXACHLOROBENZENE | ***0.000270*** | ***J*** | ***J*** | | ***0.000250*** | ***J*** | ***J*** | | ***0.000430*** | | | | ***0.000500*** | | | | 0.000430 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for

## Seawater, Inner Harbor

| EPA NO | MV010 | | | | MV011 | | | | MV012 | | | | MV013 | | | | MV015 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M99QW01F01 | | | | M99QW01E01 | | | | M99QW02E01 | | | | M99QW03E01 | | | | M99PW02S01 | | | |
| Date Sampled | 9/10/96 | | | | 9/10/96 | | | | 9/17/96 | | | | 9/19/96 | | | | 9/13/96 | | | |
| Depth | | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/L) Conti*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.000250 | U | U | | 0.000240 | U | U | | 0.000270 | N | U | + | 0.000290 | U | U | | 0.9300 | E | R | D |
| GAMMA-BHC (LINDANE) | ***0.000310*** | | | | 0.000270 | U | U | | 0.000290 | J | U | + | 0.000330 | U | U | | 0.6900 | E | R | D |
| DELTA-BHC | 0.000300 | U | U | | 0.000290 | U | U | | 0.000310 | U | U | | 0.000350 | U | U | | 0.8600 | E | R | D |
| HEPTACHLOR | 0.000420 | U | U | | 0.000410 | U | U | | 0.000450 | U | U | | 0.000500 | U | U | | 0.5000 | E | R | D |
| ALDRIN | 0.000520 | U | U | | 0.000500 | U | U | | 0.000540 | U | U | | 0.000610 | U | U | | 0.3300 | E | R | D |
| GAMMA-CHLORDANE | 0.000210 | U | U | | 0.000200 | U | U | | 0.000220 | U | U | | 0.000240 | U | U | | ***0.000870*** | | | |
| ALPHA-CHLORDANE | 0.000450 | U | U | | 0.000440 | U | U | | 0.000480 | U | U | | 0.000530 | U | U | | 0.000560 | U | U | |
| TRANS-NONACHLOR | 0.000320 | U | U | | 0.000310 | U | U | | 0.000340 | U | U | | 0.000380 | U | U | | 0.000400 | U | U | |
| HEPTACHLOR EPOXIDE | 0.000790 | U | U | | 0.000760 | U | U | | 0.000830 | U | U | | 0.000920 | U | U | | 0.9700 | E | R | D |
| DIELDRIN | 0.000380 | U | U | | 0.000360 | U | U | | 0.000400 | U | U | | 0.000440 | U | U | | 1.20 | E | R | D |
| 4,4'-DDE | 0.000180 | U | U | | 0.000180 | U | U | | 0.000190 | U | U | | 0.000210 | N | U | + | 0.8600 | E | R | D |
| 2,4'-DDD | 0.000700 | U | U | | 0.000680 | U | U | | 0.000740 | U | U | | 0.000820 | U | U | | ***0.0067*** | | | |
| ENDRIN | 0.000540 | U | U | | 0.000520 | U | U | | 0.000560 | U | U | | 0.000630 | U | U | | 1.30 | E | R | D |
| ENDRIN ALDEHYDE | 0.000300 | U | U | | 0.000290 | U | U | | 0.000320 | U | U | | 0.000350 | U | U | | 1.10 | E | R | D |
| 4,4'-DDD | 0.000460 | U | U | | 0.000440 | U | U | | 0.000480 | U | U | | 0.000530 | U | U | | 1.30 | E | R | D |
| 2,4'-DDT | 0.000300 | U | U | | 0.000290 | U | U | | 0.000310 | U | U | | 0.000350 | U | U | | 0.000360 | U | U | |
| ENDOSULFAN II | 0.000570 | U | U | | 0.000550 | U | U | | 0.000600 | U | U | | 0.000670 | U | U | | 1.00 | E | R | D |
| ENDOSULFAN SULFATE | 0.000570 | U | U | | 0.000550 | U | U | | ***0.000320*** | ***J*** | ***J*** | | 0.000670 | U | U | | 1.30 | E | R | D |
| 4,4'-DDT | 0.000690 | U | U | | 0.000660 | U | U | | 0.000720 | U | U | | 0.000800 | U | U | | 0.2200 | E | R | D |
| ENDRIN KETONE | 0.000300 | U | U | | ***0.000450*** | | | | 0.000320 | N | U | + | 0.000360 | N | U | + | 0.2100 | E | R | D |
| METHOXYCHLOR | 0.000770 | U | U | | ***0.000500*** | ***J*** | ***J*** | | 0.000810 | U | U | | 0.000900 | U | U | | ***0.000560*** | ***J*** | ***J*** | |
| MIREX | 0.000230 | U | U | | 0.000220 | U | U | | 0.000240 | U | U | | 0.000260 | U | U | | 0.000280 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for

## Seawater, Inner Harbor

| EPA NO | MV015DL | | | | ? | | | | ? | | | | ? | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M99PW02S01 | | | | | | | | | | | | | | | | | | | |
| Date Sampled | 9/13/96 | | | | | | | | | | | | | | | | | | | |
| Depth | DILUTION | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 0.0210 | U | R | D | | | | | | | | | | | | | | | | |
| PCB-18 (2,2',5) | 0.0280 | U | R | D | | | | | | | | | | | | | | | | |
| PCB-28 (2,4,4') | ***1.80*** | ***D*** | | | | | | | | | | | | | | | | | | |
| PCB-52 (2,2',5,5') | ***1.80*** | ***D*** | | | | | | | | | | | | | | | | | | |
| PCB-44 (2,2',3,5') | 0.0190 | U | R | D | | | | | | | | | | | | | | | | |
| PCB-66 (2,3',4,4') | 0.0180 | U | R | D | | | | | | | | | | | | | | | | |
| PCB-101 (2,2',3,5,5') | ***1.70*** | ***D*** | | | | | | | | | | | | | | | | | | |
| PCB-77 (3,3',4,4') | 0.0330 | U | R | D | | | | | | | | | | | | | | | | |
| PCB-118 (2,3',4,4',5) | ***1.90*** | ***D*** | | | | | | | | | | | | | | | | | | |
| PCB-153 (2,2',4,4',5,5') | ***1.90*** | ***D*** | | | | | | | | | | | | | | | | | | |
| PCB-105 (2,3,3',4,4') | 0.0340 | U | R | D | | | | | | | | | | | | | | | | |
| PCB-138 (2,2',3,4,4',5') | ***1.80*** | ***D*** | | | | | | | | | | | | | | | | | | |
| PCB-126 (3,3',4,4',5) | 0.0280 | U | R | D | | | | | | | | | | | | | | | | |
| PCB-187 (2,2',3,4',5,5',6) | ***0.4200*** | | | | | | | | | | | | | | | | | | | |
| PCB-128 (2,2',3,3',4,4') | 0.0190 | U | R | D | | | | | | | | | | | | | | | | |
| PCB-180 (2,2',3,4,4',5,5') | ***1.80*** | ***D*** | | | | | | | | | | | | | | | | | | |
| PCB-170 (2,2',3,3',4,4',5) | 0.1600 | U | R | D | | | | | | | | | | | | | | | | |
| PCB-195 (2,2',3,3',4,4',5,6) | 0.0350 | U | R | D,+ | | | | | | | | | | | | | | | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 0.0270 | U | R | D | | | | | | | | | | | | | | | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.0320 | U | R | D | | | | | | | | | | | | | | | | |
| ***STIV141E - Pesticides (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | ***3.70*** | ***D*** | | | | | | | | | | | | | | | | | | |
| 2,4'-DDE | 0.0200 | U | R | D | | | | | | | | | | | | | | | | |
| ENDOSULFAN I | ***1.70*** | ***D*** | | | | | | | | | | | | | | | | | | |
| HEXACHLOROBENZENE | 0.0210 | U | R | D | | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for

## Seawater, Inner Harbor

| EPA NO | MV015DL | | | | ? | | | | ? | | | | ? | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M99PW02S01 | | | | | | | | | | | | | | | | | | | |
| Date Sampled | 9/13/96 | | | | | | | | | | | | | | | | | | | |
| Depth | DILUTION | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/L) Conti*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | ***2.70*** | ***D*** | | | | | | | | | | | | | | | | | | |
| GAMMA-BHC (LINDANE) | ***3.60*** | ***D*** | | | | | | | | | | | | | | | | | | |
| DELTA-BHC | ***3.70*** | ***D*** | | | | | | | | | | | | | | | | | | |
| HEPTACHLOR | ***0.2900*** | ***D*** | | | | | | | | | | | | | | | | | | |
| ALDRIN | ***0.2200*** | ***D*** | | | | | | | | | | | | | | | | | | |
| GAMMA-CHLORDANE | 0.0130 | U | R | D | | | | | | | | | | | | | | | | |
| ALPHA-CHLORDANE | 0.0280 | U | R | D | | | | | | | | | | | | | | | | |
| TRANS-NONACHLOR | 0.0200 | U | R | D | | | | | | | | | | | | | | | | |
| HEPTACHLOR EPOXIDE | ***2.10*** | ***D*** | | | | | | | | | | | | | | | | | | |
| DIELDRIN | ***1.80*** | ***D*** | | | | | | | | | | | | | | | | | | |
| 4,4'-DDE | ***0.8700*** | ***D*** | | | | | | | | | | | | | | | | | | |
| 2,4'-DDD | 0.0430 | U | R | D | | | | | | | | | | | | | | | | |
| ENDRIN | ***0.9100*** | ***D*** | ***J*** | ***C*** | | | | | | | | | | | | | | | | |
| ENDRIN ALDEHYDE | ***1.80*** | ***D*** | | | | | | | | | | | | | | | | | | |
| 4,4'-DDD | ***1.20*** | ***D*** | | | | | | | | | | | | | | | | | | |
| 2,4'-DDT | 0.0180 | U | R | D | | | | | | | | | | | | | | | | |
| ENDOSULFAN II | ***2.00*** | ***D*** | | | | | | | | | | | | | | | | | | |
| ENDOSULFAN SULFATE | ***2.70*** | ***D*** | | | | | | | | | | | | | | | | | | |
| 4,4'-DDT | ***0.1700*** | ***D*** | ***J*** | ***C*** | | | | | | | | | | | | | | | | |
| ENDRIN KETONE | ***0.2100*** | ***D*** | | | | | | | | | | | | | | | | | | |
| METHOXYCHLOR | 0.0470 | U | R | D | | | | | | | | | | | | | | | | |
| MIREX | 0.0140 | U | R | D | | | | | | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for

# Marine Tissues, Inner Harbor

| EPA NO | MV016 | | | | MV017 | | | | MV018 | | | | MV018DL | | | | MV019 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M99MT03S01 | | | | M99MT03D01 | | | | M99MT03S02 | | | | M99MT03S02 | | | | M99MT03S05 | | | |
| Date Sampled | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | |
| Depth | URCHINS | | | | URCHINS | | | | STEGASTES | | | | DILUTION | | | | DICTYOTA | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | ***0.26*** | | ***J*** | ***F*** | ***0.15*** | | ***J*** | ***F*** | ***2.6*** | | | | 2.1 | UR | R | D | ***6.9*** | | | |
| PCB-18 (2,2',5) | 0.08 | U | U | | ***0.26*** | | ***J*** | ***F*** | ***1.6*** | | ***J*** | ***C*** | 2.7 | UR | R | D | ***0.71*** | | | |
| PCB-28 (2,4,4') | 0.08 | U | U | | ***0.14*** | | | | ***2.3*** | | | | 5.1 | R | R | D | ***7.1*** | | | |
| PCB-44 (2,2',3,5') | 0.07 | U | U | | 0.08 | U | U | | 0.11 | U | U | | 2.2 | UR | R | D | 0.25 | U | U | |
| PCB-52 (2,2',5,5') | ***0.33*** | | | | ***0.18*** | | | | ***4.7*** | | | | 4.0 | JR | R | D | ***17.0*** | | ***J*** | ***C*** |
| PCB-66 (2,3',4,4') | 0.11 | U | U | | 0.13 | U | U | | ***1.9*** | | | | 3.7 | UR | R | D | 0.41 | U | U | |
| PCB-77 (3,3',4,4') | 0.15 | U | U | | 0.17 | U | U | | 0.24 | U | U | | 4.9 | UR | R | D | 0.55 | U | U | |
| PCB-101 (2,2',3,5,5') | ***1.2*** | | | | ***1.1*** | | | | ***19.0*** | | | | 28.0 | R | R | D | ***12.0*** | | | |
| PCB-105 (2,3,3',4,4') | ***0.60*** | | | | ***0.52*** | | | | ***6.7*** | | | | 9.3 | R | R | D | ***1.5*** | | | |
| PCB-118 (2,3',4,4',5) | ***1.1*** | | | | ***1.1*** | | | | ***18.0*** | | | | 26.0 | R | R | D | ***0.93*** | ***J*** | ***J*** | |
| PCB-126 (3,3',4,4',5) | 0.12 | U | UJ | C | 0.14 | U | UJ | C | 0.20 | U | U | | 4.0 | UR | R | D | ***9.7*** | | | |
| PCB-128 (2,2',3,3',4,4') | ***0.42*** | | | | ***0.36*** | | | | ***6.9*** | | | | 8.6 | R | R | D | ***7.9*** | | | |
| PCB-138 (2,2',3,4,4',5') | ***4.7*** | | | | ***4.4*** | | | | 84.0 | E | R | D | ***120*** | ***D*** | | | ***5.9*** | | | |
| PCB-153 (2,2',4,4',5,5') | ***6.0*** | | | | ***5.9*** | | | | 160 | E | R | D | ***250*** | ***D*** | | | ***16.0*** | | | |
| PCB-170 (2,2',3,3',4,4',5) | ***0.21*** | | | | ***0.28*** | | | | 63.0 | E | R | D | ***90.0*** | ***D*** | | | ***4.9*** | | | |
| PCB-180 (2,2',3,4,4',5,5') | ***0.93*** | | | | ***2.6*** | | | | 88.0 | E | R | D | ***230*** | ***D*** | | | ***17.0*** | | | |
| PCB-187 (2,2',3,4',5,5',6) | ***4.2*** | | | | ***3.9*** | | | | 80.0 | E | R | D | ***120*** | ***D*** | | | ***6.5*** | | | |
| PCB-195 (2,2',3,3',4,4',5,6) | ***0.10*** | ***J*** | ***J*** | | ***0.15*** | ***J*** | ***J*** | | ***20.0*** | | | | 26.0 | R | R | D | ***1.2*** | | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | ***0.06*** | ***J*** | ***J*** | | ***0.12*** | ***J*** | ***J*** | | ***17.0*** | | | | 24.0 | R | R | D | ***9.4*** | | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | ***0.38*** | | | | ***0.59*** | | | | 27.0 | E | R | D | ***43.0*** | ***D*** | | | ***20.0*** | | | |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | ***0.27*** | | ***J*** | ***C*** | ***0.08*** | ***J*** | ***J*** | ***C*** | ***0.53*** | | | | 2.9 | UR | R | D | ***0.51*** | | | |
| 2,4'-DDE | 0.14 | NJ | U | + | 0.16 | NJ | U | + | ***1.2*** | | | | 4.7 | UR | R | D | 0.53 | U | U | |
| ENDOSULFAN I | 0.19 | U | U | | 0.21 | U | U | | 0.31 | U | U | | 6.3 | UR | R | D | 0.70 | U | U | |
| HEXACHLOROBENZENE | 0.06 | NJ | U | + | 0.07 | NJ | U | + | ***0.54*** | | | | 1.4 | JR | R | D | ***0.14*** | ***J*** | ***J*** | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Inner Harbor

| EPA NO | MV016 | | | | MV017 | | | | MV018 | | | | MV018DL | | | | MV019 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M99MT03S01 | | | | M99MT03D01 | | | | M99MT03S02 | | | | M99MT03S02 | | | | M99MT03S05 | | | |
| Date Sampled | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | | 9/9/96 | | | |
| Depth | URCHINS | | | | URCHINS | | | | STEGASTES | | | | DILUTION | | | | DICTYOTA | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.07 | NJ | U | + | 0.08 | N | U | + | 0.12 | U | U | | 2.3 | UR | R | D | ***0.42*** | | | |
| GAMMA-BHC (LINDANE) | ***0.06*** | ***J*** | ***J*** | ***F*** | ***0.09*** | | ***J*** | ***F*** | ***1.9*** | | | | 0.88 | JR | R | D | ***6.2*** | | | |
| DELTA-BHC | 0.06 | U | UJ | C | 0.07 | NJ | UJ | C,+ | 0.10 | N | UJ | +,C | 4.4 | R | R | D | ***0.68*** | | ***J*** | ***C*** |
| HEPTACHLOR | 0.05 | N | U | + | 0.06 | U | U | | 0.08 | N | U | + | 1.6 | UR | R | D | ***8.6*** | | | |
| ALDRIN | 0.25 | U | U | | 0.29 | U | U | | 0.42 | U | U | | 8.5 | UR | R | D | 0.95 | U | U | |
| GAMMA-CHLORDANE | 0.25 | U | U | | 0.29 | N | U | + | ***0.20*** | ***J*** | ***J*** | | 8.4 | UR | R | D | 0.94 | N | U | + |
| ALPHA-CHLORDANE | 0.14 | U | U | | 0.16 | U | U | | 0.24 | U | U | | 4.7 | UR | R | D | 0.53 | U | U | |
| TRANS-NONACHLOR | 0.13 | NJ | U | + | 0.15 | U | U | | ***1.4*** | | | | 1.4 | JR | R | D | ***7.1*** | | | |
| HEPTACHLOR EPOXIDE | 0.09 | U | U | | 0.10 | U | U | | ***0.14*** | ***J*** | ***J*** | | 2.9 | UR | R | D | 0.33 | U | U | |
| DIELDRIN | 0.09 | U | U | | 0.11 | U | U | | 0.16 | U | U | | 3.1 | UR | R | D | ***5.5*** | | | |
| 4,4'-DDE | ***0.89*** | | | | ***0.70*** | ***J*** | ***J*** | | ***36.0*** | | | | 27.0 | R | R | D | 2.2 | J | U | + |
| 2,4'-DDD | ***0.89*** | | | | ***0.74*** | | | | ***7.2*** | | | | 11.0 | R | R | D | ***3.1*** | | | |
| ENDRIN | 0.05 | U | U | | 0.06 | U | U | | ***6.1*** | | | | 1.7 | UR | R | D | 0.19 | U | U | |
| ENDRIN ALDEHYDE | 0.13 | U | U | | 0.15 | U | U | | 0.21 | U | U | | 4.3 | UR | R | D | ***0.70*** | | | |
| 4,4'-DDD | 0.38 | J | U | + | 0.44 | U | U | | ***3.6*** | | | | 3.6 | JR | R | D | 1.4 | U | U | |
| 2,4'-DDT | 0.09 | N | U | + | 0.11 | N | U | + | ***5.1*** | | | | 7.2 | R | R | D | ***10.0*** | | | |
| ENDOSULFAN II | 0.19 | U | U | | 0.21 | U | U | | 0.31 | U | U | | 6.3 | UR | R | D | 0.70 | U | U | |
| ENDOSULFAN SULFATE | 0.19 | U | U | | 0.21 | U | U | | 0.31 | U | U | | 6.3 | UR | R | D | 0.70 | U | U | |
| 4,4'-DDT | 0.14 | U | U | | 0.16 | U | U | | ***2.4*** | | | | 4.9 | R | R | D | 0.51 | U | U | |
| ENDRIN KETONE | 0.13 | U | U | | 0.15 | U | U | | 0.21 | U | U | | 4.3 | UR | R | D | 0.48 | U | U | |
| METHOXYCHLOR | 0.11 | U | UJ | C | 0.12 | U | UJ | C | 0.18 | U | U | | 3.6 | UR | R | D | 0.41 | U | U | |
| MIREX | ***0.25*** | | | | ***0.08*** | ***J*** | ***J*** | | ***0.34*** | | | | 0.53 | JR | R | D | ***7.5*** | | | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for
## Marine Tissues, Inner Harbor

| EPA NO | MV020 | | | | MV021 | | | | MV022 | | | | MV022DL | | | | MV023 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M99MT03D05 | | | | M99MT04S01 | | | | M99MT04S02 | | | | M99MT04S02 | | | | M99MT04D02 | | | |
| Date Sampled | 9/9/96 | | | | 9/12/96 | | | | 9/12/96 | | | | 9/12/96 | | | | 9/12/96 | | | |
| Depth | DICTYOTA | | | | URCHINS | | | | STEGASTES | | | | DILUTION | | | | STEGASTES | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 0.27 | U | U | | 0.07 | N | U | + | ***1.6*** | | | | 1.0 | JR | R | D | ***1.7*** | | | |
| PCB-18 (2,2',5) | ***2.0*** | | | | ***0.26*** | | ***J*** | ***F*** | ***0.90*** | | ***J*** | ***C*** | 0.84 | JR | R | D | ***0.68*** | | ***J*** | ***C*** |
| PCB-28 (2,4,4') | 0.34 | U | U | | 0.08 | N | U | + | ***2.6*** | | | | 3.2 | R | R | D | ***2.5*** | | | |
| PCB-44 (2,2',3,5') | 0.29 | N | U | + | 0.07 | U | U | | ***0.98*** | | | | 1.1 | UR | R | D | ***0.77*** | | | |
| PCB-52 (2,2',5,5') | ***2.3*** | | ***J*** | ***C*** | ***0.27*** | | | | ***4.1*** | | | | 2.9 | R | R | D | ***5.2*** | | | |
| PCB-66 (2,3',4,4') | 0.47 | U | U | | 0.12 | U | U | | ***3.3*** | | | | 1.8 | UR | R | D | ***4.5*** | | | |
| PCB-77 (3,3',4,4') | 0.63 | U | U | | 0.16 | U | U | | 0.24 | U | U | | 2.4 | UR | R | D | 0.21 | U | U | |
| PCB-101 (2,2',3,5,5') | ***2.9*** | | | | ***1.2*** | | | | ***21.0*** | | | | 24.0 | R | R | D | 37.0 | E | R | D |
| PCB-105 (2,3,3',4,4') | ***2.5*** | | | | 0.09 | U | U | | ***6.1*** | | | | 4.6 | R | R | D | ***12.0*** | | | |
| PCB-118 (2,3',4,4',5) | ***2.1*** | | | | ***1.1*** | | | | ***19.0*** | | | | 23.0 | R | R | D | 36.0 | E | R | D |
| PCB-126 (3,3',4,4',5) | 0.52 | N | U | + | 0.13 | U | UJ | C | 0.20 | U | U | | 2.0 | UR | R | D | 0.17 | U | U | |
| PCB-128 (2,2',3,3',4,4') | 0.83 | J | U | + | ***0.38*** | | | | ***6.7*** | | | | 6.6 | R | R | D | ***12.0*** | | | |
| PCB-138 (2,2',3,4,4',5') | ***3.6*** | | | | ***4.1*** | | | | 69.0 | E | R | D | ***81.0*** | ***D*** | | | 120 | E | R | D |
| PCB-153 (2,2',4,4',5,5') | ***6.7*** | | | | ***5.2*** | | | | 120 | E | R | D | ***150*** | ***D*** | | | 160 | E | R | D |
| PCB-170 (2,2',3,3',4,4',5) | ***1.8*** | | | | ***0.28*** | | | | 48.0 | E | R | D | ***51.0*** | ***D*** | | | 62.0 | E | R | D |
| PCB-180 (2,2',3,4,4',5,5') | ***5.5*** | | | | ***0.93*** | | | | 76.0 | E | R | D | ***120*** | ***D*** | | | 78.0 | E | R | D |
| PCB-187 (2,2',3,4',5,5',6) | ***10.0*** | | | | ***3.0*** | | | | 54.0 | E | R | D | ***66.0*** | ***D*** | | | 100 | E | R | D |
| PCB-195 (2,2',3,3',4,4',5,6) | ***0.43*** | ***J*** | ***J*** | | ***0.08*** | ***J*** | ***J*** | | ***9.6*** | | | | 17.0 | R | R | D | ***16.0*** | | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | ***1.5*** | | | | ***0.07*** | ***J*** | ***J*** | | ***17.0*** | | | | 19.0 | R | R | D | ***22.0*** | | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | ***7.1*** | | | | ***0.29*** | | | | 33.0 | E | R | D | ***39.0*** | ***D*** | | | 38.0 | E | R | D |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | ***1.6*** | | | | 0.09 | N | UJ | C,+ | ***0.21*** | | | | 1.4 | UR | R | D | ***0.28*** | | | |
| 2,4'-DDE | 0.61 | U | U | | 0.15 | NJ | U | + | ***1.1*** | | | | 1.1 | JR | R | D | ***1.6*** | | | |
| ENDOSULFAN I | ***0.56*** | ***J*** | ***J*** | | 0.20 | U | U | | 0.31 | U | U | | 3.1 | UR | R | D | 0.26 | U | U | |
| HEXACHLOROBENZENE | 0.25 | NJ | U | + | 0.06 | J | U | + | ***0.52*** | | | | 1.1 | R | R | D | ***2.1*** | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

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# Analytical Results Summary for

## Marine Tissues, Inner Harbor

| EPA NO | MV020 | | | | MV021 | | | | MV022 | | | | MV022DL | | | | MV023 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M99MT03D05 | | | | M99MT04S01 | | | | M99MT04S02 | | | | M99MT04S02 | | | | M99MT04D02 | | | |
| Date Sampled | 9/9/96 | | | | 9/12/96 | | | | 9/12/96 | | | | 9/12/96 | | | | 9/12/96 | | | |
| Depth | DICTYOTA | | | | URCHINS | | | | STEGASTES | | | | DILUTION | | | | STEGASTES | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | ***0.67*** | | | | 0.08 | U | U | | 0.12 | U | U | | 1.2 | UR | R | D | 0.10 | N | U | + |
| GAMMA-BHC (LINDANE) | ***0.32*** | | | | ***0.07*** | ***J*** | ***J*** | ***F*** | 0.12 | N | UJ | +,C | 0.32 | JR | R | D | ***1.5*** | | | |
| DELTA-BHC | ***0.75*** | | ***J*** | ***C*** | 0.06 | N | UJ | C,+ | 0.10 | N | U | + | 3.2 | R | R | D | 0.08 | N | UJ | +,C |
| HEPTACHLOR | 0.20 | U | U | | 0.05 | N | U | + | ***0.72*** | | | | 0.79 | UR | R | D | ***0.26*** | | | |
| ALDRIN | 1.1 | U | U | | 0.27 | U | U | | 0.42 | U | U | | 4.2 | UR | R | D | 0.36 | U | U | |
| GAMMA-CHLORDANE | 1.1 | N | U | + | ***0.28*** | | | | ***0.21*** | ***J*** | ***J*** | | 4.1 | UR | R | D | ***0.36*** | | | |
| ALPHA-CHLORDANE | 0.62 | NJ | U | + | 0.15 | U | U | | 0.23 | U | U | | 2.3 | UR | R | D | ***0.50*** | | | |
| TRANS-NONACHLOR | ***0.27*** | ***J*** | ***J*** | | 0.14 | J | U | + | ***4.7*** | | | | 4.0 | R | R | D | ***19.0*** | | | |
| HEPTACHLOR EPOXIDE | 0.38 | J | U | + | 0.09 | U | U | | 0.14 | U | U | | 1.4 | UR | R | D | 0.12 | U | U | |
| DIELDRIN | 0.40 | U | U | | 0.10 | U | U | | 0.15 | U | U | | 1.5 | UR | R | D | 0.13 | N | U | + |
| 4,4'-DDE | 2.6 | J | U | + | ***1.8*** | | | | 72.0 | E | R | D | ***46.0*** | | | | 140 | E | R | D |
| 2,4'-DDD | ***0.91*** | | | | ***0.53*** | | | | ***6.3*** | | | | 7.4 | R | R | D | ***9.4*** | | | |
| ENDRIN | 0.22 | U | U | | 0.06 | U | U | | ***2.9*** | | | | 0.85 | UR | R | D | 0.07 | U | U | |
| ENDRIN ALDEHYDE | ***1.1*** | | | | 0.14 | U | U | | 0.21 | U | U | | 2.1 | UR | R | D | 0.18 | U | U | |
| 4,4'-DDD | 1.7 | NJ | U | + | 0.41 | U | U | | ***4.7*** | | | | 3.8 | JR | R | D | ***17.0*** | | | |
| 2,4'-DDT | 0.39 | U | U | | 0.10 | N | U | + | ***3.6*** | | | | 4.1 | R | R | D | ***5.8*** | | | |
| ENDOSULFAN II | 0.80 | U | U | | 0.20 | U | U | | 0.31 | U | U | | 3.1 | UR | R | D | ***0.57*** | | | |
| ENDOSULFAN SULFATE | 0.80 | U | U | | 0.20 | U | U | | 0.31 | U | U | | 3.1 | UR | R | D | 0.26 | U | U | |
| 4,4'-DDT | 0.59 | U | U | | ***0.16*** | | | | ***9.0*** | | | | 9.3 | R | R | D | 29.0 | E | R | D |
| ENDRIN KETONE | 0.55 | U | U | | 0.14 | U | U | | 0.21 | U | U | | 2.1 | UR | R | D | 0.18 | U | U | |
| METHOXYCHLOR | 0.47 | U | U | | 0.12 | U | UJ | C | 0.18 | U | U | | 1.8 | UR | R | D | 0.15 | U | U | |
| MIREX | ***3.6*** | | | | ***0.09*** | ***J*** | ***J*** | | ***1.1*** | | | | 1.3 | JR | R | D | ***5.0*** | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Inner Harbor

| EPA NO | MV023DL | | | | MV024 | | | | MV024RE | | | | MV025 | | | | MV025DL | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M99MT04D02 | | | | M99MT04S05 | | | | M99MT04S05 | | | | M99MT08S02 | | | | M99MT08S02 | | | |
| Date Sampled | 9/12/96 | | | | 9/12/96 | | | | 9/12/96 | | | | 9/17/96 | | | | 9/17/96 | | | |
| Depth | DILUTION | | | | DICTYOTA | | | | REANALYSES | | | | STEGASTES | | | | DILUTION | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 3.6 | UR | R | D | 0.15 | U | UJ | S | 0.59 | U | R | D | ***2.4*** | | | | 1.3 | JR | R | D |
| PCB-18 (2,2',5) | 4.6 | UR | R | D | ***0.60*** | | ***J*** | ***S*** | 0.76 | U | R | D | 0.15 | U | UJ | C | 3.0 | UR | R | D |
| PCB-28 (2,4,4') | 2.7 | JR | R | D | 0.18 | U | UJ | S | 0.73 | U | R | D | ***2.0*** | | | | 2.6 | JR | R | D |
| PCB-44 (2,2',3,5') | 3.7 | UR | R | D | 0.15 | N | UJ | S,+ | 0.61 | U | R | D | ***0.92*** | | | | 2.4 | UR | R | D |
| PCB-52 (2,2',5,5') | 6.1 | JR | R | D | ***0.43*** | | ***J*** | ***C,S*** | 0.33 | N | R | D | ***3.9*** | | | | 4.8 | JR | R | D |
| PCB-66 (2,3',4,4') | 6.2 | JR | R | D | 0.26 | U | UJ | S | 1.0 | U | R | D | ***4.1*** | | | | 4.1 | UR | R | D |
| PCB-77 (3,3',4,4') | 8.3 | UR | R | D | 0.34 | U | UJ | S | 1.4 | U | R | D | 0.27 | U | U | | 5.4 | UR | R | D |
| PCB-101 (2,2',3,5,5') | ***50.0*** | ***D*** | ***J*** | ***C*** | ***0.91*** | | ***J*** | ***S*** | 3.2 | U | R | D | 30.0 | E | R | D | ***39.0*** | ***D*** | ***J*** | ***C*** |
| PCB-105 (2,3,3',4,4') | 4.6 | UR | R | D | 0.19 | N | UJ | S,+ | 0.76 | U | R | D | ***9.8*** | | | | 12.0 | R | R | D |
| PCB-118 (2,3',4,4',5) | ***51.0*** | ***D*** | | | 0.90 | NJ | UJ | S,+ | 3.7 | U | R | D | ***25.0*** | | | | 31.0 | R | R | D |
| PCB-126 (3,3',4,4',5) | 6.8 | UR | R | D | 0.28 | U | UJ | S | 1.1 | U | R | D | 0.22 | U | U | | 4.4 | UR | R | D |
| PCB-128 (2,2',3,3',4,4') | 14.0 | R | R | D | 0.45 | U | UJ | S | 1.8 | U | R | D | ***11.0*** | | | | 12.0 | R | R | D |
| PCB-138 (2,2',3,4,4',5') | ***170*** | ***D*** | | | 1.8 | J | UJ | S,B | 1.4 | J | R | D | 130 | E | R | D | ***160*** | ***D*** | | |
| PCB-153 (2,2',4,4',5,5') | ***310*** | ***D*** | | | ***3.3*** | | ***J*** | ***S*** | 3.6 | J | R | D | 200 | E | R | D | ***310*** | ***D*** | | |
| PCB-170 (2,2',3,3',4,4',5) | ***100*** | ***D*** | | | ***0.66*** | | ***J*** | ***S*** | 1.1 | | R | D | 79.0 | E | R | D | ***120*** | ***D*** | | |
| PCB-180 (2,2',3,4,4',5,5') | ***260*** | ***D*** | | | ***2.4*** | | ***J*** | ***S*** | 2.3 | | R | D | 100 | E | R | D | ***300*** | ***D*** | | |
| PCB-187 (2,2',3,4',5,5',6) | ***160*** | ***D*** | | | ***3.2*** | | ***J*** | ***S*** | 2.3 | J | R | D | 120 | E | R | D | ***160*** | ***D*** | | |
| PCB-195 (2,2',3,3',4,4',5,6) | 21.0 | R | R | D | ***0.39*** | | ***J*** | ***S*** | 0.49 | J | R | D | ***22.0*** | | | | 38.0 | R | R | D |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 27.0 | R | R | D | ***0.45*** | | ***J*** | ***S*** | 0.57 | J | R | D | 29.0 | E | R | D | ***37.0*** | ***D*** | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | ***57.0*** | ***D*** | | | ***4.1*** | | ***J*** | ***S*** | 4.6 | | R | D | 39.0 | E | R | D | ***53.0*** | ***D*** | | |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 4.9 | UR | R | D | ***0.41*** | | ***J*** | ***S*** | 0.55 | NJ | R | D | ***0.38*** | | | | 3.2 | UR | R | D |
| 2,4'-DDE | 8.0 | UR | R | D | 0.33 | U | UJ | S | 1.3 | U | R | D | ***1.8*** | | | | 1.9 | JR | R | D |
| ENDOSULFAN I | 11.0 | UR | R | D | 0.44 | U | UJ | S | 1.7 | U | R | D | 0.35 | U | U | | 6.9 | UR | R | D |
| HEXACHLOROBENZENE | 2.1 | JR | R | D | 0.13 | U | UJ | S | 0.27 | J | R | D | ***0.43*** | | | | 1.4 | JR | R | D |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Inner Harbor

| EPA NO | MV023DL | | | | MV024 | | | | MV024RE | | | | MV025 | | | | MV025DL | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M99MT04D02 | | | | M99MT04S05 | | | | M99MT04S05 | | | | M99MT08S02 | | | | M99MT08S02 | | | |
| Date Sampled | 9/12/96 | | | | 9/12/96 | | | | 9/12/96 | | | | 9/17/96 | | | | 9/17/96 | | | |
| Depth | DILUTION | | | | DICTYOTA | | | | REANALYSES | | | | STEGASTES | | | | DILUTION | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 4.0 | UR | R | D | ***0.12*** | ***J*** | ***J*** | ***S*** | 0.65 | U | R | D | 0.13 | N | U | + | 2.6 | UR | R | D |
| GAMMA-BHC (LINDANE) | 4.1 | UR | R | D | ***0.13*** | ***J*** | ***J*** | ***S*** | 0.67 | U | R | D | ***1.2*** | | | | 2.7 | UR | R | D |
| DELTA-BHC | 0.87 | JR | R | D | ***0.34*** | | ***J*** | ***C,S*** | 0.53 | U | R | D | 0.11 | N | UJ | +,C | 0.72 | JR | R | D |
| HEPTACHLOR | 2.7 | UR | R | D | ***0.28*** | | ***J*** | ***S*** | 0.44 | U | R | D | 0.09 | U | U | | 1.8 | UR | R | D |
| ALDRIN | 14.0 | UR | R | D | 0.59 | U | UJ | S | 2.4 | U | R | D | 0.47 | U | U | | 9.4 | UR | R | D |
| GAMMA-CHLORDANE | 14.0 | UR | R | D | 0.59 | NJ | UJ | S,+ | 2.3 | U | R | D | ***0.14*** | ***J*** | ***J*** | | 9.3 | UR | R | D |
| ALPHA-CHLORDANE | 8.0 | UR | R | D | 0.33 | U | UJ | S | 1.3 | U | R | D | 0.26 | U | U | | 5.2 | UR | R | D |
| TRANS-NONACHLOR | 16.0 | R | R | D | 0.31 | U | UJ | S | 1.2 | U | R | D | ***1.1*** | | | | 4.9 | UR | R | D |
| HEPTACHLOR EPOXIDE | 4.9 | UR | R | D | 0.20 | U | UJ | S | 0.81 | U | R | D | 0.16 | U | U | | 3.2 | UR | R | D |
| DIELDRIN | 5.2 | UR | R | D | 0.22 | U | UJ | S | 0.86 | U | R | D | 0.17 | U | U | | 3.4 | UR | R | D |
| 4,4'-DDE | ***190*** | ***D*** | | | ***0.15*** | ***J*** | ***J*** | ***S*** | 5.7 | U | R | D | ***37.0*** | | | | 25.0 | R | R | D |
| 2,4'-DDD | 11.0 | R | R | D | 0.36 | NJ | UJ | S,+ | 1.4 | U | R | D | ***11.0*** | | | | 13.0 | R | R | D |
| ENDRIN | 2.9 | UR | R | D | 0.12 | U | UJ | S | 0.48 | U | R | D | 0.09 | N | U | + | 1.9 | UR | R | D |
| ENDRIN ALDEHYDE | 7.2 | UR | R | D | 0.30 | U | UJ | S | 1.2 | U | R | D | 0.24 | U | U | | 4.7 | UR | R | D |
| 4,4'-DDD | 12.0 | JR | R | D | ***0.15*** | ***J*** | ***J*** | ***S*** | 3.5 | U | R | D | ***5.1*** | | | | 4.1 | JR | R | D |
| 2,4'-DDT | 7.8 | R | R | D | ***0.16*** | ***J*** | ***J*** | ***S*** | 0.84 | U | R | D | 0.17 | N | U | + | 7.8 | R | R | D |
| ENDOSULFAN II | 11.0 | UR | R | D | 0.44 | U | UJ | S | 1.7 | U | R | D | 0.35 | U | U | | 6.9 | UR | R | D |
| ENDOSULFAN SULFATE | 11.0 | UR | R | D | 0.44 | U | UJ | S | 1.7 | U | R | D | 0.35 | U | U | | 6.9 | UR | R | D |
| 4,4'-DDT | ***22.0*** | ***D*** | | | 0.32 | U | UJ | S | 1.3 | U | R | D | ***1.8*** | | | | 1.8 | JR | R | D |
| ENDRIN KETONE | 7.2 | UR | R | D | 0.30 | U | UJ | S | 1.2 | U | R | D | 0.24 | U | U | | 4.7 | UR | R | D |
| METHOXYCHLOR | 6.1 | UR | R | D | 0.25 | U | UJ | S | 1.0 | U | R | D | 0.20 | U | U | | 4.0 | UR | R | D |
| MIREX | 6.2 | R | R | D | ***0.38*** | | ***J*** | ***S*** | 0.82 | U | R | D | ***1.2*** | | | | 0.39 | JR | R | D |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

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# Analytical Results Summary for

## Marine Tissues, Inner Harbor

| EPA NO | MV026 | | | | MV027 | | | | MV028 | | | | MV028DL | | | | MV029 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M99MT08S01 | | | | M99MT08S05 | | | | M99MT01S02 | | | | M99MT01S02 | | | | M99MT01S05 | | | |
| Date Sampled | 9/18/96 | | | | 9/18/96 | | | | 9/17/96 | | | | 9/17/96 | | | | 9/17/96 | | | |
| Depth | URCHINS | | | | DICTYOTA | | | | STEGASTES | | | | DILUTION | | | | DICTYOTA | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 0.06 | N | U | + | 0.39 | U | U | | ***3.3*** | | | | 64.0 | UR | R | D | 0.39 | U | U | |
| PCB-18 (2,2',5) | 0.08 | N | U | + | ***1.8*** | | | | 0.15 | U | UJ | C | 82.0 | UR | R | D | 0.51 | N | U | + |
| PCB-28 (2,4,4') | ***0.07*** | ***J*** | ***J*** | | 0.49 | U | U | | ***2.2*** | | | | 79.0 | UR | R | D | 0.49 | U | U | |
| PCB-44 (2,2',3,5') | 0.07 | U | U | | 0.41 | N | U | + | ***2.3*** | | | | 67.0 | UR | R | D | 0.41 | U | U | |
| PCB-52 (2,2',5,5') | ***0.17*** | | | | 0.89 | N | UJ | C,+ | ***13.0*** | | | | 140 | UR | R | D | 0.89 | N | UJ | C,+ |
| PCB-66 (2,3',4,4') | 0.11 | U | U | | 0.68 | U | U | | ***4.8*** | | | | 110 | UR | R | D | 0.68 | U | U | |
| PCB-77 (3,3',4,4') | 0.15 | U | U | | 0.90 | U | U | | 0.27 | U | U | | 150 | UR | R | D | 0.90 | U | U | |
| PCB-101 (2,2',3,5,5') | ***0.96*** | | | | ***2.3*** | | | | 37.0 | E | R | D | ***60.0*** | ***DJ*** | ***J*** | ***C*** | ***22.0*** | | | |
| PCB-105 (2,3,3',4,4') | ***0.38*** | | | | 0.51 | N | U | + | ***17.0*** | | | | 82.0 | UR | R | D | 0.51 | N | U | + |
| PCB-118 (2,3',4,4',5) | ***0.84*** | | | | ***0.69*** | ***J*** | ***J*** | | 44.0 | E | R | D | ***62.0*** | ***DJ*** | ***J*** | ****11*** | 2.4 | U | U | |
| PCB-126 (3,3',4,4',5) | 0.12 | U | UJ | C | 0.74 | U | UJ | C | 0.22 | U | U | | 120 | UR | R | D | 0.75 | NJ | U | + |
| PCB-128 (2,2',3,3',4,4') | ***0.36*** | | | | ***0.32*** | ***J*** | ***J*** | | ***13.0*** | | | | 190 | UR | R | D | 1.2 | U | U | |
| PCB-138 (2,2',3,4,4',5') | ***3.6*** | | | | ***3.1*** | ***J*** | ***J*** | | 110 | E | R | D | ***180*** | ***DJ*** | ***J*** | ****11*** | ***4.6*** | ***J*** | ***J*** | |
| PCB-153 (2,2',4,4',5,5') | ***4.5*** | | | | ***5.6*** | | | | 170 | E | R | D | ***420*** | ***DJ*** | ***J*** | ****11*** | 3.9 | N | U | + |
| PCB-170 (2,2',3,3',4,4',5) | ***0.39*** | | | | ***1.9*** | | | | 69.0 | E | R | D | ***120*** | ***D*** | | | ***3.2*** | | | |
| PCB-180 (2,2',3,4,4',5,5') | ***1.0*** | | | | ***4.3*** | | | | 100 | E | R | D | ***820*** | ***D*** | | | ***7.0*** | | | |
| PCB-187 (2,2',3,4',5,5',6) | ***3.0*** | | | | ***9.0*** | | | | 190 | E | R | D | ***710*** | ***D*** | | | 1.7 | N | U | + |
| PCB-195 (2,2',3,3',4,4',5,6) | ***0.09*** | ***J*** | ***J*** | | ***0.90*** | | | | 93.0 | E | R | D | ***210*** | ***D*** | | | ***4.5*** | | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 0.12 | J | U | + | ***0.53*** | ***J*** | ***J*** | | 100 | E | R | D | ***1,800*** | ***D*** | | | ***6.6*** | | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | ***0.22*** | | | | ***4.2*** | | | | 130 | E | R | D | ***3,200*** | ***D*** | | | ***64.0*** | | | |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 0.11 | NJ | UJ | C,+ | 0.54 | N | U | + | 0.16 | U | U | | 88.0 | UR | R | D | ***1.7*** | | | |
| 2,4'-DDE | 0.14 | U | U | | 0.87 | U | U | | 0.26 | U | U | | 139 | UR | R | D | 0.87 | U | U | |
| ENDOSULFAN I | 0.19 | U | U | | 1.2 | J | U | + | 0.34 | U | U | | 190 | UR | R | D | ***8.2*** | | | |
| HEXACHLOROBENZENE | 0.07 | NJ | U | + | 0.36 | U | U | | ***1.2*** | | | | 58.0 | UR | R | D | 0.36 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

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# Analytical Results Summary for

## Marine Tissues, Inner Harbor

| EPA NO | MV026 | | | | MV027 | | | | MV028 | | | | MV028DL | | | | MV029 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M99MT08S01 | | | | M99MT08S05 | | | | M99MT01S02 | | | | M99MT01S02 | | | | M99MT01S05 | | | |
| Date Sampled | 9/18/96 | | | | 9/18/96 | | | | 9/17/96 | | | | 9/17/96 | | | | 9/17/96 | | | |
| Depth | URCHINS | | | | DICTYOTA | | | | STEGASTES | | | | DILUTION | | | | DICTYOTA | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.09 | N | U | + | ***0.39*** | ***J*** | ***J*** | | 0.13 | U | U | | 71.0 | UR | R | D | 0.43 | N | U | + |
| GAMMA-BHC (LINDANE) | 0.09 | NJ | U | + | ***0.31*** | ***J*** | ***J*** | | 0.13 | N | U | + | 72.0 | UR | R | D | 0.45 | N | U | + |
| DELTA-BHC | 0.07 | N | UJ | C,+ | ***0.68*** | | ***J*** | ***C*** | 0.10 | N | UJ | +,C | 57.0 | UR | R | D | ***1.3*** | | ***J*** | ***C*** |
| HEPTACHLOR | 0.06 | NJ | U | + | 0.29 | U | U | | 0.03 | N | U | + | 48.0 | UR | R | D | 0.29 | U | U | |
| ALDRIN | 0.25 | U | U | | 1.6 | U | U | | 0.46 | U | U | | 250 | UR | R | D | 1.6 | U | U | |
| GAMMA-CHLORDANE | 0.25 | U | U | | ***1.6*** | | | | ***0.20*** | ***J*** | ***J*** | | 250 | UR | R | D | 1.5 | U | U | |
| ALPHA-CHLORDANE | 0.14 | U | U | | 0.87 | U | U | | 0.26 | U | U | | 140 | UR | R | D | 0.88 | N | U | + |
| TRANS-NONACHLOR | 0.13 | U | U | | 0.81 | U | U | | ***10.0*** | | | | 130 | UR | R | D | 0.81 | U | U | |
| HEPTACHLOR EPOXIDE | 0.09 | U | U | | 0.54 | NJ | U | + | 0.16 | U | U | | 88.0 | UR | R | D | 0.54 | U | U | |
| DIELDRIN | 0.09 | U | U | | 0.57 | U | U | | 0.17 | U | U | | 94.0 | UR | R | D | 0.57 | U | U | |
| 4,4'-DDE | ***0.72*** | | | | 3.8 | U | U | | 140 | E | R | D | ***120*** | ***DJ*** | ***J*** | ****11*** | ***6.8*** | | | |
| 2,4'-DDD | ***0.51*** | | | | ***0.88*** | ***J*** | ***J*** | | ***7.3*** | | | | 150 | UR | R | D | 0.96 | U | U | |
| ENDRIN | ***0.07*** | | | | 0.32 | U | U | | 0.09 | U | U | | 52.0 | UR | R | D | 0.32 | U | U | |
| ENDRIN ALDEHYDE | 0.13 | U | U | | ***0.94*** | | | | 0.23 | U | U | | 130 | UR | R | D | 0.79 | U | U | |
| 4,4'-DDD | 0.38 | U | U | | 0.24 | J | U | + | ***19.0*** | | | | 380 | UR | R | D | ***4.9*** | | | |
| 2,4'-DDT | 0.12 | N | U | + | 0.55 | N | U | + | ***5.9*** | | | | 91.0 | UR | R | D | ***3.9*** | | | |
| ENDOSULFAN II | 0.19 | U | U | | 1.2 | U | U | | 0.34 | U | U | | 190 | UR | R | D | 1.2 | U | U | |
| ENDOSULFAN SULFATE | 0.19 | U | U | | 1.2 | U | U | | 0.34 | U | U | | 190 | UR | R | D | 1.2 | U | U | |
| 4,4'-DDT | 0.14 | U | U | | 0.85 | U | U | | ***17.0*** | | | | 140 | UR | R | D | ***42.0*** | | | |
| ENDRIN KETONE | 0.13 | U | U | | 0.79 | U | U | | 0.23 | U | U | | 130 | UR | R | D | 0.79 | U | U | |
| METHOXYCHLOR | 0.11 | U | UJ | C | 0.67 | U | U | | 0.20 | U | U | | 110 | UR | R | D | 0.67 | U | U | |
| MIREX | 0.09 | J | U | + | ***13.0*** | | | | ***3.0*** | | | | 2.9 | JR | R | D | ***1.8*** | | | |

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- See Cover Sheet for Lab, Rev and Qual Code key.

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# Analytical Results Summary for

## Marine Tissues, Inner Harbor

| EPA NO | MV030 | | | | MV031 | | | | MV032 | | | | MV032DL | | | | MV033 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M99MT01S01 | | | | M99MT06S01 | | | | M99MT06S02 | | | | M99MT06S02 | | | | M99MT06S05 | | | |
| Date Sampled | 9/17/96 | | | | 9/18/96 | | | | 9/18/96 | | | | 9/18/96 | | | | 9/18/96 | | | |
| Depth | URCHINS | | | | URCHINS | | | | STEGASTES | | | | DILUTION | | | | DICTYOTA | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 0.06 | J | U | + | ***0.07*** | | ***J*** | ***F,$*** | ***2.5*** | | | | 4.4 | UR | R | D | 0.70 | NJ | U | + |
| PCB-18 (2,2',5) | 0.08 | J | U | + | ***0.30*** | | ***J*** | ***F,$*** | 0.15 | U | UJ | +,C | 5.7 | UR | R | D | ***3.8*** | | | |
| PCB-28 (2,4,4') | 0.08 | U | U | | 0.08 | J | U | + | ***2.6*** | | | | 3.6 | JR | R | D | 0.91 | U | U | |
| PCB-44 (2,2',3,5') | 0.07 | U | U | | 0.07 | U | U | | ***1.1*** | | | | 4.6 | UR | R | D | 0.76 | U | U | |
| PCB-52 (2,2',5,5') | ***3.1*** | | | | ***0.28*** | | | ***$*** | ***7.5*** | | | | 8.4 | JR | R | D | 1.6 | N | UJ | C,+ |
| PCB-66 (2,3',4,4') | 0.11 | U | U | | 0.11 | U | U | | ***8.1*** | | | | 7.8 | UR | R | D | 1.3 | U | U | |
| PCB-77 (3,3',4,4') | 0.14 | U | U | | 0.15 | U | U | | 0.26 | U | U | | 10.0 | UR | R | D | 1.7 | U | U | |
| PCB-101 (2,2',3,5,5') | 0.33 | U | U | | ***1.2*** | | | ***$*** | 42.0 | E | R | D | ***66.0*** | ***D*** | ***J*** | ***C*** | ***7.5*** | | | |
| PCB-105 (2,3,3',4,4') | ***0.42*** | | | | ***0.33*** | | | ***$*** | ***13.0*** | | | | 20.0 | R | R | D | ***1.9*** | | | |
| PCB-118 (2,3',4,4',5) | 0.38 | U | U | | ***1.0*** | | | ***$*** | 47.0 | E | R | D | ***65.0*** | ***D*** | | | 4.4 | J | U | + |
| PCB-126 (3,3',4,4',5) | 0.12 | U | UJ | C | 0.12 | U | UJ | C | 0.21 | U | U | | 8.4 | UR | R | D | 1.4 | N | UJ | C,+ |
| PCB-128 (2,2',3,3',4,4') | ***0.29*** | | | | ***0.29*** | | | ***$*** | ***18.0*** | | | | 21.0 | R | R | D | 2.2 | J | U | + |
| PCB-138 (2,2',3,4,4',5') | ***5.2*** | | | | ***3.9*** | | | ***$*** | 180 | E | R | D | ***280*** | ***D*** | | | ***8.8*** | ***J*** | ***J*** | |
| PCB-153 (2,2',4,4',5,5') | ***7.3*** | | | | ***5.3*** | | | ***$*** | 240 | E | R | D | ***560*** | ***D*** | | | ***8.6*** | | | |
| PCB-170 (2,2',3,3',4,4',5) | ***0.56*** | | | | ***0.22*** | | | ***$*** | 94.0 | E | R | D | ***190*** | ***D*** | | | ***2.7*** | | | |
| PCB-180 (2,2',3,4,4',5,5') | ***1.2*** | | | | ***0.66*** | | | ***$*** | 110 | E | R | D | ***450*** | ***D*** | | | ***9.1*** | | | |
| PCB-187 (2,2',3,4',5,5',6) | 0.27 | N | U | + | ***3.1*** | | | ***$*** | 160 | E | R | D | ***250*** | ***D*** | | | ***9.6*** | | | |
| PCB-195 (2,2',3,3',4,4',5,6) | ***0.82*** | | | | ***0.09*** | ***J*** | ***J*** | ***$*** | 35.0 | E | R | D | ***37.0*** | ***D*** | | | ***5.3*** | | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | ***1.2*** | | | | ***0.09*** | ***J*** | ***J*** | ***$*** | 44.0 | E | R | D | ***59.0*** | ***D*** | | | ***8.6*** | | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | ***8.6*** | | | | ***0.40*** | | | ***$*** | 60.0 | E | R | D | ***98.0*** | ***D*** | | | ***18.0*** | | | |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 0.08 | J | UJ | C,+ | ***0.07*** | ***J*** | ***J*** | ***C*** | ***0.40*** | | | | 6.1 | UR | R | D | 0.99 | N | U | + |
| 2,4'-DDE | 0.14 | U | U | | ***0.12*** | ***J*** | ***J*** | | ***2.4*** | | | | 9.9 | UR | R | D | 1.6 | U | U | |
| ENDOSULFAN I | ***1.7*** | | | | 0.19 | U | U | | 0.33 | U | U | | 13.0 | UR | R | D | 2.2 | U | U | |
| HEXACHLOROBENZENE | 0.06 | J | U | + | 0.06 | U | U | | ***0.69*** | | | | 0.62 | JR | R | D | ***0.99*** | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems ROEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Inner Harbor

| EPA NO | MV030 | | | | MV031 | | | | MV032 | | | | MV032DL | | | | MV033 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M99MT01S01 | | | | M99MT06S01 | | | | M99MT06S02 | | | | M99MT06S02 | | | | M99MT06S05 | | | |
| Date Sampled | 9/17/96 | | | | 9/18/96 | | | | 9/18/96 | | | | 9/18/96 | | | | 9/18/96 | | | |
| Depth | URCHINS | | | | URCHINS | | | | STEGASTES | | | | DILUTION | | | | DICTYOTA | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | ***0.45*** | | | | 0.07 | NJ | U | + | 0.12 | N | U | + | 4.9 | UR | R | D | ***2.0*** | | | |
| GAMMA-BHC (LINDANE) | ***0.55*** | | | | ***0.06*** | ***J*** | ***J*** | ***F*** | 0.10 | N | UJ | +,C | 5.1 | UR | R | D | ***0.91*** | | | |
| DELTA-BHC | ***0.39*** | | ***J*** | ***C*** | 0.06 | U | UJ | C | 0.10 | N | U | + | 4.0 | UR | R | D | ***2.0*** | | ***J*** | ***C*** |
| HEPTACHLOR | 0.05 | N | U | + | 0.05 | N | U | + | 0.08 | U | U | | 3.3 | UR | R | D | 0.55 | U | U | |
| ALDRIN | 0.25 | U | U | | 0.25 | U | U | | 0.45 | U | U | | 18.0 | UR | R | D | 2.9 | U | U | |
| GAMMA-CHLORDANE | 0.25 | U | U | | 0.25 | U | U | | ***0.12*** | ***J*** | ***J*** | | 18.0 | UR | R | D | 2.9 | U | U | |
| ALPHA-CHLORDANE | 0.14 | U | U | | 0.14 | U | U | | 0.25 | U | U | | 9.9 | UR | R | D | 1.6 | U | U | |
| TRANS-NONACHLOR | ***1.6*** | | | | 0.13 | U | U | | ***8.0*** | | | | 7.4 | JR | R | D | 1.5 | U | U | |
| HEPTACHLOR EPOXIDE | 0.09 | U | U | | 0.09 | U | U | | 0.15 | U | U | | 6.1 | UR | R | D | 0.99 | NJ | U | + |
| DIELDRIN | 0.09 | U | U | | 0.09 | U | U | | 0.16 | U | U | | 6.5 | UR | R | D | 1.1 | U | U | |
| 4,4'-DDE | 0.60 | U | U | | ***0.84*** | | | | 160 | E | R | D | ***110*** | ***D*** | | | 7.1 | U | U | |
| 2,4'-DDD | 0.15 | U | U | | ***0.64*** | | | | ***13.0*** | | | | 18.0 | R | R | D | ***2.9*** | | | |
| ENDRIN | ***0.08*** | | | | ***0.14*** | | | | 0.09 | U | U | | 3.6 | UR | R | D | 0.60 | U | U | |
| ENDRIN ALDEHYDE | 0.13 | U | U | | 0.13 | U | U | | 0.23 | U | U | | 9.0 | UR | R | D | 1.5 | U | U | |
| 4,4'-DDD | ***2.5*** | | | | 0.38 | U | U | | ***12.0*** | | | | 8.7 | JR | R | D | ***1.8*** | ***J*** | ***J*** | |
| 2,4'-DDT | 0.09 | U | U | | ***0.21*** | | | | ***9.9*** | | | | 14.0 | R | R | D | 1.0 | NJ | U | + |
| ENDOSULFAN II | 0.18 | U | U | | 0.19 | U | U | | 0.33 | U | U | | 13.0 | UR | R | D | 2.2 | U | U | |
| ENDOSULFAN SULFATE | 0.18 | U | U | | 0.19 | U | U | | 0.33 | U | U | | 13.0 | UR | R | D | 2.2 | U | U | |
| 4,4'-DDT | 0.14 | U | U | | 0.14 | U | U | | ***10.0*** | | | | 7.1 | JR | R | D | 1.6 | U | U | |
| ENDRIN KETONE | 0.13 | U | U | | 0.13 | U | U | | 0.23 | U | U | | 9.0 | UR | R | D | 1.5 | U | U | |
| METHOXYCHLOR | 0.11 | U | UJ | C | 0.11 | U | UJ | C | 0.19 | U | U | | 7.6 | UR | R | D | 1.3 | U | U | |
| MIREX | ***1.2*** | | | | 0.08 | J | U | + | ***2.9*** | | | | 3.2 | JR | R | D | ***6.2*** | | | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Inner Harbor

| EPA NO | MV034 | | | | MV035 | | | | MV035DL | | | | MV036 | | | | MV037 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M99MT07S01 | | | | M99MT07S02 | | | | M99MT07S02 | | | | M99MT07S05 | | | | M99MT05S01 | | | |
| Date Sampled | 9/18/96 | | | | 9/18/96 | | | | 9/18/96 | | | | 9/18/96 | | | | 9/18/96 | | | |
| Depth | URCHINS | | | | STEGASTES | | | | DILUTION | | | | DICTYOTA | | | | URCHINS | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | 0.06 | N | U | + | ***3.6*** | | | | 2.9 | JR | R | D | 0.74 | U | U | | 0.06 | N | U | + |
| PCB-18 (2,2',5) | ***0.34*** | | ***J*** | ***F*** | 0.14 | N | UJ | +,C | 5.6 | UR | R | D | ***3.2*** | | | | ***0.18*** | | ***J*** | ***F*** |
| PCB-28 (2,4,4') | 0.07 | NJ | U | + | ***2.2*** | | | | 4.1 | JR | R | D | 0.93 | U | U | | 0.08 | J | U | + |
| PCB-44 (2,2',3,5') | 0.06 | U | U | | ***0.93*** | | | | 4.5 | UR | R | D | 0.78 | N | U | + | 0.07 | U | U | |
| PCB-52 (2,2',5,5') | ***0.13*** | ***J*** | ***J*** | | ***5.1*** | | | | 7.8 | JR | R | D | 1.7 | N | UJ | C,+ | ***0.24*** | | | |
| PCB-66 (2,3',4,4') | 0.10 | U | U | | ***3.3*** | | | | 7.6 | UR | R | D | 1.3 | U | U | | 0.11 | U | U | |
| PCB-77 (3,3',4,4') | 0.14 | U | U | | 0.25 | U | U | | 10.0 | UR | R | D | 1.7 | U | U | | 0.14 | U | U | |
| PCB-101 (2,2',3,5,5') | ***0.73*** | | | | 26.0 | E | R | D | ***60.0*** | ***D*** | | | ***3.6*** | ***J*** | ***J*** | | ***1.2*** | | | |
| PCB-105 (2,3,3',4,4') | ***0.25*** | | | | ***7.7*** | | | | 18.0 | R | R | D | 0.97 | N | U | + | ***0.65*** | | | |
| PCB-118 (2,3',4,4',5) | ***0.68*** | | | | 25.0 | E | R | D | ***52.0*** | ***D*** | | | ***1.5*** | ***J*** | ***J*** | | ***0.94*** | | | |
| PCB-126 (3,3',4,4',5) | 0.11 | U | UJ | C | 0.21 | U | U | | 8.2 | UR | R | D | 1.4 | U | UJ | C | 0.12 | U | UJ | C |
| PCB-128 (2,2',3,3',4,4') | ***0.47*** | | | | ***11.0*** | | | | 18.0 | R | R | D | 2.3 | U | U | | ***0.39*** | | | |
| PCB-138 (2,2',3,4,4',5') | ***3.5*** | | | | 100 | E | R | D | ***240*** | ***D*** | | | ***6.8*** | ***J*** | ***J*** | | ***5.3*** | | | |
| PCB-153 (2,2',4,4',5,5') | ***4.5*** | | | | 140 | E | R | D | ***450*** | ***D*** | | | ***13.0*** | | | | ***6.3*** | | | |
| PCB-170 (2,2',3,3',4,4',5) | ***0.22*** | | | | 56.0 | E | R | D | ***170*** | ***D*** | | | ***4.5*** | | | | ***0.31*** | | | |
| PCB-180 (2,2',3,4,4',5,5') | ***0.68*** | | | | 66.0 | E | R | D | ***390*** | ***D*** | | | ***8.3*** | | | | ***0.62*** | | | |
| PCB-187 (2,2',3,4',5,5',6) | ***2.6*** | | | | 92.0 | E | R | D | ***220*** | ***D*** | | | ***25.0*** | | | | ***3.5*** | | | |
| PCB-195 (2,2',3,3',4,4',5,6) | ***0.11*** | ***J*** | ***J*** | | 29.0 | E | R | D | ***46.0*** | ***D*** | | | ***1.7*** | | | | ***0.15*** | | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | ***0.08*** | ***J*** | ***J*** | | 25.0 | E | R | D | ***50.0*** | ***D*** | | | ***1.7*** | | | | ***0.06*** | ***J*** | ***J*** | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | ***0.39*** | | | | 34.0 | E | R | D | ***90.0*** | ***D*** | | | ***10.0*** | | | | ***0.27*** | | | |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 0.08 | NJ | UJ | C,+ | ***0.51*** | | | | 6.0 | UR | R | D | ***2.0*** | | | | 0.08 | NJ | UJ | C,+ |
| 2,4'-DDE | 0.13 | N | U | + | ***1.4*** | | | | 9.7 | UR | R | D | 1.7 | U | U | | 0.14 | NJ | U | + |
| ENDOSULFAN I | 0.18 | U | U | | 0.32 | U | U | | 13.0 | UR | R | D | 2.2 | J | U | + | 0.19 | U | U | |
| HEXACHLOROBENZENE | ***0.05*** | ***J*** | ***J*** | ***F*** | ***1.5*** | | | | 2.3 | JR | R | D | 0.69 | NJ | U | + | 0.06 | NJ | U | + |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

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# Analytical Results Summary for

## Marine Tissues, Inner Harbor

| EPA NO | MV034 | | | | MV035 | | | | MV035DL | | | | MV036 | | | | MV037 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M99MT07S01 | | | | M99MT07S02 | | | | M99MT07S02 | | | | M99MT07S05 | | | | M99MT05S01 | | | |
| Date Sampled | 9/18/96 | | | | 9/18/96 | | | | 9/18/96 | | | | 9/18/96 | | | | 9/18/96 | | | |
| Depth | URCHINS | | | | STEGASTES | | | | DILUTION | | | | DICTYOTA | | | | URCHINS | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.07 | NJ | U | + | 0.12 | U | U | | 4.8 | UR | R | D | ***0.79*** | ***J*** | ***J*** | | 0.07 | U | U | |
| GAMMA-BHC (LINDANE) | 0.07 | J | U | + | 0.12 | N | U | + | 5.0 | UR | R | D | ***0.61*** | ***J*** | ***J*** | | ***0.05*** | ***J*** | ***J*** | ***F*** |
| DELTA-BHC | 0.04 | NJ | UJ | C,+ | 0.10 | N | U | +,C | 1.3 | JR | R | D | ***2.3*** | | ***J*** | ***C*** | 0.06 | N | UJ | C,+ |
| HEPTACHLOR | 0.04 | U | U | | 0.08 | U | U | | 3.3 | UR | R | D | 0.55 | N | U | + | 0.05 | N | U | + |
| ALDRIN | 0.24 | U | U | | 0.44 | U | U | | 18.0 | UR | R | D | 3.0 | U | U | | 0.25 | U | U | |
| GAMMA-CHLORDANE | 0.23 | U | U | | ***0.12*** | ***J*** | ***J*** | | 17.0 | UR | R | D | ***1.5*** | ***J*** | ***J*** | | 0.25 | U | U | |
| ALPHA-CHLORDANE | 0.13 | U | U | | ***0.27*** | | | | 9.7 | UR | R | D | 1.7 | U | U | | 0.14 | U | U | |
| TRANS-NONACHLOR | 0.12 | U | U | | ***1.8*** | | | | 2.5 | JR | R | D | 1.6 | NJ | U | + | 0.13 | U | U | |
| HEPTACHLOR EPOXIDE | 0.08 | U | U | | 0.15 | U | U | | 6.0 | UR | R | D | 1.0 | U | U | | 0.09 | U | U | |
| DIELDRIN | 0.09 | U | U | | 0.16 | U | U | | 6.4 | UR | R | D | 1.1 | U | U | | 0.09 | U | U | |
| 4,4'-DDE | ***0.51*** | ***J*** | ***J*** | | 55.0 | E | R | D | ***49.0*** | ***D*** | | | 7.1 | J | U | + | ***0.87*** | | | |
| 2,4'-DDD | ***0.39*** | | | | ***9.6*** | | | | 19.0 | R | R | D | ***3.5*** | | | | ***0.66*** | | | |
| ENDRIN | 0.05 | U | U | | 0.09 | U | U | | 3.6 | UR | R | D | 0.61 | U | U | | ***0.06*** | | | |
| ENDRIN ALDEHYDE | 0.12 | U | U | | 0.22 | U | U | | 8.8 | UR | R | D | ***1.2*** | ***J*** | ***J*** | | 0.13 | U | U | |
| 4,4'-DDD | 0.36 | U | U | | ***10.0*** | | | | 9.9 | JR | R | D | 4.6 | J | U | + | 0.38 | U | U | |
| 2,4'-DDT | 0.09 | N | U | + | 0.16 | N | U | + | 10.0 | R | R | D | 1.1 | N | U | + | ***0.33*** | | | |
| ENDOSULFAN II | 0.18 | U | U | | 0.32 | U | U | | 13.0 | UR | R | D | 2.2 | NJ | U | + | 0.19 | U | U | |
| ENDOSULFAN SULFATE | 0.18 | U | U | | 0.32 | U | U | | 13.0 | UR | R | D | 2.2 | U | U | | 0.19 | U | U | |
| 4,4'-DDT | 0.13 | U | U | | ***6.8*** | | | | 7.8 | JR | R | D | 1.6 | U | U | | 0.14 | NJ | U | + |
| ENDRIN KETONE | 0.12 | U | U | | 0.22 | U | U | | 8.8 | UR | R | D | 1.5 | U | U | | 0.13 | U | U | |
| METHOXYCHLOR | 0.10 | U | UJ | C | 0.19 | U | U | | 7.5 | UR | R | D | 1.3 | U | U | | 0.11 | U | UJ | C |
| MIREX | 0.08 | J | U | + | ***0.65*** | | | | 1.2 | JR | R | D | ***13.0*** | | | | 0.08 | J | U | + |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

# Marine Tissues, Inner Harbor

| EPA NO | MV038 | | | | MV038DL | | | | MV039 | | | | MV040 | | | | MV040RE | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M99MT05S02 | | | | M99MT05S02 | | | | M99MT05S05 | | | | M99MT02S01 | | | | M99MT02S01 | | | |
| Date Sampled | 9/18/96 | | | | 9/18/96 | | | | 9/18/96 | | | | 9/20/96 | | | | 9/20/96 | | | |
| Depth | STEGASTES | | | | DILUTION | | | | DICTYOTA | | | | URCHINS | | | | REANALYSES | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | ***2.7*** | | | | 1.9 | JR | R | D | 0.88 | U | U | | 0.13 | | R | D | 0.13 | U | U | |
| PCB-18 (2,2',5) | 0.90 | | UJ | C | 2.5 | UR | R | D | ***3.4*** | | | | 0.32 | | R | D | 0.17 | N | U | + |
| PCB-28 (2,4,4') | ***2.0*** | | | | 2.3 | JR | R | D | 1.1 | U | U | | 0.07 | NJ | R | D | 0.16 | U | U | |
| PCB-44 (2,2',3,5') | ***1.4*** | | | | 2.0 | UR | R | D | 0.91 | N | U | + | 0.07 | U | R | D | 0.14 | U | U | |
| PCB-52 (2,2',5,5') | ***3.7*** | | | | 4.7 | R | R | D | 2.0 | N | UJ | C,+ | 0.23 | | R | D | ***0.26*** | ***J*** | ***J*** | |
| PCB-66 (2,3',4,4') | ***4.2*** | | | | 3.4 | UR | R | D | 1.5 | U | U | | 0.11 | U | R | D | 0.23 | U | U | |
| PCB-77 (3,3',4,4') | 0.45 | U | U | | 4.5 | UR | R | D | 2.0 | U | U | | 0.15 | U | R | D | 0.30 | U | U | |
| PCB-101 (2,2',3,5,5') | ***29.0*** | | | | 35.0 | R | R | D | ***7.0*** | | | | 0.81 | | R | D | ***1.0*** | | ***J*** | ***C*** |
| PCB-105 (2,3,3',4,4') | ***6.5*** | | | | 2.5 | UR | R | D | 1.1 | N | U | + | 0.35 | | R | D | 0.17 | U | U | |
| PCB-118 (2,3',4,4',5) | ***25.0*** | | | | 28.0 | R | R | D | 5.5 | U | U | | 0.61 | | R | D | ***0.67*** | ***J*** | ***J*** | |
| PCB-126 (3,3',4,4',5) | 0.37 | U | U | | 3.7 | UR | R | D | 1.7 | U | UJ | C | 0.12 | U | R | D | 0.25 | N | U | + |
| PCB-128 (2,2',3,3',4,4') | ***9.4*** | | | | 9.8 | R | R | D | 2.7 | U | U | | 0.19 | J | R | D | ***0.22*** | ***J*** | ***J*** | |
| PCB-138 (2,2',3,4,4',5') | 140 | E | R | D | ***180*** | ***D*** | | | ***6.6*** | ***J*** | ***J*** | | 3.0 | | R | D | ***4.9*** | | | |
| PCB-153 (2,2',4,4',5,5') | 200 | E | R | D | ***250*** | ***D*** | | | ***13.0*** | | | | 4.0 | | R | D | ***4.9*** | | | |
| PCB-170 (2,2',3,3',4,4',5) | 85.0 | E | R | D | ***94.0*** | ***D*** | | | ***2.6*** | | | | 0.22 | | R | D | ***0.32*** | | | |
| PCB-180 (2,2',3,4,4',5,5') | 140 | E | R | D | ***220*** | ***D*** | | | ***7.1*** | | | | 0.61 | | R | D | ***0.72*** | | | |
| PCB-187 (2,2',3,4',5,5',6) | 96.0 | E | R | D | ***120*** | ***D*** | | | ***19.0*** | | | | 2.1 | | R | D | ***2.6*** | | | |
| PCB-195 (2,2',3,3',4,4',5,6) | ***19.0*** | | | | 19.0 | R | R | D | ***1.8*** | ***J*** | ***J*** | | 0.08 | J | R | D | ***0.06*** | ***J*** | ***J*** | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | ***26.0*** | | | | 30.0 | R | R | D | ***1.8*** | | | | 0.08 | J | R | D | ***0.12*** | ***J*** | ***J*** | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 50.0 | E | R | D | ***64.0*** | ***D*** | | | ***18.0*** | | | | 0.31 | | R | D | ***0.37*** | | | |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | ***0.33*** | | | | 2.7 | UR | R | D | ***2.5*** | | | | 0.13 | | R | D | 0.17 | NJ | UJ | C,+ |
| 2,4'-DDE | ***1.9*** | | | | 4.4 | UR | R | D | 2.0 | U | U | | 0.08 | NJ | R | D | 0.29 | U | U | |
| ENDOSULFAN I | 0.58 | U | U | | 5.8 | UR | R | D | 2.6 | U | U | | 0.19 | U | R | D | 0.38 | U | U | |
| HEXACHLOROBENZENE | ***0.54*** | | | | 0.54 | JR | R | D | 0.80 | NJ | U | + | 0.01 | J | R | D | 0.12 | U | U | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Inner Harbor

| EPA NO | MV038 | | | | MV038DL | | | | MV039 | | | | MV040 | | | | MV040RE | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M99MT05S02 | | | | M99MT05S02 | | | | M99MT05S05 | | | | M99MT02S01 | | | | M99MT02S01 | | | |
| Date Sampled | 9/18/96 | | | | 9/18/96 | | | | 9/18/96 | | | | 9/20/96 | | | | 9/20/96 | | | |
| Depth | STEGASTES | | | | DILUTION | | | | DICTYOTA | | | | URCHINS | | | | REANALYSES | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.22 | U | U | | 2.2 | UR | R | D | ***0.67*** | ***J*** | ***J*** | | 0.07 | U | R | D | 0.14 | U | U | |
| GAMMA-BHC (LINDANE) | ***0.46*** | | | | 2.2 | UR | R | D | ***0.50*** | ***J*** | ***J*** | | 0.04 | J | R | D | 0.15 | U | U | |
| DELTA-BHC | 0.09 | N | UJ | +,C | 0.64 | JR | R | D | ***1.7*** | | ***J*** | ***C*** | 0.06 | N | R | D | 0.12 | NJ | UJ | C,+ |
| HEPTACHLOR | 0.15 | U | U | | 1.5 | UR | R | D | 0.64 | N | U | + | 0.05 | U | R | D | 0.10 | U | U | |
| ALDRIN | 0.78 | U | U | | 7.8 | UR | R | D | 3.5 | U | U | | 0.26 | U | R | D | 0.52 | U | U | |
| GAMMA-CHLORDANE | 0.77 | U | U | | 7.7 | UR | R | D | 3.5 | U | U | | 0.26 | U | R | D | 0.51 | U | U | |
| ALPHA-CHLORDANE | 0.44 | U | U | | 4.4 | UR | R | D | 2.0 | U | U | | 0.15 | U | R | D | 0.29 | U | U | |
| TRANS-NONACHLOR | ***1.8*** | | | | 1.7 | JR | R | D | 1.8 | U | U | | 0.14 | U | R | D | 0.27 | U | U | |
| HEPTACHLOR EPOXIDE | 0.27 | U | U | | 2.7 | UR | R | D | 1.2 | U | U | | 0.09 | U | R | D | 0.18 | U | U | |
| DIELDRIN | 0.29 | U | U | | 2.9 | UR | R | D | 1.3 | U | U | | 0.10 | U | R | D | 0.19 | U | U | |
| 4,4'-DDE | ***36.0*** | | | | 26.0 | R | R | D | 8.3 | J | U | + | 0.48 | J | R | D | ***0.55*** | ***J*** | ***J*** | |
| 2,4'-DDD | ***8.9*** | | | | 11.0 | R | R | D | 2.1 | N | U | + | 0.44 | | R | D | 0.32 | U | U | |
| ENDRIN | 0.16 | U | U | | 1.6 | UR | R | D | 0.72 | U | U | | 0.13 | | R | D | 0.11 | U | U | |
| ENDRIN ALDEHYDE | 0.40 | U | U | | 4.0 | UR | R | D | ***1.4*** | ***J*** | ***J*** | | 0.13 | U | R | D | 0.26 | U | U | |
| 4,4'-DDD | ***5.7*** | | | | 4.7 | JR | R | D | 5.3 | J | U | + | 0.39 | U | R | D | 0.78 | U | U | |
| 2,4'-DDT | ***6.6*** | | | | 7.4 | R | R | D | 1.2 | N | U | + | 0.20 | | R | D | 0.19 | U | U | |
| ENDOSULFAN II | 0.58 | U | U | | 5.8 | UR | R | D | 2.6 | NJ | U | + | 0.19 | U | R | D | 0.38 | U | U | |
| ENDOSULFAN SULFATE | 0.58 | U | U | | 5.8 | UR | R | D | 2.6 | U | U | | 0.19 | U | R | D | 0.38 | U | U | |
| 4,4'-DDT | ***3.9*** | | | | 3.0 | JR | R | D | 1.9 | U | U | | 0.14 | U | R | D | 0.28 | U | UJ | C |
| ENDRIN KETONE | 0.40 | U | U | | 4.0 | UR | R | D | 1.8 | U | U | | 0.13 | U | R | D | 0.26 | U | U | |
| METHOXYCHLOR | 0.33 | U | U | | 3.3 | UR | R | D | 1.5 | U | U | | 0.11 | U | R | D | 0.22 | U | U | |
| MIREX | ***0.36*** | | | | 0.38 | JR | R | D | ***7.8*** | | | | 0.02 | J | R | D | 0.18 | U | U | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

# Marine Tissues, Inner Harbor

| EPA NO | MV041 | | | | MV041DL | | | | MV042 | | | | ? | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M99MT02S02 | | | | M99MT02S02 | | | | M99MT02S05 | | | | | | | | | | | |
| Date Sampled | 9/20/96 | | | | 9/20/96 | | | | 9/20/96 | | | | | | | | | | | |
| Depth | STEGASTES | | | | DILUTION | | | | DICTYOTA | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | ***4.2*** | | | | 1.1 | JR | R | D | 0.31 | N | U | + | | | | | | | | |
| PCB-18 (2,2',5) | ***0.82*** | | ***J*** | ***C*** | 2.9 | UR | R | D | ***1.9*** | | | | | | | | | | | |
| PCB-28 (2,4,4') | ***2.4*** | | | | 2.7 | JR | R | D | 0.40 | U | U | | | | | | | | | |
| PCB-44 (2,2',3,5') | ***1.0*** | | | | 2.3 | UR | R | D | 0.33 | N | U | + | | | | | | | | |
| PCB-52 (2,2',5,5') | ***4.7*** | | | | 4.7 | JR | R | D | 0.72 | N | UJ | C,+ | | | | | | | | |
| PCB-66 (2,3',4,4') | ***2.8*** | | | | 3.9 | UR | R | D | 0.56 | U | U | | | | | | | | | |
| PCB-77 (3,3',4,4') | 0.52 | U | U | | 5.2 | UR | R | D | 0.75 | U | U | | | | | | | | | |
| PCB-101 (2,2',3,5,5') | ***22.0*** | | | | 24.0 | R | R | D | ***23.0*** | | | | | | | | | | | |
| PCB-105 (2,3,3',4,4') | ***5.1*** | | | | 2.9 | UR | R | D | ***5.1*** | | | | | | | | | | | |
| PCB-118 (2,3',4,4',5) | ***19.0*** | | | | 18.0 | R | R | D | ***1.7*** | ***J*** | ***J*** | | | | | | | | | |
| PCB-126 (3,3',4,4',5) | 0.42 | U | U | | 4.2 | UR | R | D | 0.61 | U | U | | | | | | | | | |
| PCB-128 (2,2',3,3',4,4') | ***7.0*** | | | | 5.9 | JR | R | D | ***0.51*** | ***J*** | ***J*** | | | | | | | | | |
| PCB-138 (2,2',3,4,4',5') | 82.0 | E | R | D | ***89.0*** | ***D*** | | | ***6.2*** | | | | | | | | | | | |
| PCB-153 (2,2',4,4',5,5') | 140 | E | R | D | ***170*** | ***D*** | | | ***12.0*** | | | | | | | | | | | |
| PCB-170 (2,2',3,3',4,4',5) | 58.0 | E | R | D | ***54.0*** | ***R*** | | | ***3.4*** | | | | | | | | | | | |
| PCB-180 (2,2',3,4,4',5,5') | 120 | E | R | D | ***130*** | ***D*** | | | ***9.1*** | | | | | | | | | | | |
| PCB-187 (2,2',3,4',5,5',6) | 70.0 | E | R | D | ***78.0*** | ***D*** | | | ***7.7*** | | | | | | | | | | | |
| PCB-195 (2,2',3,3',4,4',5,6) | ***12.0*** | | | | 9.8 | R | R | D | ***1.6*** | | | | | | | | | | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | ***19.0*** | | | | 17.0 | R | R | D | ***1.9*** | | | | | | | | | | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | ***44.0*** | | | | 53.0 | R | R | D | ***12.0*** | | | | | | | | | | | |
| ***STIV141E - Pesticides (UG/KG)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | ***0.55*** | | | | 3.1 | UR | R | D | 0.44 | N | U | + | | | | | | | | |
| 2,4'-DDE | ***1.4*** | | | | 5.0 | UR | R | D | 0.72 | U | U | | | | | | | | | |
| ENDOSULFAN I | 0.66 | U | U | | 6.6 | UR | R | D | ***0.52*** | ***J*** | ***J*** | | | | | | | | | |
| HEXACHLOROBENZENE | ***0.42*** | | | | 0.60 | JR | R | D | 0.29 | NJ | U | + | | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

## Marine Tissues, Inner Harbor

| EPA NO | MV041 | | | | MV041DL | | | | MV042 | | | | ? | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M99MT02S02 | | | | M99MT02S02 | | | | M99MT02S05 | | | | | | | | | | | |
| Date Sampled | 9/20/96 | | | | 9/20/96 | | | | 9/20/96 | | | | | | | | | | | |
| Depth | STEGASTES | | | | DILUTION | | | | DICTYOTA | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/KG) Con*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.25 | U | U | | 2.5 | UR | R | D | ***1.4*** | | | | | | | | | | | |
| GAMMA-BHC (LINDANE) | ***0.73*** | | | | 2.5 | UR | R | D | ***0.55*** | | | | | | | | | | | |
| DELTA-BHC | 0.10 | N | UJ | +,C | 0.86 | JR | R | D | ***0.41*** | | ***J*** | ***C*** | | | | | | | | |
| HEPTACHLOR | 0.17 | U | U | | 1.7 | UR | R | D | 0.23 | N | U | + | | | | | | | | |
| ALDRIN | 0.90 | U | U | | 9.0 | UR | R | D | 1.3 | U | U | | | | | | | | | |
| GAMMA-CHLORDANE | 0.88 | U | U | | 8.8 | UR | R | D | 1.3 | U | U | | | | | | | | | |
| ALPHA-CHLORDANE | 0.50 | U | U | | 5.0 | UR | R | D | 0.72 | U | U | | | | | | | | | |
| TRANS-NONACHLOR | ***1.2*** | | | | 0.95 | JR | R | D | 0.67 | U | U | | | | | | | | | |
| HEPTACHLOR EPOXIDE | 0.31 | U | U | | 3.1 | UR | R | D | 0.44 | U | U | | | | | | | | | |
| DIELDRIN | 0.33 | U | U | | 3.3 | UR | R | D | 0.47 | U | U | | | | | | | | | |
| 4,4'-DDE | ***65.0*** | | | | 41.0 | R | R | D | ***1.2*** | ***J*** | ***J*** | | | | | | | | | |
| 2,4'-DDD | ***8.5*** | | | | 8.8 | R | R | D | ***2.3*** | | | | | | | | | | | |
| ENDRIN | 0.18 | U | U | | 1.8 | UR | R | D | 0.26 | U | U | | | | | | | | | |
| ENDRIN ALDEHYDE | 0.45 | U | U | | 4.5 | UR | R | D | ***2.4*** | | | | | | | | | | | |
| 4,4'-DDD | ***4.3*** | | | | 3.3 | JR | R | D | ***0.51*** | ***J*** | ***J*** | | | | | | | | | |
| 2,4'-DDT | ***5.2*** | | | | 5.2 | R | R | D | 0.46 | U | U | | | | | | | | | |
| ENDOSULFAN II | 0.66 | U | U | | 6.6 | UR | R | D | 0.95 | U | U | | | | | | | | | |
| ENDOSULFAN SULFATE | 0.66 | U | U | | 6.6 | UR | R | D | 0.95 | U | U | | | | | | | | | |
| 4,4'-DDT | ***3.8*** | | | | 2.1 | JR | R | D | 0.70 | U | U | | | | | | | | | |
| ENDRIN KETONE | 0.45 | U | U | | 4.5 | UR | R | D | 0.65 | U | U | | | | | | | | | |
| METHOXYCHLOR | 0.38 | U | U | | 3.8 | UR | R | D | 0.55 | U | U | | | | | | | | | |
| MIREX | ***0.52*** | | | | 0.32 | JR | R | D | ***1.4*** | | | | | | | | | | | |

- BOLD ITALICIZED values are detects.
- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2n

# Analytical Results Summary for

# Field QC Water, Marine Sites

| EPA NO | MV010 | | | | MV011 | | | | MV012 | | | | MV013 | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M99QW01F01 | | | | M99QW01E01 | | | | M99QW02E01 | | | | M99QW03E01 | | | | | | | |
| Date Sampled | 9/10/96 | | | | 9/10/96 | | | | 9/17/96 | | | | 9/19/96 | | | | | | | |
| Depth | | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141C - PCBs (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| PCB-8 (2,4') | ***0.0011*** | | | | ***0.000650*** | | | | 0.000370 | U | U | | 0.000410 | U | U | | | | | |
| PCB-18 (2,2',5) | ***0.000910*** | | | | ***0.0011*** | | | | 0.000490 | U | U | | 0.000540 | U | U | | | | | |
| PCB-28 (2,4,4') | 0.000980 | U | U | | 0.000940 | U | U | | 0.0010 | N | U | + | 0.0011 | N | U | + | | | | |
| PCB-52 (2,2',5,5') | 0.000360 | N | U | + | 0.000350 | U | U | | 0.000380 | U | U | | 0.000420 | U | U | | | | | |
| PCB-44 (2,2',3,5') | 0.000310 | U | U | | 0.000300 | U | U | | 0.000330 | U | U | | 0.000360 | U | U | | | | | |
| PCB-66 (2,3',4,4') | 0.000300 | U | U | | 0.000290 | U | U | | 0.000310 | U | U | | 0.000350 | U | U | | | | | |
| PCB-101 (2,2',3,5,5') | 0.000370 | U | U | | 0.000360 | U | U | | 0.000390 | U | U | | 0.000430 | U | U | | | | | |
| PCB-77 (3,3',4,4') | 0.000540 | U | U | | 0.000510 | U | U | | 0.000560 | U | U | | 0.000630 | U | U | | | | | |
| PCB-118 (2,3',4,4',5) | 0.000350 | U | U | | 0.000330 | U | U | | 0.000370 | U | U | | 0.000410 | U | U | | | | | |
| PCB-153 (2,2',4,4',5,5') | 0.000240 | U | U | | 0.000230 | U | U | | 0.000250 | U | U | | 0.000280 | U | U | | | | | |
| PCB-105 (2,3,3',4,4') | 0.000540 | N | U | + | ***0.000260*** | ***J*** | ***J*** | | 0.000570 | U | U | | 0.000640 | U | U | | | | | |
| PCB-138 (2,2',3,4,4',5') | 0.000570 | | UJ | B | 0.000460 | | UJ | B | 0.0027 | | UJ | B | 0.000810 | | UJ | B | | | | |
| PCB-126 (3,3',4,4',5) | 0.000450 | U | U | | 0.000430 | U | U | | 0.000470 | U | U | | 0.000530 | U | U | | | | | |
| PCB-187 (2,2',3,4',5,5',6) | 0.000560 | U | U | | 0.000540 | U | U | | 0.000590 | U | U | | 0.000660 | U | U | | | | | |
| PCB-128 (2,2',3,3',4,4') | 0.000300 | U | U | | 0.000290 | U | U | | 0.000320 | U | U | | 0.000350 | U | U | | | | | |
| PCB-180 (2,2',3,4,4',5,5') | 0.000700 | U | U | | 0.000670 | J | U | + | 0.000740 | U | U | | 0.000820 | U | U | | | | | |
| PCB-170 (2,2',3,3',4,4',5) | 0.0027 | U | U | | 0.0026 | U | U | | 0.0028 | U | U | | 0.0031 | U | U | | | | | |
| PCB-195 (2,2',3,3',4,4',5,6) | 0.000570 | N | U | + | 0.000550 | U | U | | 0.000600 | U | U | | 0.000660 | U | U | | | | | |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000440 | U | U | | 0.000420 | U | U | | 0.000460 | U | U | | 0.000510 | U | U | | | | | |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000520 | U | U | | 0.000500 | U | U | | 0.000550 | U | U | | 0.000610 | U | U | | | | | |
| ***STIV141E - Pesticides (UG/L)*** | | | | | | | | | | | | | | | | | | | | |
| ALPHA-BHC | 0.000390 | U | U | | 0.000370 | U | U | | 0.000410 | U | U | | 0.000450 | U | U | | | | | |
| 2,4'-DDE | 0.000330 | U | U | | 0.000320 | U | U | | 0.000350 | U | U | | 0.000390 | U | U | | | | | |
| ENDOSULFAN I | 0.000570 | U | U | | 0.000550 | N | U | + | 0.000600 | U | U | | 0.000670 | U | U | | | | | |
| HEXACHLOROBENZENE | ***0.000270*** | ***J*** | ***J*** | | ***0.000250*** | ***J*** | ***J*** | | ***0.000430*** | | | | ***0.000500*** | | | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

OEES Technical Information Systems RGEN Ver. 2o

# Analytical Results Summary for

## Field QC Water, Marine Sites

| EPA NO | MV010 | | | | MV011 | | | | MV012 | | | | MV013 | | | | ? | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OGDEN ID | M99QW01F01 | | | | M99QW01E01 | | | | M99QW02E01 | | | | M99QW03E01 | | | | | | | |
| Date Sampled | 9/10/96 | | | | 9/10/96 | | | | 9/17/96 | | | | 9/19/96 | | | | | | | |
| Depth | | | | | | | | | | | | | | | | | | | | |
| ***Method*** Analyte | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE | ANALYTICAL RESULT | LAB QUAL | REV QUAL | QUAL CODE |
| ***STIV141E - Pesticides (UG/L) Conti*** | | | | | | | | | | | | | | | | | | | | |
| BETA-BHC | 0.000250 | U | U | | 0.000240 | U | U | | 0.000270 | N | U | + | 0.000290 | U | U | | | | | |
| GAMMA-BHC (LINDANE) | ***0.000310*** | | | | 0.000270 | U | U | | 0.000290 | J | U | + | 0.000330 | U | U | | | | | |
| DELTA-BHC | 0.000300 | U | U | | 0.000290 | U | U | | 0.000310 | U | U | | 0.000350 | U | U | | | | | |
| HEPTACHLOR | 0.000420 | U | U | | 0.000410 | U | U | | 0.000450 | U | U | | 0.000500 | U | U | | | | | |
| ALDRIN | 0.000520 | U | U | | 0.000500 | U | U | | 0.000540 | U | U | | 0.000610 | U | U | | | | | |
| GAMMA-CHLORDANE | 0.000210 | U | U | | 0.000200 | U | U | | 0.000220 | U | U | | 0.000240 | U | U | | | | | |
| ALPHA-CHLORDANE | 0.000450 | U | U | | 0.000440 | U | U | | 0.000480 | U | U | | 0.000530 | U | U | | | | | |
| TRANS-NONACHLOR | 0.000320 | U | U | | 0.000310 | U | U | | 0.000340 | U | U | | 0.000380 | U | U | | | | | |
| HEPTACHLOR EPOXIDE | 0.000790 | U | U | | 0.000760 | U | U | | 0.000830 | U | U | | 0.000920 | U | U | | | | | |
| DIELDRIN | 0.000380 | U | U | | 0.000360 | U | U | | 0.000400 | U | U | | 0.000440 | U | U | | | | | |
| 4,4'-DDE | 0.000180 | U | U | | 0.000180 | U | U | | 0.000190 | U | U | | 0.000210 | N | U | + | | | | |
| 2,4'-DDD | 0.000700 | U | U | | 0.000680 | U | U | | 0.000740 | U | U | | 0.000820 | U | U | | | | | |
| ENDRIN | 0.000540 | U | U | | 0.000520 | U | U | | 0.000560 | U | U | | 0.000630 | U | U | | | | | |
| ENDRIN ALDEHYDE | 0.000300 | U | U | | 0.000290 | U | U | | 0.000320 | U | U | | 0.000350 | U | U | | | | | |
| 4,4'-DDD | 0.000460 | U | U | | 0.000440 | U | U | | 0.000480 | U | U | | 0.000530 | U | U | | | | | |
| 2,4'-DDT | 0.000300 | U | U | | 0.000290 | U | U | | 0.000310 | U | U | | 0.000350 | U | U | | | | | |
| ENDOSULFAN II | 0.000570 | U | U | | 0.000550 | U | U | | 0.000600 | U | U | | 0.000670 | U | U | | | | | |
| ENDOSULFAN SULFATE | 0.000570 | U | U | | 0.000550 | U | U | | ***0.000320*** | ***J*** | ***J*** | | 0.000670 | U | U | | | | | |
| 4,4'-DDT | 0.000690 | U | U | | 0.000660 | U | U | | 0.000720 | U | U | | 0.000800 | U | U | | | | | |
| ENDRIN KETONE | 0.000300 | U | U | | ***0.000450*** | | | | 0.000320 | N | U | + | 0.000360 | N | U | + | | | | |
| METHOXYCHLOR | 0.000770 | U | U | | ***0.000500*** | ***J*** | ***J*** | | 0.000810 | U | U | | 0.000900 | U | U | | | | | |
| MIREX | 0.000230 | U | U | | 0.000220 | U | U | | 0.000240 | U | U | | 0.000260 | U | U | | | | | |

- BOLD ITALICIZED values are detects.

- See Cover Sheet for Lab, Rev and Qual Code key.

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# Appendix F

# APPENDIX F
# DATA QUALITY ASSESSMENT

This appendix presents a qualitative and quantitative assessment of the quality of data on soil, water and tissue analyses collected during the investigation of NAF Midway Island (hereafter referred to as the "Site"). Sections F.1 and F.2 briefly introduce procedures for quality control (QC) and data validation. Section F.3 discusses data quality in terms of precision, accuracy, representativeness, comparability, and completeness. Section F.4 discusses the results of the analyses of soil and water performance evaluation (PE) sample, and Section F.5 summarizes the overall usability of the analytical data.

## F.1 QUALITY CONTROL PROGRAM

The QC program is a defined set of procedures followed by field sampling personnel, the analytical laboratory, and the data validators to ensure the accuracy and reliability of all analytical data collected during the investigation of the Site. Major components of the QC program are the collection of field QC samples and the performance of laboratory QC analyses.

Field QC samples provide a means of evaluating the quality of field sampling procedures, determining the effectiveness of equipment decontamination procedures, and assessing the potential for introduction of contaminants unrelated to the Site. Field QC samples collected during the project included field duplicates, performance evaluation samples, equipment rinsates, and field blanks. Field QC samples were collected according to Ogden Level D QC requirements, Standard Operating Procedure (SOP) Number FP-F-1, *Laboratory QC Samples (Soil, Water)* (Ogden 1995).

Laboratory QC analyses serve as a check on the precision and accuracy of analytical methods and instrumentation and provide a means of assessing potential contamination that may occur during laboratory sample preparation and analyses. Laboratory QC analyses performed during the project consisted of method blanks, instrument blanks, laboratory blank spikes, matrix spikes (MS), matrix spike duplicates (MSD), laboratory duplicates, serial dilutions, surrogate spikes, and internal standards. Laboratory QC procedures were conducted according to Ogden Level D QC requirements and method requirements (Ogden 1995).

## F.2 DATA VALIDATION PROGRAM

Analytical results were validated to evaluate compliance with the specified analytical methods and the data quality objectives outlined in the *NAF Midway Island Quality Assurance Project Plan (QAPjP)* (Ogden 1996). All analytical data obtained under CTO 0136 were validated according to Ogden Level D data validation procedures. In general, Level D data validation procedures require the review of summary forms and raw data with regards to sample management, instrument performance and calibration, field and laboratory QC samples, and internal standards performance. Specific Ogden Level D data validation requirements are identified in SOP Number DVP-1, *Data Validation Presentation* (Ogden 1995)

Where the analytical data did not meet the required QC criteria or where special consideration by the data user was required, standard "data qualifiers" were applied to the specific analytical results. Data qualifiers are defined in the *USEPA Contract Laboratory Program National Functional Guidelines For Organic Data Review* (USEPA 1994) and the *USEPA Contract Laboratory Program National Functional Guidelines For Inorganic Data Review* (USEPA 1994c). They are presented in Table F-1. In addition, standard "qualification codes" were applied to indicate why data qualifiers were applied and to identify possible limitations of data use. Qualification codes are defined in SOP Number DVP-1 and are presented in Table F-2.

## F.3 DATA QUALITY ASSESSMENT

This section summarizes the data validation methodology and results in terms of data precision, accuracy, representativeness, completeness, and comparability. Each of these data quality parameters was evaluated through review of associated field and/or laboratory QC sample results. The overall usability of the analytical data is discussed with regards to each of the data quality parameters.

### F.3.1 Precision

Precision is a quantitative measure of the variability between two duplicate samples. Precision is expressed as the relative percent difference (RPD) in concentration between duplicate and original sample analyses, as calculated from the following formula (USEPA 1994):

Equation F-1 $$RPD = \frac{|S - D|}{\frac{1}{2}(S + D)} \times 100$$

where:

RPD = Relative percent difference (percent)

S = Concentration of analyte in first (original) sample (mg/kg or µg/l)

D = Concentration of analyte in second (duplicate) sample (mg/kg or µg/l)

The precision of the analytical data was evaluated by calculating RPD values for four types of duplicate samples: field duplicates, MSDs, laboratory duplicates, and blank spike duplicates. For each type of duplicate sample, all RPD values for a given analyte was averaged to produce a single, analyte-specific average RPD value which was then compared against an established QC criterion. Data qualifiers may be applied to certain analytical results where RPD values do not meet the established QC criteria.

### F.3.1.1 Field Duplicates

Collocated field duplicates are discrete samples collected from a location adjacent to the original sample. In soil, discrete field duplicate samples are collected from adjacent soil liners. Ground-water field duplicates are collected from the same ground-water monitoring wells immediately following collection of the original sample. Seawater field duplicates are collected from the same location and depth and immediately after collection of the original sample. Tissue field duplicates are a collection of similar species collected from the same location. Analysis of collocated field duplicates provides information on the entire sample measurement system, including sample collection, sample analysis, and nonhomogeneities of the media sampled. As specified in the QAPjP and required by Ogden Level D protocol, approximately 10 percent of samples analyzed were field duplicate samples. Soil, ground-water, and seawater field duplicate RPD values were compared against the goals of 100 percent, 50 percent, and 50 percent respectively. Original and duplicate tissue samples were compared against the goal of 200 percent. The RPD between the results of the original sample and those of the duplicate was determined in accordance with data validation SOP Numbers DVP-1 through DVP-15. Because field duplicate RPD values are not representative of any single component of the sampling and analysis process, they were not typically used as a basis for the application of data qualifiers.

Analyte-specific average RPD values for concentrations of semivolatiles and pesticides/PCBs in soil field duplicates are presented in Table F-3 and F-4 respectively. The average RPD value for all analytes (overall precision) met the goal of 100 percent.

Analyte-specific average RPD values for sediment concentrations of semivolatiles and pesticides/PCBs in sediment field duplicates are presented in Table F-5 and F-6 respectively. The average RPD value for all analytes (overall precision) met the goal of 100 percent.

Analyte-specific average RPD values for concentrations of semivolatiles PCBs, pesticides, and metals in elutriate samples are presented in Table F-7, F-8, F-9, and F-10 respectively. The average RPD values for analyte concentrations in the sediment elutriate were based on less than three data points, the minimum number of data points necessary for statistical comparison. The average RPD value for all analytes met the goal of 50 percent. The analytes that exceeded the 50 percent criterion include bis(2-ethylhexyl)phthalate, PCB-170, PCB-28, PCB-8, alpha-BHC, arsenic, cadmium, iron, and vanadium. These exceedances are not indicative of poor overall performance with respect to the stated data quality objectives .

Analyte-specific average RPD values for analytes in field duplicate samples of ground water could not be determined because the original sample was lost during shipment.

Analyte-specific RPD values for seawater PCBs and pesticides are presented in Table F-11 and F-12 respectively. The average RPD for all analytes met the goal of 50 percent. Gamma-BHC and hexachlorobenzene exceeded the 50 percent criterion; however, these exceedances are not indicative of poor overall performance with respect to the stated DQO. The gamma-BHC and hexachlorobenzene RPD results were based on one set of data points with a non-detect in the sample and a detect in the duplicate. In addition the concentration of hexachlorobenzene in the duplicate was below the CRQL (Contract Required Quantitation Limit).

Analyte-specific average RPD values for field duplicate samples of tissue are presented in Tables F-13 and F-14 for PCBs and pesticides respectively. The average RPD for all analytes met the goal of 200 percent.

### F.3.1.2 Matrix Spike Duplicates

MSD analyses are conducted by the laboratory to assess the precision of organic analytical methods and to help distinguish between uncertainty due to sample variability and uncertainty due to analytical variability. Precision is reported as the RPD between the MS and MSD results (see Section F.4.1 for discussion of MS samples). As specified in SOP Number FP-F-1 and required by Level D protocol, one MS/MSD analysis was performed per 20 samples of a particular matrix (soil, sediment, ,ground water, seawater, and tissue). MSD RPD values were compared against analyte-specific control limits, which were either stated in the QAPjP or were subsequently established by laboratory QC procedures. MSD RPD values were not used as a basis for the application of data qualifiers.

Analyte-specific average RPD values for organics in soil MS/MSD samples are presented in Table F-15. Four soil MS/MSD average RPD results exceeded the established RPD QC criterion for specific analytes due to significant dilution of two of the matrix spike samples: dieldrin with an average RPD of 78.13 percent (QC limit of 38.00 percent), endrin with an average RPD of 69.42 percent (45.00 percent), 1,2,4-trichlorobenzene with an average RPD of 25.21 percent (23.00 percent), and pentachlorophenol with an average RPD of 120.10 percent (47 percent). No qualifications were applied to the data based on the MS/MSD results because the diluted samples could not be adequately evaluated and the laboratory control samples had adequate recoveries. Therefore, the overall precision criteria were met.

Analyte-specific average RPD values for organics in sediment MS/MSD samples are presented in Table F-16. No sediment MS/MSD average RPD results exceeded the established RPD QC criterion for specific analytes.

Analyte-specific RPD values for organics in MS/MSD samples of ground water are presented in Table F-17. The analyte-specific RPD for acenaphthene was noted to be outside the laboratory acceptance criteria but within the method acceptance criteria. Therefore, this exceedance is not indicative of poor overall precision performance with respect to the stated DQO.

Analyte-specific RPD values for organics in MS/MSD samples of seawater are presented in Table F-18. No seawater MS/MSD RPD results for seawater exceeded the specified

RPD acceptance criterion for specific analytes; therefore the overall precision criteria was met.

Analyte-specific average RPD values for organics in MS/MSD samples of tissue are presented in Table F-19. No average analyte-specific RPD value exceeded the established QC limit of ≤ 30 percent. However, all the analytes in SDG OMIAT04, with the exception of PCB-52 and PCB-101 exceeded the established QC limit. Because the concentrations of fortified compounds in all samples were greater than five times the spike concentration, and the SRM showed acceptable recoveries, the overall precision criterion was met.

#### F.3.1.3 Laboratory Duplicates

The laboratory analyzes duplicate samples to evaluate the precision of inorganic analytical procedures. A laboratory duplicate sample consists of a single sample that is homogenized at the laboratory then split into two samples for analysis. Precision is reported as the RPD between the two sample results. Only two samples of sediment elutriate were submitted for metals analysis and no laboratory duplicate analysis was performed. Therefore, the precision could not be evaluated.

#### F.3.1.4 Summary

Although the results of some analyses for precision fell outside the QC criteria established by either the laboratory, NFESC (NEESA ), the QAPjP (Ogden 1995e), or the USEPA Statements of Work (SOW) (USEPA 1994a; USEPA 1995a), the overall usability of the data, as related to precision, was not compromised. The instances where precision data did not meet QC criteria are attributable to either the nonhomogeneity of the sample or the existence of relatively few data points with which to determine correlations and conclusions.

### F.3.2 Accuracy

Spike sample analyses are conducted by the laboratory to assess the accuracy of specific analytical methods and to provide information on the effect of the sample matrix on the analytical methodology. Spike sample analyses are performed by adding known amounts ("spikes") of representative target compounds to a sample aliquot that is subjected to the

entire analytical procedure. The analytical results of the original sample (non-fortified) are compared with those of the spike sample. Accuracy is reported as the percent recovery (%R) of the spike, as calculated from the following equation (USEPA 1994cd):

Equation F-2

$$\%R = \frac{SSR - SR}{SA} \times 100$$

where:

%R = Percent recovery (percent)

SSR = Spike sample result (concentration units)

SR = Original sample result (concentration units)

SA = Spike added (concentration units)

The accuracy of the analytical data is evaluated by calculating %R values for two types of spike samples: MS samples and blank spike samples. For each type of spike sample, all %R values for a given analyte are averaged to produce a single, analyte-specific average %R value which is then compared against an established QC criterion. Data qualifiers may be applied to certain analytical results where the %R values in an SDG do not meet the established QC criteria.

### F.3.2.1 Matrix Spike Samples

MS analyses are performed by adding spikes to soil, sediment, ground-water, seawater, and tissue samples. As specified in SOP Number FP-F-1 and required by Ogden Level D protocol, one MS analysis was performed per 20 samples of a particular matrix. MS %R values were excluded from the average %R calculation when the spike sample concentration (SSR) exceeded four times the spike amount (SA). In addition, the standard deviation was not calculated when less than three %R values were available. Average matrix spike %R values were compared against analyte-specific control limits, which were stated in the QAPjP or were subsequently established by internal laboratory QC procedures.

#### F.3.2.1.1 Organic Analytes

Average analyte-specific %R values for organic analytes in MS samples of soil are presented in Table F-20. The average %R for gamma-BHC, heptachlor, aldrin, endrin, and pentachlorophenol exceeded the soil QC limits. Review of the data indicated that two MS/MSD pairs had percent recoveries of 0 percent due to a 10X and 20X dilution, thus skewing the overall average %R. Because of the dilution, no qualifications were assigned to the data. Samples containing pentachlorophenol were qualified in one SDG due to the low %R and lack of a blank spike analysis. No further overall QC exceedances were noted for organic analytes in soil.

Average analyte-specific %R values for organics in MS samples of sediment are presented in Table F-21. These values were within their respective QC limits;, therefore, they are acceptable.

Analyte-specific %R for organics in MS samples of ground water are presented in Table F-22. The analyte-specific %R for ground water was within the respective QC limit; therefore, it is acceptable.

Analyte-specific %R for organics in MS samples of seawater are presented in Table F-23. This value was within the respective QC limit and is, therefore, acceptable.

Analyte-specific average %R values for organics in MS samples of tissue are presented in Table F-24. These values were within their respective QC limits and are, therefore, acceptable.

#### F.3.2.1.2 Inorganic Analytes

Only two samples of sediment elutriate were analyzed for metals. No MS /MSD analysis was performed on these samples; therefore, the samples could not be evaluated for accuracy using this criteria.

### F.3.2.2 Blank Spike Samples

The laboratory carries out blank spike analyses to demonstrate its processes of sample preparation and analysis are under control. Blank spikes consist of silica sand or reagent water spiked with known amounts of specific analytes. The blank spikes are subjected to

the entire analytical procedure along with the Site samples. A minimum of one blank spike was analyzed for each matrix and for each method preparatory batch of samples. Average %R values for blank spikes were compared against analyte-specific control limits, which were stated in the QAPjP or were subsequently established by internal laboratory QC procedures.

Average %R values for organic analyte-specific blank spikes are presented in Tables F-25 through F-29. The overall accuracy of blank spike data fell within the specified laboratory control limits for all the matrices and are acceptable for all target compounds.

#### F.3.2.3 Summary

The overall usability of the data is acceptable with respect to accuracy. The instances where data failed to meet accuracy QC criteria were considered isolated and not indicative of overall poor method performance.

### F.3.3 Representativeness

Representativeness expresses the extent to which the analytical data reflect the actual media at the Site. In general, the RI data are representative of the Site conditions and characteristics. Acceptable representativeness is achieved by proper sampling and sample management procedures. Section F.3.3.1 discusses representativeness with respect to general sample management issues including sample documentation, preservation, handling, and transport. Section F.3.3.2 discusses representativeness with respect to analytical-method-specific issues including method deviations, the presence of potential laboratory or field artifacts, indications of sample nonhomogeneity, internal standard recovery deficiencies, and surrogate recovery deficiencies.

#### F.3.3.1 Overall Sample Management

Sample collection, handling, documentation, and transport were generally performed as specified in the QAPjP and according to NFESC protocol. The majority of the samples arrived at the laboratories properly labeled and with properly completed, legible chain-of-custody (COC) forms. None of the COCs for the soil sample analysis were signed by the receiving laboratory, however. Sample labeling deficiencies were noted on the COC

forms by laboratory personnel and were clarified by the CTO Manager or CTO Laboratory Coordinator.

The temperatures inside the coolers were not recorded on some of the accompanying soil sample COC forms upon arrival at the laboratory, which is a violation of NFESC protocol. As a result, qualifications were not given to these coolers. No sample containers were noted to be broken; therefore, no data qualifiers are assigned.

All Site samples were extracted and analyzed within the method-specified holding times.

### F.3.3.2 Method-Specific Representativeness Issues

#### F.3.3.2.1 CLP Semivolatile Organic Analysis

Soil samples were analyzed for SVOCs by USEPA CLP Method OLM03.1B, as defined in the *USEPA Contract Laboratory Program (CLP) Statement of Work For Organics Analysis* (USEPA 1994a). Fifty Site and field QC samples were analyzed for SVOCs, for a total of 3,250 individual target compound analyses.

No soil samples submitted for SVOC analysis exceeded the NFESC percent-moisture criterion of 50 percent.

For numerous calibration standards associated with sample results, the RSD and/or %D values of at least one target compound did not meet QC criteria. Detect and non-detect results were qualified as "J" and "UJ," respectively for calibration deficiencies. The largest percentage of data qualifiers were assigned to 4-chloroaniline, 3-nitroaniline, 3,3'-dichlorobenzidine, and carbazol.

Bis(2-ethyhexyl)phthalate was detected in one method blank sample. Detect and non-detect results were qualified as "J" and "UJ," respectively, in the associated Site samples. In total, data qualifiers were assigned to 18 results for method blank contamination.

Seven target compounds were qualified for poor internal standard (IS) performance. Detect and non-detect results were qualified as "J" and "UJ," respectively, when the IS area count was less than 50 percent of the area count for the associated standard. Non-detect results were qualified as "R" when the IS area count was less than 25 percent of the area count for the associated standard. Detect and non-detect results were qualified as "J"

and "UJ", respectively, when the IS area count was greater than 100 percent of the area count for the associated standard.

No soil samples were qualified due to surrogate recovery deficiencies.

### F.3.3.2.2 CLP Pesticides/PCBs

Soil samples were analyzed for pesticides and PCBs by USEPA CLP Method OLM03.1P, as defined in the *USEPA Contract Laboratory Program (CLP) Statement of Work for Organic Analysis* (USEPA 1994). Fifty-one Site and field QC samples were analyzed for pesticides/PCBs, for a total of 1,428 individual target compound analyses.

No soil samples submitted for pesticide/PCB analysis exceeded the NFESC percent-moisture criterion of 50 percent.

All reported percent resolutions in the initial resolution check were above 60 percent and were considered acceptable. However, gamma chlordane/alpha chlordane had percent resolution below the 90 percent QC criterion on the DB 1701 column for all three SDGs. In addition, alpha chlordane/endosulfan I, dieldrin/4,4'-DDE, and endosulfan II/4,4'-DDD were noted to have overlapping retention time windows on the DB608 column, while endosulfan II/4,4'-DDD and alpha chlordane/gamma chlordane had overlapping retention time windows on the DB-1701 column. Poor resolution and overlapping retention time windows were a result of insufficient run times. The 15-minute run time utilized by the laboratory was too short to provide adequate resolution and chromatography. Aroclor 1260 was observed to coelute with 4,4'-DDD, 4,4'-DDT, dieldrin, and gamma-chlordane using this shortened run time. Compounds affected by the inadequate resolution and chromatography were qualified "N" as tentatively identified. The largest percentage of data qualifiers are assigned to Endosulfan II, Endrin, Endrin aldehyde, Aldrin, Heptachlor epoxide, Dieldrin, and Alpha-chlordane.

The %Ds between the two column quantitations for several compounds exceeded the QC limit of 25 percent and were qualified as "J". In addition, several compounds also exceeded a %D of 100 percent and were qualified as "N". The largest percentage of data qualifiers for %D deviations were assigned to 4,4'-DDD, 4,4'-DDT, gamma-chlordane, and Aroclor 1260. Due to the coelution of these compounds and the high %D between the two columns, caution should be used when evaluating the corresponding data.

### F.3.3.2.3 Low Level Semivolatile Organic Analysis (STIV141A)

Samples of ground water and sediment elutriate samples were analyzed for low-level SVOCs by STIV141A, as defined in the *Sampling and Analytical Methods for the National Status and Trends Program, National Benthic Surveillance and Mussel Watch Projects* (NOAA 1993). Five samples of ground-water and two samples of sediment elutriate were analyzed for low-level SVOCs, yielding 288 individual target compound analyses.

In analyzing the ground-water samples, the initial calibration had high %RSD values for hexachlorobutadiene, 2,4-dinitrophenol, and bis(2-ethylhexyl)phthalate affecting all five water samples. The non-detects results for these samples were qualified as "UJ". 2,4-dinitrophenol had a high %RSD in the initial calibration for the sediment elutriate analysis; therefore, 2,4-Dinitrophenol was qualified "UJ" for the nondetects in both samples.

Bis(2-ethyhexyl)phthalate was detected in both the ground-water and the sediment elutriate method blank sample. Detect and non-detect results are qualified as "J" and "UJ" respectively, in the associated Site samples. In total, data qualifiers were assigned to five results for method blank contamination.

Blank spikes for both the ground-water and sediment elutriate analyses had low recoveries for anthracene. Detects and non-detect results for anthracene were qualified as "J" and "UJ" respectively.

No samples are qualified due to surrogate recovery deficiencies.

### F.3.3.2.4 Low-Level Pesticide/PCBs Analysis (STIV141C,E)

Marine sediment, sediment elutriate, seawater, ground-water, and tissue samples were analyzed for low-level pesticides/polychlorinated biphenyls (PCBs) by STIV141C and E according to the *Sampling and Analytical Methods for the National Status and Trends Program, National Benthic Surveillance and Mussel Watch Projects* (NOAA 1993). One hundred forty three samples were analyzed for low-level pesticides/PCBs, yielding 6,721 individual target compound analyses.

No surrogate or internal standard retention time window is specified in the Status and Trends protocols. The laboratory established a window of ± 0.075 or 0.15 minutes. All surrogate retention times were within the retention time windows established by the initial calibration. All continuing calibration standards had retention times within the retention time windows established with the initial calibration standards.

The laboratory modified the analytical sequence from the Status and Trends protocols. The laboratory analyzed an initial five-point calibration with subsequent mid-level calibration standards analyzed for every ten field samples and at the end of each sequence. Status and Trends protocols suggested a four-point calibration be interspersed with samples of no more than six samples be analyzed in between calibration standards. The laboratory modifications were considered acceptable.

The NOAA Status and Trends used a correlation coefficient to determine the accuracy of initial calibrations. The laboratory deviated from the protocols by measuring the %RSDs from relative response factors for each initial calibration. The laboratory established %RSDs must be less than or equal to 25 percent for 90 percent of all compounds and less than or equal to 35 percent for all compounds. A %RSD of 25 percent or less was used to evaluate the initial calibration. In addition, no QC limits have been established for continuing calibration standards by the Status and Trends protocols. The laboratory established a %D less than or equal to 25 percent for 90 percent of the target compounds and less than or equal to 35 percent for all compounds. A %D of 25 percent was used to evaluate the data.

A few of the initial calibrations for the sediment matrix showed %RSDs for heptachlor, endrin, delta BHC, PCB-18, PCB-52, and PCB-101 above the QC limits. For samples associated with these initial calibrations, these compounds were qualified "UJ" for non-detects. Some of the continuing calibrations had %Ds for 2,4'-DDD, and 4,4'-DDD above the QC limits. For samples associated with these continuing calibrations, these compounds were qualified "UJ" for non-detects.

During some of the initial calibrations for the ground-water matrix, %RSDs for endrin, delta-BHC, and alpha-BHC exceeded the QC limits. For samples associated with these calibrations, these compounds were qualified "J" and "UJ" for detects and non-detects respectively. All continuing calibrations were within the QC limits.

Alpha-BHC and 4,4'-DDT were qualified as "UJ" in all the seawater samples except for MV015DL due to QC exceedances in the initial calibration. One sample (MV015DL) had endrin qualified "J" due to QC exceedances in the initial calibration. Detects for 4,4'-DDT were qualified "J" and non-detects "UJ" due to QC exceedances in the continuing calibration data.

Numerous calibration standards associated with tissue sample results revealed at least one target compound with RSD and/or %D values that did not meet QC criteria. Detect and non-detect results were qualified as "J" and "UJ," respectively for calibration deficiencies. The largest percentage of data qualifiers were assigned to delta-BHC, alpha-BHC, PCB-52 and PCB-101.

No target compounds were detected in method blank or instrument blank samples; therefore, no data qualifiers were assigned. No target compounds were detected in equipment rinsate or field blank samples that warranted data qualification of soil or ground-water sample results.

Five tissue samples exhibited high PCB-108 surrogate recoveries. All detects in these five samples were qualified "J". There were no additional data qualified for surrogate deficiencies.

#### F.3.3.2.5 Metals

Two samples of sediment elutriate were analyzed for metals by Method ILM04.0, as defined in the *USEPA Contract Laboratory Program (CLP) Statement of Work For Inorganics Analysis* (USEPA 1995). These analyses yielded 46 individual target compound analyses.

All %R values for the initial calibration verification standard and the continuing calibration verification standard were within the control limits of 90 to 110 percent (±1 percent) (80 to 120 percent [±1 percent] for mercury). All inductively coupled plasma interference (ICP) check samples met the ±20 percent criterion. No qualifications were assigned for method deviation.

Numerous analytes were detected in method blank and/or calibration blank samples. As a result, chromium, iron, lead, mercury, and selenium were qualified for calibration blank

contamination in at least one sample. Detect and non-detect results in the associated samples were qualified as "J" and "UJ," respectively, where the absolute value of the concentration in the sample exceeded the instrument detection limit but was less than five times the concentration in the blank sample.

#### F.3.3.3 Summary

Representativeness was determined by evaluating overall sample management (sample collection, handling, and documentation) and method-specific issues (calibration and surrogate recovery). With the exception of some of the soil analytical data for Pesticides/PCBs, the overall usability of the data was acceptable with respect to representativeness. Some qualifications were applied to the soil pesticide/PCB data due to unauthorized method modifications performed by the laboratory, resulting in data that may not be wholly representative of the site. For those analytes where qualifications were applied, some discretion should be used when evaluating the overall impact of the data.

### F.3.4 COMPLETENESS

Completeness is a measure of the amount of usable data resulting from the sampling and analysis program. Completeness of the sampling program is evaluated separately from the analytical program.

#### F.3.4.1 Sampling Program

Sampling completeness is generally defined as the number of samples collected divided by the number of samples required to adequately assess Site conditions. The sampling completeness objectives, as outlined by the *NAF Midway Island Sampling and Analysis Plan* (Ogden 1996), state that data completeness should be at least 90 percent for all critical samples for example:

- At least two soil samples collected from 20 locations for CLP SVOCs and pesticides/PCBs
- At least one ground-water sample collected from 5 locations for low-level SVOCs and low-level pesticides/PCBs

- At least one sediment sample and four duplicates collected from 12 locations for low-level SVOCs and low-level pesticides/PCBs
- At least one sediment elutriate sample collected for low-level SVOCs and low-level pesticides/PCBs
- At least one seawater sample collected from 6 locations at the Landfill sample stations and four from the Inner Harbor sample stations for low-level SVOCs and low-level pesticides/PCBs
- At least one algae tissue sample collected from 12 locations at the Landfill sample stations, eight from the sample stations in the Inner Harbor, and four reference samples collected from the lagoon
- At least one fish tissue sample collected from the Landfill sample stations and two reference samples collected from the lagoon and
- At least one invertebrate tissue sample collected from 12 locations at the Landfill sample stations, eight from the sample stations in the Inner Harbor, and four reference samples collected from the lagoon

Completeness is evaluated separately for each of the sampled media.

The completeness of the sampling program goals is summarized in Table F-30. The overall soil sampling program exceeded the 90 percent completeness goal by collecting all 44 proposed subsurface soil samples.

The overall completeness of the ground-water sampling program was slightly below the goal of 90 percent completeness. Sample MC157 was lost by the overnight shipper during transit from Honolulu to Arthur D. Little Laboratory in Massachusetts, resulting in completeness of 83 percent. Duplicate sample, MC158, collected from the same well, was used as the primary sample.

All 18 proposed marine sediment samples were collected, thereby achieving 100 percent sampling completeness, and exceeding the completeness goal of 90 percent.

Fifteen marine sediment samples were collected, exceeding the proposed number of 14. The completeness goal of 107 percent exceeds the 90 percent completeness goal.

All tissue samples exceeded the 90 percent completeness goal as follows: algae: 104 percent; herbivorous fish: 96 percent; carnivorous fish: 111 percent; and invertebrates: 126 percent.

### F.3.4.2 Analytical Program

Analytical completeness is defined as the percentage of acceptable (i.e., not rejected) data points. Analytical completeness is calculated on a method basis with the exception of Method ILM04.0 (metals); for this method, analytical completeness is calculated for each individual analyte. The completeness objective for the analytical program is 90 percent, as specified in the QAPjP (Ogden 1995e).

The completeness of the analytical program is summarized in Table F-31. The analytical program exceeded the completeness goal of 90-percent for all analytical parameters and matrices.

### F.3.4.3 Summary

The sampling program met the overall goal of 90 percent completeness for the soil, sediment, ground-water, seawater and tissue sampling events. The low-level SVOCs and low-level pesticides/PCBs were slightly below the 90 percent goal because one ground-water sample was lost during shipment.

The analytical program met the goal of 90-percent completeness for all organic and inorganic methods and is therefore acceptable.

## F.3.5 COMPARABILITY

Comparability is a qualitative parameter that expresses the confidence with which one data set can be compared with another. Comparability of the sampling program is evaluated separately from the analytical program.

Sampling comparability is considered acceptable when the following steps are taken:

- A consistent approach to sampling was applied throughout the program

- Samples were consistently preserved
- Sampling was performed during the same time of the year and under similar physical conditions

Analytical comparability is considered acceptable when the following steps are taken:

- The investigation consistently utilized the same analytical laboratory, sample preparation routine, and analytical methods
- The analytical results for a given analysis were reported with consistent detection limits and consistent units of measure

## F.4 Performance Evaluation Samples

PE samples are sample aliquots spiked with certified amounts of specific target compounds at an independent laboratory and submitted to the analytical laboratory for "blind" analysis. Typically, accuracy is evaluated by comparing analytical results with "performance acceptance limits," which are supplied by the independent laboratory and are based on statistical analysis of the historical performance of a group of analytical laboratories.

One soil PE sample was obtained from Environmental Resource Associates (ERA) in Colorado and one water PE sample was obtained from NSI Solutions, Inc. The water PE sample was documented by field personnel, labeled as a Site sample, and shipped to the analytical laboratory along with regular Site samples to ensure routine (i.e., non-preferential) handling and analysis. The water PE sample was subjected to analysis for low-level pesticides by STIV141E and analysis for low-level PCBs by STIV141C.

The soil PE sample was prepared by ERA with a non-Site-specific soil matrix and a non-standard sampling container. Each method requested had a dedicated soil sample container. The soil PE sample was subjected to the following suite of laboratory analyses:

- Semi-Volatiles by USEPA CLP Method OLM03.1
- Pesticides by USEPA CLP Method OLM03.1

- PCBs by USEPA CLP Method OLM03.1

Performance acceptance limits were supplied by ERA in June 1996 for all soil spiked analytes. No performance acceptance limits were supplied by NSI for the water PE sample. Instead, Certificates of Analysis stating the gravimetric concentration of the test analytes in μg/L were supplied in September 1996.

### F.4.1 Performance Evaluation Sample Results

The results of analyses of the water and soil PE samples are presented in Tables F-32, F-33, F-34 and F-35. The water PE samples were sent to Arthur D. Little Laboratory in Cambridge, Massachusetts and the soil PE sample was sent to Ceimic Laboratory in San Diego, California. Recoveries of all spiked analytes were generally lower than the certified concentrations. In the water PE sample analyses, the recovery values of both the low-level pesticides and the low-level PCBs were less than the performance acceptance limits by one order of magnitude. In 14 instances, the recovery values of the soil PE sample were below the certified concentration. The following section summarizes the findings of PE sample analyses by analytical method.

#### F.4.1.1 Pesticides in Water PE Sample

Sixteen pesticide compounds were spiked into the water PE sample and all 16 were reported at concentrations below the certified value. Due to the lack of advisory limits for the low-level concentrations, performance acceptability was evaluated according to the laboratory's ability to detect the presence or absence of the compounds. All 16 compounds were detected (Table F-32); therefore, the laboratory was judged to have demonstrated acceptable performance.

#### F.4.1.2 PCBs in Water PE Sample

Seven PCB congeners were spiked into the water PE sample. All seven compounds were reported at concentrations below the certified value. Due to the lack of advisory limits for the low-level concentrations, performance acceptability was evaluated according to the laboratory's ability to detect the presence or absence of the compounds. All seven compounds were detected (Table F-33); therefore, the laboratory was judged to have demonstrated acceptable performance.

### F.4.1.3 Semivolatiles in Soil PE Sample

Twenty semivolatile compounds were spiked into the soil PE sample. All 20 compounds were detected; however, 1,2-dichlorobenzene, bis(2-ethylhexyl)phthalate, 1,2,4-trichlorobenzene, 2,4-dinitrophenol, and 2-methylphenol were detected below the advisory range (Table F-34). None of these compounds was detected above the reporting limits in any of the Site samples, therefore the laboratory was judged to have demonstrated acceptable performance.

### F.4.1.4 Pesticides in Soil PE Sample

Twelve pesticide compounds were spiked into a soil PE sample. The laboratory correctly identified all of the compounds present in the PE sample, however, eight of the compounds were detected below the advisory range (Table F-35). Due to the abbreviated run times, coelution, and lack of acceptable second column %Ds, soil pesticide detects were qualified "NJ."

### F.4.1.5 PCBs in Soil PE Sample

Aroclor-1260 was spiked into the soil PE sample. The Aroclor was not detected by the analytical laboratory within the performance acceptance limits (Table F-35). In addition, the laboratory also reported endosulfan II and endrin aldehyde as detects in this sample when no pesticides were present. As a result of this analysis, caution must be exercised when evaluating both the PCB and the pesticide soil data.

### F.4.2 Summary

The Arthur D. Little Laboratory demonstrated acceptable performance for the low-level pesticide and PCB methods for the water matrix. While the recoveries of all compounds were below the certified concentrations, lack of acceptance performance limits for the low-level compounds necessitated that acceptability be based on whether or not the laboratory identified the compounds correctly. The laboratory correctly identified all compounds. The Ceimic Laboratory demonstrated marginal performance for the pesticide and PCB soil analysis. With the exception of delta-BHC and endrin, all the analytes, including Aroclor-1260, were detected at levels below the acceptance performance limits. However, a greater concern was the false positives of endosulfan II

and endrin aldehyde reported in the PCB PE sample. The laboratory reported one or both of these pesticides in seventeen soil samples;. therefore the compounds in these samples should be evaluated with caution.

When considered in conjunction with other data quality indicators, such as MS/MSD results, blank spike results, and surrogate recovery results, the water PE sample analytical results indicate good overall analytical data quality. The soil PE sample analytical results indicate marginal overall analytical data quality.

## F.5 CONCLUSIONS

With the exception of the soil pesticide/PCB data, the overall usability of the data is acceptable with respect to its precision, accuracy, representativeness, completeness, and comparability. Where individual samples and/or target compounds failed to meet established QC criteria, data qualifiers were applied to the data. When assessing the overall impact of the data, the individual data qualifiers should be considered for decision-making purposes. The soil pesticide/PCB data, as stated in sections F.3.1.2, F.3.2.1, F.3.3.2.2, F.4.1.3, and F.4.1.4 should be used with discretion when evaluating their overall impact on the Site.

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## Table F-1

## DATA QUALIFIER DEFINITIONS

| Data Qualifier | Organics | Inorganics |
|---|---|---|
| U | The analyte was analyzed for, but was not detected above the reported sample quantitation limit. | The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. |
| J | The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample. | The associated value is an estimated quantity. |
| N | The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification." | Not applicable. |
| NJ | The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. | Not applicable. |
| UJ | The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample. | The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise. |
| R | The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified. | The data are unusable. (Note: Analyte may or may not be present.) |

## Table F-2

## QUALIFICATION CODE DEFINITIONS

| Qualification Code | Organics | Inorganics |
|---|---|---|
| H | Holding times were exceeded. | Holding times were exceeded. |
| S | Surrogate recovery was outside QC limits. | The sequence or number of standards used for the calibration was incorrect. |
| C | Calibration percent relative standard deviation or percent difference was noncompliant. | Correlation coefficient was < 0.995. |
| R | Calibration relative response factor was < 0.05. | %R for calibration was not within control limits. |
| B | Presumed contamination from preparation (method) blank. | Presumed contamination from preparation (method) or calibration blank. |
| L | Not applicable. | Laboratory control sample %R results were not within control limits. |
| Q | MS/MSD recovery was poor or RPD high. | MS recovery was poor. |
| E | Not applicable. | Duplicates showed poor agreement. |
| I | Internal standard performance was unsatisfactory. | ICP interference check sample results were unsatisfactory. |
| A | Not applicable. | ICP serial dilution percent difference results were not within control limits. |
| M | Tuning bromofluorobenzene or decafluorotriphenylphosphine was noncompliant. | Not applicable. |
| T | Presumed contamination from trip blank. | Not applicable. |
| + | False positive – reported compound was not present. | Not applicable. |

## Table F-2 (continued)

## QUALIFICATION CODE DEFINITIONS

| Qualification Code | Organics | Inorganics |
|---|---|---|
| - | False negative – compound was present, but not reported. | Not applicable. |
| F | Presumed contamination from field blank or equipment rinsate. | Presumed contamination from field blank or equipment rinsate. |
| $ | Reported result or other information was incorrect. | Reported result or other information was incorrect. |
| ? | Tentatively identified compound (TIC) identity or reported retention time has been changed. | Not applicable. |
| D | The analysis with this flag should not be used because another more technically sound analysis is available. | The analysis with this flag should not be used because another more technically sound analysis is available. |
| P | Instrument performance for pesticides was poor. | Post digestion spike recovery was not within control limits. |
| *# | Unusual problems found with the data that have been described the data validation report. The number following the asterisk (*) will indicate the subsection of the report where a description of the problem can be found. z | Unusual problems found with the data that have been described the data validation report. The number following the asterisk will indicate the subsection of the report where a description of the problem can be found. |

**TABLE F-3**
**CTO 0136 MIDWAY ISLAND**
**SOIL FIELD DUPLICATE DATA**

| OGDEN_ANALYTE | AVE RPD | STDEV | POPULATION |
|---|---|---|---|
| **Method: OLM03.1B** | | | |
| 1,2,4-TRICHLOROBENZENE | 0.00 | 0.00 | 8 |
| 1,2-DICHLOROBENZENE | 0.00 | 0.00 | 8 |
| 1,3-DICHLOROBENZENE | 0.00 | 0.00 | 8 |
| 1,4-DICHLOROBENZENE | 0.00 | 0.00 | 8 |
| 2,2'OXYBIS(1-CHLOROPROPANE) | 0.00 | 0.00 | 8 |
| 2,4,5-TRICHLOROPHENOL | 0.00 | 0.00 | 8 |
| 2,4,6-TRICHLOROPHENOL | 0.00 | 0.00 | 8 |
| 2,4-DICHLOROPHENOL | 0.00 | 0.00 | 8 |
| 2,4-DIMETHYLPHENOL | 0.00 | 0.00 | 8 |
| 2,4-DINITROPHENOL | 0.00 | 0.00 | 8 |
| 2,4-DINITROTOLUENE | 0.00 | 0.00 | 8 |
| 2,6-DINITROTOLUENE | 0.00 | 0.00 | 8 |
| 2-CHLORONAPHTHALENE | 0.00 | 0.00 | 8 |
| 2-CHLOROPHENOL | 0.00 | 0.00 | 8 |
| 2-METHYLNAPHTHALENE | 0.00 | 0.00 | 8 |
| 2-METHYLPHENOL | 0.00 | 0.00 | 8 |
| 2-NITROANILINE | 0.00 | 0.00 | 8 |
| 2-NITROPHENOL | 0.00 | 0.00 | 8 |
| 3,3'-DICHLOROBENZIDINE | 0.00 | 0.00 | 8 |
| 3-NITROANILINE | 0.00 | 0.00 | 8 |
| 4,6-DINITRO-2-METHYLPHENOL | 0.00 | 0.00 | 8 |
| 4-BROMOPHENYL-PHENYLETHER | 0.00 | 0.00 | 8 |
| 4-CHLORO-3-METHYLPHENOL | 0.00 | 0.00 | 8 |
| 4-CHLOROANILINE | 0.00 | 0.00 | 8 |
| 4-CHLOROPHENYL-PHENYLETHER | 0.00 | 0.00 | 8 |
| 4-METHYLPHENOL | 0.00 | 0.00 | 8 |
| 4-NITROANILINE | 0.00 | 0.00 | 8 |
| 4-NITROPHENOL | 0.00 | 0.00 | 8 |
| ACENAPHTHENE | 0.00 | 0.00 | 8 |
| ACENAPHTHYLENE | 0.00 | 0.00 | 8 |
| ANTHRACENE | 0.00 | 0.00 | 8 |
| BENZO(A)ANTHRACENE | 50.00 | 100.00 | 8 |
| BENZO(A)PYRENE | 1.61 | 3.23 | 8 |
| BENZO(B)FLUORANTHENE | 52.78 | 98.29 | 8 |
| BENZO(G,H,I)PERYLENE | 0.00 | 0.00 | 8 |
| BENZO(K)FLUORANTHENE | 51.02 | 99.34 | 8 |
| BIS(2-CHLOROETHOXY)METHANE | 0.00 | 0.00 | 8 |
| BIS(2-CHLOROETHYL)ETHER | 0.00 | 0.00 | 8 |
| BIS(2-ETHYLHEXYL)PHTHALATE | 0.00 | 0.00 | 8 |
| BUTYLBENZYLPHTHALATE | 50.00 | 100.00 | 8 |
| CARBAZOLE | 0.00 | 0.00 | 8 |
| CHRYSENE | 52.78 | 98.29 | 8 |
| DI-N-BUTYLPHTHALATE | 0.00 | 0.00 | 8 |
| DI-N-OCTYL PHTHALATE | 0.00 | 0.00 | 8 |

**TABLE F-3**
**CTO 0136 MIDWAY ISLAND**
**SOIL FIELD DUPLICATE DATA**

| | | | |
|---|---|---|---|
| DIBENZ(A,H)ANTHRACENE | 0.00 | 0.00 | 8 |
| DIBENZOFURAN | 0.00 | 0.00 | 8 |
| DIETHYLPHTHALATE | 0.00 | 0.00 | 8 |
| DIMETHYLPHTHALATE | 0.00 | 0.00 | 8 |
| FLUORANTHENE | 25.06 | 19.87 | 8 |
| FLUORENE | 0.00 | 0.00 | 8 |
| HEXACHLOROBENZENE | 0.00 | 0.00 | 8 |
| HEXACHLOROBUTADIENE | 0.00 | 0.00 | 8 |
| HEXACHLOROCYCLOPENTADIENE | 0.00 | 0.00 | 8 |
| HEXACHLOROETHANE | 0.00 | 0.00 | 8 |
| INDENO(1,2,3-CD)PYRENE | 50.00 | 100.00 | 8 |
| ISOPHORONE | 0.00 | 0.00 | 8 |
| N-NITROSO-DI-N-PROPYLAMINE | 0.00 | 0.00 | 8 |
| N-NITROSODIPHENYLAMINE (1) | 0.00 | 0.00 | 8 |
| NAPHTHALENE | 0.00 | 0.00 | 8 |
| NITROBENZENE | 0.00 | 0.00 | 8 |
| PENTACHLOROPHENOL | 0.00 | 0.00 | 8 |
| PHENANTHRENE | 50.00 | 100.00 | 8 |
| PHENOL | 0.00 | 0.00 | 8 |
| PYRENE | 18.37 | 23.00 | 8 |

**TABLE F-4**
**CTO 0136 MIDWAY ISLAND SOIL FIELD DUPLICATE DATA**

| OGDEN_ANALYTE | AVE RPD | STDEV | POPULATION |
|---|---|---|---|
| **Method: OLM03.1P** | | | |
| 4,4'-DDD | 18.75 | 37.50 | 8 |
| 4,4'-DDE | 28.85 | 20.36 | 8 |
| 4,4'-DDT | 16.23 | 19.18 | 8 |
| ALDRIN | 100.00 | 115.47 | 8 |
| ALPHA-BHC | 0.00 | 0.00 | 8 |
| ALPHA-CHLORDANE | 66.67 | 94.28 | 8 |
| AROCLOR-1016 | 0.00 | 0.00 | 8 |
| AROCLOR-1221 | 0.00 | 0.00 | 8 |
| AROCLOR-1232 | 0.00 | 0.00 | 8 |
| AROCLOR-1242 | 0.00 | 0.00 | 8 |
| AROCLOR-1248 | 0.00 | 0.00 | 8 |
| AROCLOR-1254 | 52.24 | 98.60 | 8 |
| AROCLOR-1260 | 24.95 | 49.04 | 8 |
| BETA-BHC | 0.00 | 0.00 | 8 |
| DELTA-BHC | 0.00 | 0.00 | 8 |
| DIELDRIN | 57.25 | 95.50 | 8 |
| ENDOSULFAN I | 0.00 | 0.00 | 8 |
| ENDOSULFAN II | 50.00 | 100.00 | 8 |
| ENDOSULFAN SULFATE | 0.00 | 0.00 | 8 |
| ENDRIN | 50.00 | 100.00 | 8 |
| ENDRIN ALDEHYDE | 50.00 | 100.00 | 8 |
| ENDRIN KETONE | 0.00 | 0.00 | 8 |
| GAMMA-BHC (LINDANE) | 0.00 | 0.00 | 8 |
| GAMMA-CHLORDANE | 11.48 | 22.96 | 8 |
| HEPTACHLOR | 0.00 | 0.00 | 8 |
| HEPTACHLOR EPOXIDE | 50.00 | 100.00 | 8 |
| METHOXYCHLOR | 50.00 | 100.00 | 8 |
| TOXAPHENE | 0.00 | 0.00 | 8 |

**TABLE F-5**
**CTO 0136 MIDWAY ISLAND**
**FIELD DUPLICATE MARINE SEDIMENT DATA**

| OGDEN_ANALYTE | AVE RPD | STDEV | POPULATION |
|---|---|---|---|
| METHOD: STIV141C | | | |
| PCB-101 (2,2',3,5,5') | 14.29 | 20.20 | 4 |
| PCB-105 (2,3,3',4,4') | 100.00 | 141.42 | 4 |
| PCB-118 (2,3',4,4',5) | 8.00 | 11.31 | 4 |
| PCB-126 (3,3',4,4',5) | 0.00 | 0.00 | 4 |
| PCB-128 (2,2',3,3',4,4') | 14.67 | 20.74 | 4 |
| PCB-138 (2,2',3,4,4',5') | 16.22 | 15.29 | 4 |
| PCB-153 (2,2',4,4',5,5') | 4.76 | 6.73 | 4 |
| PCB-170 (2,2',3,3',4,4',5) | 13.51 | 19.11 | 4 |
| PCB-18 (2,2',5) | 100.00 | 141.42 | 4 |
| PCB-180 (2,2',3,4,4',5,5') | 12.68 | 17.93 | 4 |
| PCB-187 (2,2',3,4',5,5',6) | 6.98 | 9.87 | 4 |
| PCB-195 (2,2',3,3',4,4',5,6) | 3.70 | 5.24 | 4 |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 2.70 | 3.82 | 4 |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 100.00 | 141.42 | 4 |
| PCB-28 (2,4,4') | 5.88 | 8.32 | 4 |
| PCB-44 (2,2',3,5') | 11.24 | 15.89 | 4 |
| PCB-52 (2,2',5,5') | 0.00 | 0.00 | 4 |
| PCB-66 (2,3',4,4') | 18.14 | 25.66 | 4 |
| PCB-77 (3,3',4,4') | 0.00 | 0.00 | 4 |
| PCB-8 (2,4') | 4.76 | 6.73 | 4 |

**TABLE F-6**
**CTO 0136 MIDWAY ISLAND**
**FIELD DUPLICATE MARINE SEDIMENT DATA**

| OGDEN_ANALYTE | AVE RPD | STDEV | POPULATION |
|---|---|---|---|
| **METHOD: STIV141E** | | | |
| 2,4'-DDD | 17.65 | 24.96 | 4 |
| 2,4'-DDE | 46.03 | 65.10 | 4 |
| 2,4'-DDT | 4.76 | 6.73 | 4 |
| 4,4'-DDD | 6.25 | 8.84 | 4 |
| 4,4'-DDE | 14.65 | 20.72 | 4 |
| 4,4'-DDT | 6.93 | 9.80 | 4 |
| ALDRIN | 0.00 | 0.00 | 4 |
| ALPHA-BHC | 0.00 | 0.00 | 4 |
| ALPHA-CHLORDANE | 7.53 | 10.64 | 4 |
| BETA-BHC | 0.00 | 0.00 | 4 |
| CIS-NONACHLOR | 122.59 | 98.81 | 6 |
| DELTA-BHC | 0.00 | 0.00 | 4 |
| DIELDRIN | 27.27 | 38.57 | 4 |
| ENDOSULFAN I | 0.00 | 0.00 | 4 |
| ENDOSULFAN II | 0.00 | 0.00 | 4 |
| ENDOSULFAN SULFATE | 0.00 | 0.00 | 4 |
| ENDRIN | 0.00 | 0.00 | 4 |
| ENDRIN ALDEHYDE | 0.00 | 0.00 | 4 |
| ENDRIN KETONE | 0.00 | 0.00 | 4 |
| GAMMA-BHC (LINDANE) | 0.00 | 0.00 | 4 |
| GAMMA-CHLORDANE | 17.65 | 24.96 | 4 |
| HEPTACHLOR | 0.00 | 0.00 | 4 |
| HEPTACHLOR EPOXIDE | 0.00 | 0.00 | 4 |
| HEXACHLOROBENZENE | 0.00 | 0.00 | 4 |
| METHOXYCHLOR | 0.00 | 0.00 | 4 |
| MIREX | 0.00 | 0.00 | 4 |
| TRANS-NONACHLOR | 13.33 | 18.86 | 4 |

**TABLE F-6**
**CTO 0136 MIDWAY ISLAND**
**FIELD DUPLICATE MARINE SEDIMENT DATA**

| OGDEN_ANALYTE | AVE RPD | STDEV | POPULATION |
|---|---|---|---|
| METHOD: STIV141E | | | |
| 2,4'-DDD | 17.65 | 24.96 | 4 |
| 2,4'-DDE | 46.03 | 65.10 | 4 |
| 2,4'-DDT | 4.76 | 6.73 | 4 |
| 4,4'-DDD | 6.25 | 8.84 | 4 |
| 4,4'-DDE | 14.65 | 20.72 | 4 |
| 4,4'-DDT | 6.93 | 9.80 | 4 |
| ALDRIN | 0.00 | 0.00 | 4 |
| ALPHA-BHC | 0.00 | 0.00 | 4 |
| ALPHA-CHLORDANE | 7.53 | 10.64 | 4 |
| BETA-BHC | 0.00 | 0.00 | 4 |
| CIS-NONACHLOR | 122.59 | 98.81 | 6 |
| DELTA-BHC | 0.00 | 0.00 | 4 |
| DIELDRIN | 27.27 | 38.57 | 4 |
| ENDOSULFAN I | 0.00 | 0.00 | 4 |
| ENDOSULFAN II | 0.00 | 0.00 | 4 |
| ENDOSULFAN SULFATE | 0.00 | 0.00 | 4 |
| ENDRIN | 0.00 | 0.00 | 4 |
| ENDRIN ALDEHYDE | 0.00 | 0.00 | 4 |
| ENDRIN KETONE | 0.00 | 0.00 | 4 |
| GAMMA-BHC (LINDANE) | 0.00 | 0.00 | 4 |
| GAMMA-CHLORDANE | 17.65 | 24.96 | 4 |
| HEPTACHLOR | 0.00 | 0.00 | 4 |
| HEPTACHLOR EPOXIDE | 0.00 | 0.00 | 4 |
| HEXACHLOROBENZENE | 0.00 | 0.00 | 4 |
| METHOXYCHLOR | 0.00 | 0.00 | 4 |
| MIREX | 0.00 | 0.00 | 4 |
| TRANS-NONACHLOR | 13.33 | 18.86 | 4 |

**TABLE F-7**
**CTO 0136 MIDWAY ISLAND**
**FIELD DUPLICATE SEDIMENT ELUTRIATE DATA**

| OGDEN_ANALYTE | AVE RPD | STDEV | POPULATION |
|---|---|---|---|
| **METHOD: STIV141A** | | | |
| 1,2,4-TRICHLOROBENZENE | 0.00 | N/A | 2 |
| 1,3,5-TRICHLOROBENZENE | 0.00 | N/A | 2 |
| 2,4,5-TRICHLOROPHENOL | 0.00 | N/A | 2 |
| 2,4,6-TRICHLOROPHENOL | 0.00 | N/A | 2 |
| 2,4-DINITROPHENOL | 0.00 | N/A | 2 |
| ACENAPHTHENE | 0.00 | N/A | 2 |
| ACENAPHTHYLENE | 0.00 | N/A | 2 |
| ANTHRACENE | 0.00 | N/A | 2 |
| BENZO(A)ANTHRACENE | 0.00 | N/A | 2 |
| BENZO(A)PYRENE | 0.00 | N/A | 2 |
| BENZO(B)FLUORANTHENE | 0.00 | N/A | 2 |
| BENZO(E)PYRENE | 0.00 | N/A | 2 |
| BENZO(G,H,I)PERYLENE | 0.00 | N/A | 2 |
| BENZO(K)FLUORANTHENE | 0.00 | N/A | 2 |
| BIPHENYL | 0.00 | N/A | 2 |
| BIS(2-ETHYLHEXYL)PHTHALATE | 124.87 | N/A | 2 |
| CHRYSENE | 0.00 | N/A | 2 |
| CHRYSENES, C1-ALKYL-SUBSTITUTED- | 0.00 | N/A | 2 |
| CHRYSENES, C2-ALKYL-SUBSTITUTED- | 0.00 | N/A | 2 |
| CHRYSENES, C3-ALKYL-SUBSTITUTED- | 0.00 | N/A | 2 |
| CHRYSENES, C4-ALKYL-SUBSTITUTED- | 0.00 | N/A | 2 |
| DIBENZO(A,H)ANTHRACENE | 0.00 | N/A | 2 |
| DIBENZOTHIOPHENE | 0.00 | N/A | 2 |
| DIBENZOTHIOPHENES, C1-ALKYL-SUBSTITUTED | 0.00 | N/A | 2 |
| DIBENZOTHIOPHENES, C2-ALKYL-SUBSTITUTED | 0.00 | N/A | 2 |
| DIBENZOTHIOPHENES, C3-ALKYL-SUBSTITUTED | 0.00 | N/A | 2 |
| FLUORANTHENE | 0.00 | N/A | 2 |
| FLUORANTHENES+PYRENES, C1-ALKYL-SUB | 0.00 | N/A | 2 |
| FLUORANTHENES+PYRENES, C2-ALKYL-SUB | 0.00 | N/A | 2 |
| FLUORANTHENES+PYRENES, C3-ALKYL-SUB | 0.00 | N/A | 2 |
| FLUORENE | 0.00 | N/A | 2 |
| FLUORENES, C1-ALKYL-SUBSTITUTED- | 0.00 | N/A | 2 |
| FLUORENES, C2-ALKYL-SUBSTITUTED- | 0.00 | N/A | 2 |
| FLUORENES, C3-ALKYL-SUBSTITUTED- | 0.00 | N/A | 2 |
| HEXACHLOROBUTADIENE | 0.00 | N/A | 2 |
| INDENO(1,2,3-CD)PYRENE | 0.00 | N/A | 2 |
| NAPHTHALENE | 0.00 | N/A | 2 |
| NAPHTHALENES, C1-ALKYL-SUBSTITUTED- | 0.00 | N/A | 2 |
| NAPHTHALENES, C2-ALKYL-SUBSTITUTED- | 37.84 | N/A | 2 |
| NAPHTHALENES, C3-ALKYL-SUBSTITUTED- | 0.00 | N/A | 2 |
| NAPHTHALENES, C4-ALKYL-SUBSTITUTED- | 0.00 | N/A | 2 |
| PERYLENE | 0.00 | N/A | 2 |
| PHENANTHRENE | 0.00 | N/A | 2 |
| PHENANTHRENES+ANTHRACENES, C1-ALKYL-SUB | 0.00 | N/A | 2 |
| PHENANTHRENES+ANTHRACENES, C2-ALKYL-SUB | 0.00 | N/A | 2 |
| PHENANTHRENES+ANTHRACENES, C3-ALKYL-SUB | 0.00 | N/A | 2 |
| PHENANTHRENES+ANTHRACENES, C4-ALKYL-SUB | 0.00 | N/A | 2 |
| PYRENE | 0.00 | N/A | 2 |

**TABLE F-8**
**CTO 0136 MIDWAY ISLAND**
**FIELD DUPLICATE SEDIMENT ELUTRIATE DATA**

| OGDEN_ANALYTE | AVE RPD | STDEV | POPULATION |
|---|---|---|---|
| METHOD: STIV141C | | | |
| PCB-101 (2,2',3,5,5') | 10.53 | N/A | 2 |
| PCB-105 (2,3,3',4,4') | 0.00 | N/A | 2 |
| PCB-118 (2,3',4,4',5) | 0.00 | N/A | 2 |
| PCB-126 (3,3',4,4',5) | 0.00 | N/A | 2 |
| PCB-128 (2,2',3,3',4,4') | 0.00 | N/A | 2 |
| PCB-138 (2,2',3,4,4',5') | 0.00 | N/A | 2 |
| PCB-153 (2,2',4,4',5,5') | 19.35 | N/A | 2 |
| PCB-170 (2,2',3,3',4,4',5) | 64.94 | N/A | 2 |
| PCB-18 (2,2',5) | 0.00 | N/A | 2 |
| PCB-180 (2,2',3,4,4',5,5') | 30.51 | N/A | 2 |
| PCB-187 (2,2',3,4',5,5',6) | 18.18 | N/A | 2 |
| PCB-195 (2,2',3,3',4,4',5,6) | 0.00 | N/A | 2 |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 0.00 | N/A | 2 |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.00 | N/A | 2 |
| PCB-28 (2,4,4') | 200.00 | N/A | 2 |
| PCB-44 (2,2',3,5') | 0.00 | N/A | 2 |
| PCB-52 (2,2',5,5') | 0.00 | N/A | 2 |
| PCB-66 (2,3',4,4') | 0.00 | N/A | 2 |
| PCB-77 (3,3',4,4') | 0.00 | N/A | 2 |
| PCB-8 (2,4') | 200.00 | N/A | 2 |

**TABLE F-9**
**CTO 0136 MIDWAY ISLAND**
**FIELD DUPLICATE SEDIMENT ELUTRIATE DATA**

| OGDEN_ANALYTE | AVE RPD | STDEV | POPULATION |
|---|---|---|---|
| **METHOD: STIV141E** | | | |
| 2,4'-DDD | 0.00 | N/A | 2 |
| 2,4'-DDE | 0.00 | N/A | 2 |
| 2,4'-DDT | 0.00 | N/A | 2 |
| 4,4'-DDD | 0.00 | N/A | 2 |
| 4,4'-DDE | 0.00 | N/A | 2 |
| 4,4'-DDT | 0.00 | N/A | 2 |
| ALDRIN | 0.00 | N/A | 2 |
| ALPHA-BHC | 150.00 | N/A | 2 |
| ALPHA-CHLORDANE | 0.00 | N/A | 2 |
| BETA-BHC | 0.00 | N/A | 2 |
| CIS-NONACHLOR | 19.18 | N/A | 2 |
| DELTA-BHC | 31.58 | N/A | 2 |
| DIELDRIN | 0.00 | N/A | 2 |
| ENDOSULFAN I | 0.00 | N/A | 2 |
| ENDOSULFAN II | 0.00 | N/A | 2 |
| ENDOSULFAN SULFATE | 0.00 | N/A | 2 |
| ENDRIN | 0.00 | N/A | 2 |
| ENDRIN ALDEHYDE | 0.00 | N/A | 2 |
| ENDRIN KETONE | 0.00 | N/A | 2 |
| GAMMA-BHC (LINDANE) | 0.00 | N/A | 2 |
| GAMMA-CHLORDANE | 0.00 | N/A | 2 |
| HEPTACHLOR | 0.00 | N/A | 2 |
| HEPTACHLOR EPOXIDE | 0.00 | N/A | 2 |
| HEXACHLOROBENZENE | 0.00 | N/A | 2 |
| METHOXYCHLOR | 0.00 | N/A | 2 |
| MIREX | 15.00 | N/A | 2 |
| TRANS-NONACHLOR | 0.00 | N/A | 2 |

**TABLE F-10**
**CTO 0136 MIDWAY ISLAND**
**FIELD DUPLICATE SEDIMENT ELUTRIATE DATA**

| OGDEN_ANALYTE | AVE RPD | STDEV | POPULATION |
|---|---|---|---|
| **METHOD: ILM04.0** | | | |
| ALUMINUM | 0.00 | N/A | 2 |
| ANTIMONY | 0.00 | N/A | 2 |
| ARSENIC | 200.00 | N/A | 2 |
| BARIUM | 0.00 | N/A | 2 |
| BERYLLIUM | 0.00 | N/A | 2 |
| CADMIUM | 92.68 | N/A | 2 |
| CALCIUM | 0.24 | N/A | 2 |
| CHROMIUM | 0.00 | N/A | 2 |
| COBALT | 0.00 | N/A | 2 |
| COPPER | 4.08 | N/A | 2 |
| CYANIDE | N/A | N/A | 0 |
| IRON | 200.00 | N/A | 2 |
| LEAD | 0.00 | N/A | 2 |
| MAGNESIUM | 0.73 | N/A | 2 |
| MANGANESE | 0.00 | N/A | 2 |
| MERCURY | 0.00 | N/A | 2 |
| NICKEL | 2.60 | N/A | 2 |
| POTASSIUM | 0.78 | N/A | 2 |
| SELENIUM | 0.00 | N/A | 2 |
| SILVER | 10.53 | N/A | 2 |
| SODIUM | 0.87 | N/A | 2 |
| THALLIUM | 0.00 | N/A | 2 |
| VANADIUM | 200.00 | N/A | 2 |
| ZINC | 2.73 | N/A | 2 |

**TABLE F-11**
**CTO 0136 MIDWAY ISLAND**
**FIELD DUPLICATE SEA WATER DATA**

| OGDEN_ANALYTE | AVE RPD | STDEV | POPULATION |
|---|---|---|---|
| **METHOD: STIV141C** | | | |
| PCB-101 (2,2',3,5,5') | 0.00 | 0.00 | 6 |
| PCB-105 (2,3,3',4,4') | 0.00 | 0.00 | 6 |
| PCB-118 (2,3',4,4',5) | 0.00 | 0.00 | 6 |
| PCB-126 (3,3',4,4',5) | 0.00 | 0.00 | 6 |
| PCB-128 (2,2',3,3',4,4') | 0.00 | 0.00 | 6 |
| PCB-138 (2,2',3,4,4',5') | 0.00 | 0.00 | 6 |
| PCB-153 (2,2',4,4',5,5') | 0.00 | 0.00 | 6 |
| PCB-170 (2,2',3,3',4,4',5) | 0.00 | 0.00 | 6 |
| PCB-18 (2,2',5) | 0.00 | 0.00 | 6 |
| PCB-180 (2,2',3,4,4',5,5') | 0.00 | 0.00 | 6 |
| PCB-187 (2,2',3,4',5,5',6) | 0.00 | 0.00 | 6 |
| PCB-195 (2,2',3,3',4,4',5,6) | 0.00 | 0.00 | 6 |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 0.00 | 0.00 | 6 |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.00 | 0.00 | 6 |
| PCB-28 (2,4,4') | 0.00 | 0.00 | 6 |
| PCB-44 (2,2',3,5') | 0.00 | 0.00 | 6 |
| PCB-52 (2,2',5,5') | 0.00 | 0.00 | 6 |
| PCB-66 (2,3',4,4') | 0.00 | 0.00 | 6 |
| PCB-77 (3,3',4,4') | 0.00 | 0.00 | 6 |
| PCB-8 (2,4') | 0.00 | 0.00 | 6 |

**TABLE F-12**
**CTO 0136 MIDWAY ISLAND**
**FIELD DUPLICATE SEA WATER DATA**

| OGDEN_ANALYTE | AVE RPD | STDEV | POPULATION |
|---|---|---|---|
| **METHOD: STIV141E** | | | |
| 2,4'-DDD | 0.00 | 0.00 | 6 |
| 2,4'-DDE | 0.00 | 0.00 | 6 |
| 2,4'-DDT | 0.00 | 0.00 | 6 |
| 4,4'-DDD | 0.00 | 0.00 | 6 |
| 4,4'-DDE | 0.00 | 0.00 | 6 |
| 4,4'-DDT | 0.00 | 0.00 | 6 |
| ALDRIN | 0.00 | 0.00 | 6 |
| ALPHA-BHC | 0.00 | 0.00 | 6 |
| ALPHA-CHLORDANE | 0.00 | 0.00 | 6 |
| BETA-BHC | 0.00 | 0.00 | 6 |
| CIS-NONACHLOR | 0.89 | 1.54 | 6 |
| DELTA-BHC | 0.00 | 0.00 | 6 |
| DIELDRIN | 0.00 | 0.00 | 6 |
| ENDOSULFAN I | 0.00 | 0.00 | 6 |
| ENDOSULFAN II | 0.00 | 0.00 | 6 |
| ENDOSULFAN SULFATE | 0.00 | 0.00 | 6 |
| ENDRIN | 0.00 | 0.00 | 6 |
| ENDRIN ALDEHYDE | 0.00 | 0.00 | 6 |
| ENDRIN KETONE | 0.00 | 0.00 | 6 |
| GAMMA-BHC (LINDANE) | 66.67 | 115.47 | 6 |
| GAMMA-CHLORDANE | 0.00 | 0.00 | 6 |
| HEPTACHLOR | 0.00 | 0.00 | 6 |
| HEPTACHLOR EPOXIDE | 0.00 | 0.00 | 6 |
| HEXACHLOROBENZENE | 85.99 | 100.85 | 6 |
| METHOXYCHLOR | 0.00 | 0.00 | 6 |
| MIREX | 0.00 | 0.00 | 6 |
| TRANS-NONACHLOR | 0.00 | 0.00 | 6 |

**TABLE F-13**
**CTO 0136 MIDWAY ISLAND**
**FIELD DUPLICATE MARINE TISSUE DATA**

| OGDEN_ANALYTE | AVE RPD | STDEV | POPULATION |
|---|---|---|---|
| **METHOD: STIV141C** | | | |
| PCB-101 (2,2',3,5,5') | 40.38 | 45.53 | 24 |
| PCB-105 (2,3,3',4,4') | 85.52 | 86.88 | 24 |
| PCB-118 (2,3',4,4',5) | 25.99 | 37.92 | 24 |
| PCB-126 (3,3',4,4',5) | 21.90 | 58.92 | 24 |
| PCB-128 (2,2',3,3',4,4') | 36.62 | 58.81 | 24 |
| PCB-138 (2,2',3,4,4',5') | 65.35 | 68.70 | 24 |
| PCB-153 (2,2',4,4',5,5') | 35.39 | 35.34 | 24 |
| PCB-170 (2,2',3,3',4,4',5) | 49.91 | 40.20 | 24 |
| PCB-18 (2,2',5) | 118.55 | 89.40 | 24 |
| PCB-180 (2,2',3,4,4',5,5') | 81.15 | 62.87 | 24 |
| PCB-187 (2,2',3,4',5,5',6) | 47.52 | 56.88 | 24 |
| PCB-195 (2,2',3,3',4,4',5,6) | 48.65 | 55.49 | 24 |
| PCB-206 (2,2',3,3',4,4',5,5',6) | 37.36 | 46.21 | 24 |
| PCB-209 (2,2',3,3',4,4',5,5',6,6') | 29.58 | 41.73 | 24 |
| PCB-28 (2,4,4') | 56.51 | 89.04 | 24 |
| PCB-44 (2,2',3,5') | 18.67 | 57.52 | 24 |
| PCB-52 (2,2',5,5') | 53.73 | 68.30 | 24 |
| PCB-66 (2,3',4,4') | 11.95 | 25.10 | 24 |
| PCB-77 (3,3',4,4') | 16.67 | 57.74 | 24 |
| PCB-8 (2,4') | 51.69 | 72.63 | 24 |

**TABLE F-14**
**CTO 0136 MIDWAY ISLAND**
**FIELD DUPLICATE MARINE TISSUE DATA**

| OGDEN_ANALYTE | AVE RPD | STDEV | POPULATION |
|---|---|---|---|
| **METHOD: STIV141E** | | | |
| 2,4'-DDD | 68.28 | 85.00 | 23 |
| 2,4'-DDE | 21.94 | 57.43 | 23 |
| 2,4'-DDT | 37.23 | 77.20 | 23 |
| 4,4'-DDD | 18.22 | 35.38 | 23 |
| 4,4'-DDE | 49.09 | 64.55 | 23 |
| 4,4'-DDT | 63.55 | 87.79 | 23 |
| ALDRIN | 0.00 | 0.00 | 23 |
| ALPHA-BHC | 62.44 | 74.49 | 23 |
| ALPHA-CHLORDANE | 29.51 | 61.65 | 23 |
| BETA-BHC | 56.95 | 87.69 | 23 |
| DELTA-BHC | 0.82 | 2.83 | 23 |
| DIELDRIN | 33.33 | 77.85 | 23 |
| ENDOSULFAN I | 50.00 | 90.45 | 23 |
| ENDOSULFAN II | 16.67 | 57.74 | 23 |
| ENDOSULFAN SULFATE | 0.00 | 0.00 | 23 |
| ENDRIN | 33.33 | 77.85 | 23 |
| ENDRIN ALDEHYDE | 3.70 | 12.83 | 23 |
| ENDRIN KETONE | 0.00 | 0.00 | 23 |
| GAMMA-BHC (LINDANE) | 95.52 | 91.25 | 23 |
| GAMMA-CHLORDANE | 54.39 | 89.07 | 23 |
| HEPTACHLOR | 24.49 | 61.51 | 23 |
| HEPTACHLOR EPOXIDE | 4.07 | 9.96 | 23 |
| HEXACHLOROBENZENE | 60.54 | 75.91 | 23 |
| METHOXYCHLOR | 0.00 | 0.00 | 23 |
| MIREX | 53.67 | 50.37 | 23 |
| TRANS-NONACHLOR | 65.29 | 85.69 | 23 |
| CIS-NONACHLOR | 37.72 | 53.49 | 28 |

**Table F-15**

**CTO 0136 MIDWAY ISLAND**
**ORGANIC MS/MSD PRECISION RESULTS (SOIL)**

| ANALYTE | AVERAGE RPD | STANDARD DEVIATION | POPULATION | CONTROL LIMIT % |
|---|---|---|---|---|
| CLP Method OLM03.1B | | | | |
| 1,2,4-Trichlorobenzene | 17.14 | 9.59 | 3 | 23 |
| 1,4-Dichlorobenzene | 14.6 | 9.06 | 3 | 27 |
| 2,4-Dinitrotoluene | 10.62 | 2.99 | 3 | 47 |
| 2-Chlorophenol | 7.31 | 9.17 | 3 | 50 |
| 4-Chloro-3-methylphenol | 13.23 | 2.19 | 3 | 33 |
| 4-Nitrophenol | 14.92 | 9.28 | 3 | 50 |
| Acenaphthene | 5.06 | 8.76 | 3 | 19 |
| N-Nitroso-di-n-propylami | 10.8 | 12.99 | 3 | 38 |
| Pentachlorophenol | 120.1 | 82.46 | 3 | 47 |
| Phenol | 14.87 | 13.82 | 3 | 35 |
| Pyrene | 15.45 | 9.81 | 3 | 36 |
| CLP Method OLM03.1P | | | | |
| 4,4'-DDT | 17.27 | 10.63 | 3 | 50 |
| Aldrin | 42.48 | 60.36 | 3 | 43 |
| Dieldrin | 78.13 | 106.15 | 3 | 38 |
| Endrin | 69.42 | 113.16 | 3 | 45 |
| gamma-BHC | 2.75 | 4.77 | 3 | 50 |
| Heptachlor | 2.75 | 4.77 | 3 | 31 |

**Table F-16**

**CTO 0136 MIDWAY ISLAND**
**ORGANIC MS/MSD PRECISION RESULTS (SEDIMENT )**

| ANALYTE | AVERAGE RPD | STANDARD DEVIATION | POPULATION | CONTROL LIMIT % |
|---|---|---|---|---|
| STIV141C | | | | |
| 2,4'-DDT | 5.00 | N/C | 1 | 30 |
| Heptachlor | 0.00 | N/C | 1 | 30 |
| Mirex | 4.20 | N/C | 1 | 30 |
| trans-Nonachlor | 3.73 | N/C | 1 | 30 |
| STIV141E | | | | |
| PCB-28 | 0.00 | N/C | 1 | 30 |
| PCB-52 | 1.77 | N/C | 1 | 30 |
| PCB-101 | 1.74 | N/C | 1 | 30 |
| PCB-153 | 2.99 | N/C | 1 | 30 |
| PCB-126 | 2.99 | N/C | 1 | 30 |
| PCB-180 | 4.32 | N/C | 1 | 30 |
| PCB-206 | 4.20 | N/C | 1 | 30 |
| PCB-209 | 2.90 | N/C | 1 | 30 |

**Table F-17**

**CTO 0136 MIDWAY ISLAND**
**ORGANIC MS/MSD PRECISION RESULTS (GROUNDWATER )**

| ANALYTE | AVERAGE RPD | STANDARD DEVIATION | POPULATION | CONTROL LIMIT % |
|---|---|---|---|---|
| STIV141C | | | | |
| 2,4'-DDT | 3.47 | N/C | 1 | 30 |
| Heptachlor | 3.59 | N/C | 1 | 30 |
| Mirex | 2.47 | N/C | 1 | 30 |
| trans-Nonachlor | 1.01 | N/C | 1 | 30 |
| STIV141E | | | | |
| PCB-28 | 5.13 | N/C | 1 | 30 |
| PCB-52 | 5.63 | N/C | 1 | 30 |
| PCB-101 | 4.08 | N/C | 1 | 30 |
| PCB-153 | 0.00 | N/C | 1 | 30 |
| PCB-126 | 6.29 | N/C | 1 | 30 |
| PCB-180 | 7.59 | N/C | 1 | 30 |
| PCB-206 | 3.59 | N/C | 1 | 30 |
| PCB-209 | 5.13 | N/C | 1 | 30 |
| STIV141A | | | | |
| Naphthalene | 5.17 | N/C | 1 | 25 |
| Acenaphthylene | 16.67 | N/C | 1 | 25 |
| Acenaphthene | 26.36 | N/C | 1 | 25 |
| Fluorene | 19.44 | N/C | 1 | 25 |
| Phenanthrene | 7.59 | N/C | 1 | 25 |
| Anthracene | 14.74 | N/C | 1 | 25 |
| Fluoranthene | 9.84 | N/C | 1 | 25 |
| Pyrene | 8.89 | N/C | 1 | 25 |
| Benzo(a)anthracene | 7.14 | N/C | 1 | 25 |
| Chrysene | 0 | N/C | 1 | 25 |
| Benzo(b)fluoranthene | 3.55 | N/C | 1 | 25 |
| Benzo(k)fluroanthene | 19.28 | N/C | 1 | 25 |
| Benzo(a)pyrene | 18.75 | N/C | 1 | 25 |
| Indeno(1,2,3-cd)pyrene | 17.45 | N/C | 1 | 25 |
| Dibenzo(a,h)anthracene | 17.5 | N/C | 1 | 25 |
| Benzo(g,h,i)perylene | 11.11 | N/C | 1 | 25 |

**Table F-18**

**CTO 0136 MIDWAY ISLAND**
**ORGANIC MS/MSD PRECISION RESULTS (SEAWATER )**

| ANALYTE | AVERAGE RPD | STANDARD DEVIATION | POPULATION | CONTROL LIMIT % |
|---|---|---|---|---|
| STIV141C | | | | |
| 2,4'-DDT | 6.90 | N/C | 1 | 30 |
| Heptachlor | 0.00 | N/C | 1 | 30 |
| Mirex | 8.11 | N/C | 1 | 30 |
| trans-Nonachlor | 9.94 | N/C | 1 | 30 |
| STIV141E | | | | |
| PCB-28 | 3.17 | N/C | 1 | 30 |
| PCB-52 | 8.26 | N/C | 1 | 30 |
| PCB-101 | 9.68 | N/C | 1 | 30 |
| PCB-153 | 7.09 | N/C | 1 | 30 |
| PCB-126 | 6.80 | N/C | 1 | 30 |
| PCB-180 | 6.80 | N/C | 1 | 30 |
| PCB-206 | 6.71 | N/C | 1 | 30 |
| PCB-209 | 8.33 | N/C | 1 | 30 |

**Table F-19**

**CTO 0136 MIDWAY ISLAND**
**ORGANIC MS/MSD PRECISION RESULTS (TISSUE )**

| ANALYTE | AVERAGE RPD | STANDARD DEVIATION | POPULATION | CONTROL LIMIT % |
|---|---|---|---|---|
| STIV141C | | | | |
| 2,4'-DDT | 11.45 | 16.25 | 5 | 30 |
| Heptachlor | 11.12 | 15.83 | 5 | 30 |
| Mirex | 8.26 | 14.86 | 5 | 30 |
| trans-Nonachlor | 9.13 | 13.71 | 5 | 30 |
| STIV141E | | | | |
| PCB-28 | 52.60 | 16.79 | 5 | 30 |
| PCB-52 | 8.12 | 12.59 | 5 | 30 |
| PCB-101 | 6.24 | 9.02 | 5 | 30 |
| PCB-153 | 11.72 | 11.37 | 5 | 30 |
| PCB-126 | 11.51 | 13.79 | 5 | 30 |
| PCB-180 | 11.41 | 11.39 | 5 | 30 |
| PCB-206 | 8.51 | 14.83 | 5 | 30 |
| PCB-209 | 11.92 | 18.22 | 5 | 30 |

## Table F-20

## CTO 0136 MIDWAY ISLAND
## ORGANIC MATRIX SPIKE ACCURACY RESULTS (SOIL)

| ANALYTE | AVERAGE RECOVERY | STANDARD DEVIATION | POPULATION | CONTROL LIMITS |
|---|---|---|---|---|
| **CLP Method OLM03.1P** | | | | |
| gamma-BHC | 19.33 | 33.49 | 3 | 46-127 % |
| Heptachlor | 19.33 | 33.49 | 3 | 35-130 % |
| Aldirn | 26.33 | 29.37 | 3 | 34-132 % |
| Dieldrin | 43.67 | 40.87 | 3 | 31-134 % |
| Endrin | 19.33 | 33.49 | 3 | 42-139 % |
| 4,4'-DDT | 115.33 | 92.81 | 3 | 23-134 % |
| **CLP Method OLM03.1B** | | | | |
| Phenol | 65.33 | 13.43 | 3 | 26-90 % |
| 2-Chlorophenol | 65.33 | 7.37 | 3 | 25-102 % |
| 1,4'-Dichlorobenzene | 59.00 | 16.09 | 3 | 28-104 % |
| N-Nitroso-di-n-propylamine | 66.00 | 12.17 | 3 | 41-126 % |
| 1,2,4-Trichlorobenzene | 66.00 | 13.53 | 3 | 38-197 % |
| 4-Chloro-3-methylphenol | 69.00 | 1.73 | 3 | 26-103 % |
| Acenaphthene | 76.33 | 8.62 | 3 | 31-137 % |
| 4-Nitrophenol | 54.67 | 11.72 | 3 | 11-114 % |
| 2,4-Dinitrotoluene | 64.67 | 10.69 | 3 | 28-89 % |
| Pentachlorophenol | 15.67 | 9.61 | 3 | 17-109 % |
| Pyrene | 67.00 | 24.52 | 3 | 35-142 % |

Table F-21

CTO 0136 MIDWAY ISLAND ORGANIC MATRIX SPIKE ACCURACY RESULTS (SEDIMENT)

| ANALYTE | AVERAGE RECOVERY | STANDARD DEVIATION | POPULATION | CONTROL LIMITS |
|---|---|---|---|---|
| **STIV141E** | | | | |
| Heptachlor | 91.00 | N/A | 1 | 50-150 % |
| trans-Nonachlor | 79.00 | N/A | 1 | 50-150 % |
| Mirex | 70.00 | N/A | 1 | 50-150 % |
| 2,4'-DDT | 78.00 | N/A | 1 | 50-150 % |
| **STIV141C** | | | | |
| PCB-28 | 61.00 | N/A | 1 | 50-150 % |
| PCB-52 | 56.00 | N/A | 1 | 50-150 % |
| PCB-101 | 57.00 | N/A | 1 | 50-150 % |
| PCB-153 | 66.00 | N/A | 1 | 50-150 % |
| PCB-126 | 66.00 | N/A | 1 | 50-150 % |
| PCB-180 | 68.00 | N/A | 1 | 50-150 % |
| PCB-206 | 70.00 | N/A | 1 | 50-150 % |
| PCB-209 | 68.00 | N/A | 1 | 50-150 % |

Table F-22

CTO 0136 MIDWAY ISLAND ORGANIC MATRIX SPIKE ACCURACY RESULTS (GROUNDWATER)

| ANALYTE | AVERAGE RECOVERY | STANDARD DEVIATION | POPULATION | CONTROL LIMITS |
|---|---|---|---|---|
| **STIV141E** | | | | |
| Heptachlor | 85.00 | N/A | 1 | 50-150 |
| trans-Nonachlor | 99.00 | N/A | 1 | 50-150 |
| Mirex | 80.00 | N/A | 1 | 50-150 |
| 2,4'-DDT | 85.00 | N/A | 1 | 50-150 |
| **STIV141C** | | | | |
| PCB-28 | 80.00 | N/A | 1 | 50-150 |
| PCB-52 | 73.00 | N/A | 1 | 50-150 |
| PCB-101 | 72.00 | N/A | 1 | 50-150 |
| PCB-153 | 77.00 | N/A | 1 | 50-150 |
| PCB-126 | 77.00 | N/A | 1 | 50-150 |
| PCB-180 | 76.00 | N/A | 1 | 50-150 |
| PCB-206 | 85.00 | N/A | 1 | 50-150 |
| PCB-209 | 80.00 | N/A | 1 | 50-150 |
| **STIV141A** | | | | |
| Naphthalene | 51.00 | N/A | 1 | 50-125 |
| Acenaphthylene | 65.00 | N/A | 1 | 50-125 |
| Acenaphthene | 73.00 | N/A | 1 | 50-125 |
| Fluorene | 79.00 | N/A | 1 | 50-125 |
| Phenanthrene | 82.00 | N/A | 1 | 50-125 |
| Anthracene | 44.00 | N/A | 1 | 50-125 |
| Flluoranthene | 96.00 | N/A | 1 | 50-125 |
| Pyrene | 94.00 | N/A | 1 | 50-125 |
| Benzo(a)anthracene | 87.00 | N/A | 1 | 50-125 |
| Chrysene | 85.00 | N/A | 1 | 50-125 |
| Benzo(b)fluoranthene | 86.00 | N/A | 1 | 50-125 |
| Benzo(k)fluoranthene | 91.00 | N/A | 1 | 50-125 |
| Benzo(a)pyrene | 70.00 | N/A | 1 | 50-125 |
| Indeno(1,2,3-cd)pyrene | 81.00 | N/A | 1 | 50-125 |
| Dibenzo(a,h)anthracene | 87.00 | N/A | 1 | 50-125 |
| Benzo(g,h,i)perylene | 76.00 | N/A | 1 | 50-125 |

Table F-23
CTO 0136 MIDWAY ISLAND
ORGANIC MATRIX SPIKE ACCURACY RESULTS (SEAWATER)

| ANALYTE | AVERAGE RECOVERY | STANDARD DEVIATION | POPULATION | CONTROL LIMITS |
|---|---|---|---|---|
| **STIV141E** | | | | |
| Heptachlor | 92.00 | N/A | 1 | 50-150 |
| trans-Nonachlor | 95.00 | N/A | 1 | 50-150 |
| Mirex | 77.00 | N/A | 1 | 50-150 |
| 2,4'-DDT | 90.00 | N/A | 1 | 50-150 |
| **STIV141C** | | | | |
| PCB-28 | 64.00 | N/A | 1 | 50-150 |
| PCB-52 | 63.00 | N/A | 1 | 50-150 |
| PCB-101 | 65.00 | N/A | 1 | 50-150 |
| PCB-153 | 73.00 | N/A | 1 | 50-150 |
| PCB-126 | 76.00 | N/A | 1 | 50-150 |
| PCB-180 | 76.00 | N/A | 1 | 50-150 |
| PCB-206 | 77.00 | N/A | 1 | 50-150 |
| PCB-209 | 75.00 | N/A | 1 | 50-150 |

Table F-24

CTO 0136 MIDWAY ISLAND ORGANIC MATIRX SPIKE ACCURACY RESULTS (TISSUE)

| ANALYTE | AVERAGE RECOVERY | STANDARD DEVIATION | POPULATION | CONTROL LIMITS |
|---|---|---|---|---|
| **STIV141E** | | | | |
| Heptachlor | 71.20 | 20.73 | 5 | 50-150 |
| trans-Nonachlor | 65.20 | 18.32 | 5 | 50-150 |
| Mirex | 59.20 | 18.59 | 5 | 50-150 |
| 2,4'-DDT | 82.00 | 32.74 | 5 | 50-150 |
| **STIV141C** | | | | |
| PCB-28 | 52.60 | 16.79 | 5 | 50-150 |
| PCB-52 | 59.00 | 26.85 | 5 | 50-150 |
| PCB-101 | 53.60 | 16.83 | 5 | 50-150 |
| PCB-153 | 62.20 | 23.47 | 5 | 50-150 |
| PCB-126 | 54.20 | 16.30 | 5 | 50-150 |
| PCB-180 | 59.00 | 19.27 | 5 | 50-150 |
| PCB-206 | 61.00 | 20.33 | 5 | 50-150 |
| PCB-209 | 57.20 | 19.64 | 5 | 50-150 |

Table F-25

CTO 0136 MIDWAY ISLAND ORGANIC BLANK SPIKE ACCURACY RESULTS (SOIL)

| ANALYTE | AVERAGE RECOVERY | STANDARD DEVIATION | POPULATION | CONTROL LIMITS |
|---|---|---|---|---|
| **CLP Method OLM03.1P** | | | | |
| gamma-BHC | 63.60 | 10.92 | 5 | 46-127 % |
| Heptachlor | 59.20 | 9.71 | 5 | 35-130 % |
| Aldirn | 63.60 | 10.92 | 5 | 34-132 % |
| Dieldrin | 66.40 | 9.10 | 5 | 31-134 % |
| Endrin | 71.80 | 11.34 | 5 | 42-139 % |
| 4,4'-DDT | 59.20 | 10.73 | 5 | 23-134 % |
| **CLP Method OLM03.1B** | | | | |
| Phenol | 52.00 | 14.42 | 3 | 26-90 % |
| 2-Chlorophenol | 53.00 | 14.53 | 3 | 25-102 % |
| 1,4'-Dichlorobenzene | 48.67 | 14.84 | 3 | 28-104 % |
| N-Nitroso-di-n-propylamine | 49.00 | 14.73 | 3 | 41-126 % |
| 1,2,4-Trichlorobenzene | 52.00 | 17.69 | 3 | 38-197 % |
| 4-Chloro-3-methylphenol | 51.67 | 16.50 | 3 | 26-103 % |
| Acenaphthene | 60.67 | 19.14 | 3 | 31-137 % |
| 4-Nitrophenol | 43.33 | 19.22 | 3 | 11-114 % |
| 2,4-Dinitrotoluene | 48.33 | 20.26 | 3 | 28-89 % |
| Pentachlorophenol | 42.00 | 16.37 | 3 | 17-109 % |
| Pyrene | 62.00 | 15.59 | 3 | 35-142 % |

Table F-26
CTO 0136 MIDWAY ISLAND
BLANK SPIKE ACCURACY RESULTS (SEDIMENT)

| ANALYTE | AVERAGE RECOVERY | STANDARD DEVIATION | POPULATION | CONTROL LIMITS |
|---|---|---|---|---|
| **STIV141E** | | | | |
| Heptachlor | 117.00 | N/A | 1 | 50-150 % |
| trans-Nonachlor | 100.00 | N/A | 1 | 50-150 % |
| Mirex | 83.00 | N/A | 1 | 50-150 % |
| 2,4'-DDT | 97.00 | N/A | 1 | 50-150 % |
| **STIV141C** | | | | |
| PCB-28 | 74.00 | N/A | 1 | 50-150 % |
| PCB-52 | 62.00 | N/A | 1 | 50-150 % |
| PCB-101 | 69.00 | N/A | 1 | 50-150 % |
| PCB-153 | 81.00 | N/A | 1 | 50-150 % |
| PCB-126 | 86.00 | N/A | 1 | 50-150 % |
| PCB-180 | 83.00 | N/A | 1 | 50-150 % |
| PCB-206 | 83.00 | N/A | 1 | 50-150 % |
| PCB-209 | 74.00 | N/A | 1 | 50-150 % |
| **STIV141A** | | | | |
| Naphthalene | 66 | N/A | 1 | 50-125 % |
| Acenaphthylene | | N/A | 1 | 50-125 % |
| Acenaphthene | 70 | N/A | 1 | 50-125 % |
| Fluorene | 72 | N/A | 1 | 50-125 % |
| Phenanthrene | 74 | N/A | 1 | 50-125 % |
| Anthracene | 32 | N/A | 1 | 50-125 % |
| Flluoranthene | 84 | N/A | 1 | 50-125 % |
| Pyrene | 86 | N/A | 1 | 50-125 % |
| Benzo(a)anthracene | 70 | N/A | 1 | 50-125 % |
| Chrysene | 74 | N/A | 1 | 50-125 % |
| Benzo(b)fluoranthene | 86 | N/A | 1 | 50-125 % |
| Benzo(k)fluoranthene | 74 | N/A | 1 | 50-125 % |
| Benzo(a)pyrene | 76 | N/A | 1 | 50-125 % |
| Indeno(1,2,3-cd)pyrene | 86 | N/A | 1 | 50-125 % |
| Dibenzo(a,h)anthracene | 98 | N/A | 1 | 50-125 % |
| Benzo(g,h,i)perylene | 82 | N/A | 1 | 50-125 % |

Table F-27

CTO 0136 MIDWAY ISLAND BLANK SPIKE ACCURACY RESULTS (GROUNDWATER)

| ANALYTE | AVERAGE RECOVERY | STANDARD DEVIATION | POPULATION | CONTROL LIMITS |
|---|---|---|---|---|
| **STIV141E** | | | | |
| Heptachlor | 61.00 | N/A | 1 | 50-125 % |
| trans-Nonachlor | 86.00 | N/A | 1 | 50-125 % |
| Mirex | 78.00 | N/A | 1 | 50-125 % |
| 2,4'-DDT | 86.00 | N/A | 1 | 50-125 % |
| **STIV141C** | | | | |
| PCB-28 | 63.00 | N/A | 1 | 50-125 % |
| PCB-52 | 61.00 | N/A | 1 | 50-125 % |
| PCB-101 | 65.00 | N/A | 1 | 50-125 % |
| PCB-153 | 78.00 | N/A | 1 | 50-125 % |
| PCB-126 | 71.00 | N/A | 1 | 50-125 % |
| PCB-180 | 73.00 | N/A | 1 | 50-125 % |
| PCB-206 | 76.00 | N/A | 1 | 50-125 % |
| PCB-209 | 71.00 | N/A | 1 | 50-125 % |
| **STIV141A** | | | | |
| Naphthalene | 76 | N/A | 1 | 50-125 % |
| Acenaphthylene | 64 | N/A | 1 | 50-125 % |
| Acenaphthene | 76 | N/A | 1 | 50-125 % |
| Fluorene | 72 | N/A | 1 | 50-125 % |
| Phenanthrene | 88 | N/A | 1 | 50-125 % |
| Anthracene | 38 | N/A | 1 | 50-125 % |
| Flluoranthene | 88 | N/A | 1 | 50-125 % |
| Pyrene | 88 | N/A | 1 | 50-125 % |
| Benzo(a)anthracene | 88 | N/A | 1 | 50-125 % |
| Chrysene | 88 | N/A | 1 | 50-125 % |
| Benzo(b)fluoranthene | 92 | N/A | 1 | 50-125 % |
| Benzo(k)fluoranthene | 80 | N/A | 1 | 50-125 % |
| Benzo(a)pyrene | 80 | N/A | 1 | 50-125 % |
| Indeno(1,2,3-cd)pyrene | 84 | N/A | 1 | 50-125 % |
| Dibenzo(a,h)anthracene | 96 | N/A | 1 | 50-125 % |
| Benzo(g,h,i)perylene | 76 | N/A | 1 | 50-125 % |

Ta F-28

CTO 0136 MIDWAY ISLAND ORGANIC BLANK SPIKE ACCURACY RESULTS (SEAWATER)

| ANALYTE | AVERAGE RECOVERY | STANDARD DEVIATION | POPULATION | CONTROL LIMITS |
|---|---|---|---|---|
| **STIV141E** | | | | |
| Heptachlor | 90.00 | N/A | 1 | 50-150 |
| trans-Nonachlor | 94.00 | N/A | 1 | 50-150 |
| Mirex | 80.00 | N/A | 1 | 50-150 |
| 2,4'-DDT | 89.50 | N/A | 1 | 50-150 |
| **STIV141C** | | | | |
| PCB-28 | 67.50 | N/A | 1 | 50-150 |
| PCB-52 | 64.00 | N/A | 1 | 50-150 |
| PCB-101 | 65.00 | N/A | 1 | 50-150 |
| PCB-153 | 77.00 | N/A | 1 | 50-150 |
| PCB-126 | 76.50 | N/A | 1 | 50-150 |
| PCB-180 | 79.50 | N/A | 1 | 50-150 |
| PCB-206 | 79.00 | N/A | 1 | 50-150 |
| PCB-209 | 75.50 | N/A | 1 | 50-150 |

Table F-29

CTO 0136 MIDWAY ISLAND ORGANIC BLANK SPIKE ACCURACY RESULTS (TISSUE)

| ANALYTE | AVERAGE RECOVERY | STANDARD DEVIATION | POPULATION | CONTROL LIMITS |
|---|---|---|---|---|
| **STIV141E** | | | | |
| alpha-Chlordane | 110.00 | 6.66 | 5 | 65-135 % |
| gamma-Chlordane | 102.00 | 7.53 | 5 | 65-135 % |
| trans-Nonachlor | 106.00 | 4.93 | 5 | 65-135 % |
| cis-Nonachlor | 106.00 | 8.36 | 5 | 65-135 % |
| 4,4'-DDE | 112.00 | 5.01 | 5 | 65-135 % |
| 4,4'-DDD | 99.00 | 7.37 | 5 | 65-135 % |
| 4,4'-DDT | 94.00 | 10.90 | 5 | 65-135 % |
| **STIV141C** | | | | |
| PCB-44 | 113.00 | 6.32 | 5 | 65-135 % |
| PCB-52 | 98.00 | 11.61 | 5 | 65-135 % |
| PCB-66 | 100.00 | 7.89 | 5 | 65-135 % |
| PCB-101 | 105.00 | 8.82 | 5 | 65-135 % |
| PCB-105 | 115.00 | 6.11 | 5 | 65-135 % |
| PCB-118 | 107.00 | 7.68 | 5 | 65-135 % |
| PCB-128 | 106.00 | 3.56 | 5 | 65-135 % |
| PCB-138 | 108.00 | 5.93 | 5 | 65-135 % |
| PCB-153 | 103.00 | 5.19 | 5 | 65-135 % |
| PCB-170 | 105.00 | 3.43 | 5 | 65-135 % |
| PCB-180 | 118.00 | 7.14 | 5 | 65-135 % |
| PCB-187 | 109.00 | 4.24 | 5 | 65-135 % |

| Sample Type | Total Proposed Samples | Total Actua Samples | esticides/PCBs | CLP METALS | |
|---|---|---|---|---|---|
| | | | Actual Number of Samples | Proposed Number of Samples | Actual Number of Samples |
| **Subsurface Soil** | | | | | |
| Offsite Trench Samples | 44 | 44 | N/A | N/A | N/A |
| Offsite Test Pit Samples | 0 | 1 | A | Completeness: N/A | |
| **Ground Water** | | | | | |
| Monitoring Wells | 6 | 5 | 5 | N/A | N/A |
| | | | % | Completeness: N/A | |
| **Marine Sediment** | | | | | |
| Landfills + Inner Harbor | 18 | 18 | 18 | N/A | N/A |
| | | | ) | Completeness: N/A | |
| **Marine Seawater** | | | | | |
| Landfills + Inner Harbor | 14 | 15 | 15 | N/A | N/A |
| | | | 7 | Completeness: N/A | |
| **Marine Tissue** | | | | | |
| Landfills + Inner Harbor Algae | 27 | 28 | 28 | N/A | N/A |
| | | | 4 | Completeness: N/A | |
| Herbivourous Fish | 27 | 26 | 26 | N/A | N/A |
| | | | | Completeness: N/A | |
| Carnivorous Fish | 9 | 10 | 10 | N/A | N/A |
| | | | | Completeness: N/A | |
| Inverterbrates | 27 | 34 | 34 | N/A | N/A |
| | | | 6 | Completeness: N/A | |

Notes:
Total proposed analyses = (# of proposed samples * # of p
Total actual analyses = (# of actual samples * # of actual a
* Sampling completeness (%) determined as ratio of total

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**Table F-31**
**CTO 0136 MIDWAY ISLAND INORGANIC COMPLETENESS RESULTS**

| ANALYTE | NUMBER OF SAMPLES | NUMBER OF SAMPLES REJECTED | COMPLETENESS PERCENTAGE |
|---|---|---|---|
| **CLP Method ILM04.0 - Sediment Elutriate** | | | |
| Aluminum | 2 | 0 | 100% |
| Antimony | 2 | 0 | 100% |
| Arsenic | 2 | 0 | 100% |
| Barium | 2 | 0 | 100% |
| Beryllium | 2 | 0 | 100% |
| Cadmium | 2 | 0 | 100% |
| Calcium | 2 | 0 | 100% |
| Chromium | 2 | 0 | 100% |
| Cobalt | 2 | 0 | 100% |
| Copper | 2 | 0 | 100% |
| Iron | 2 | 0 | 100% |
| Lead | 2 | 5 | 96% |
| Magnesium | 2 | 0 | 100% |
| Manganese | 2 | 0 | 100% |
| Mercury | 2 | 3 | 100% |
| Nickel | 2 | 0 | 100% |
| Potassium | 2 | 0 | 100% |
| Selenium | 2 | 0 | 100% |
| Silver | 2 | 0 | 100% |
| Sodium | 2 | 0 | 100% |
| Thallium | 2 | 0 | 100% |
| Vanadium | 2 | 0 | 100% |
| Zinc | 2 | 0 | 100% |

**Table F-31 (CONTINUED)**
**CTO 0136 MIDWAY ISLAND ORGANIC COMPLETENESS RESULTS**

| METHOD | NUMBER OF ANALYTES | NUMBER OF ANALYTES REJECTED | COMPLETENESS PERCENTAGE |
|---|---|---|---|
| **Soils** | | | |
| SVOCs by CLP Method OLM0.3B | 2816 | 0 | 100% |
| Pest/PCBs by CLP Method OLM03.1 | 1232 | 0 | 100% |
| **Sediment** | | | |
| Low-level PCBs by STIV141C | 320 | 0 | 100% |
| Low-level pesticides by STIV141E | 432 | 0 | 100% |
| **Sediment Elutriate** | | | |
| Low-level SVOCs by STIV141A | 96 | 0 | 100% |
| Low-level PCBs by STIV141C | 40 | 0 | 100% |
| Low-level pesticides by STIV141E | 54 | 0 | 100% |
| **Ground water** | | | |
| Low-level SVOCs by STIV141A | 240 | 0 | 100% |
| Low-level PCBs by STIV141C | 100 | 0 | 100% |
| Low-level pesticides by STIV141E | 135 | 0 | 100% |
| **Seawater** | | | |
| Low-level PCBs by STIV141C | 300 | 0 | 100% |
| Low-level pesticides by STIV141E | 405 | 0 | 100% |
| **Tissue (Algae)** | | | |
| Low-level PCBs by STIV141C | 520 | 0 | 100% |
| Low-level pesticides by STIV141E | 702 | 0 | 100% |
| **Tissue (Herbivorous fish)** | | | |
| Low-level PCBs by STIV141C | 520 | 0 | 100% |
| Low-level pesticides by STIV141E | 702 | 0 | 100% |
| **Tissue (Carnivorous fish)** | | | |
| Low-level PCBs by STIV141C | 200 | 0 | 100% |
| Low-level pesticides by STIV141E | 540 | 0 | 100% |
| **Tissue (Inverterbrates)** | | | |
| Low-level PCBs by STIV141C | 480 | 0 | 100% |
| Low-level pesticides by STIV141E | 648 | 0 | 100% |

Table F-32
CTO 0136 MIDWAY ISLAND PERFORMANCE EVALUATION RESULTS
PESTICIDES--WATER

| ANALYTE | CERTIFIED VALUE (ug/L) | ADVISORY RANGE (ug/L) | LABORATORY RESULT (ug/L) |
|---|---|---|---|
| Aldrin | 10 | N/A | 0.22 |
| alpha-BHC | 10 | N/A | 3.7 |
| beta-BHC | 10 | N/A | 2.7 |
| delta-BHC | 10 | N/A | 3.7 |
| gamma-BHC | 10 | N/A | 3.6 |
| 4,4'-DDT | 10 | N/A | 0.17 |
| Endrin | 10 | N/A | 0.91 |
| Heptachlor | 10 | N/A | 0.29 |
| 4,4'-DDD | 10 | N/A | 1.2 |
| 4,4'-DDE | 10 | N/A | 0.87 |
| Dieldrin | 10 | N/A | 1.8 |
| Endosulfan I | 10 | N/A | 1.7 |
| Endosulfan II | 10 | N/A | 2 |
| Endosulfan sulfate | 10 | N/A | 2.7 |
| Endrin aldehyde | 10 | N/A | 1.8 |
| Heptachlor epoxide | 10 | N/A | 2.1 |

N/A - Not applicable, advisory limits were not provided

**Table F-33**
**CTO 0136 MIDWAY ISLAND**
**PERFORMANCE EVALUATION RESULTS**
**PCBs--WATER**

| ANALYTE | CERTIFIED VALUE (ug/L) | ADVISORY RANGE (ug/L) | LABORATORY RESULT (ug/L) |
|---|---|---|---|
| PCB-28 | 10 | N/A | 1.8 |
| PCB-52 | 10 | N/A | 1.8 |
| PCB-101 | 10 | N/A | 1.7 |
| PCB-118 | 10 | N/A | 1.9 |
| PCB-138 | 10 | N/A | 1.8 |
| PCB-153 | 10 | N/A | 1.9 |
| PCB-180 | 10 | N/A | 1.8 |

N/A - Not applicable, advisory limits were not provided

**Table F-34**
**CTO 0136 MIDWAY ISLAND PERFORMANCE EVALUATION RESULTS**
**SEMIVOLATILES--SOIL**

| ANALYTE | CERTIFIED VALUE (ug/kg) | ADVISORY RANGE (ug/kg) | LABORATORY RESULT (ug/kg) |
|---|---|---|---|
| Anthracene | 9930 | 2020-10400 | 4000 |
| Benzo(b)fluoranthene | 7270 | 3030-8870 | 4000 |
| Benzo(a)pyrene | 3700 | 1190-3890 | 1600 |
| Butylbenzylphthalate | 4400 | 1810-5060 | 2700 |
| 4-Chlorophenyl-phenyl ether | 5510 | 3020-5790 | 4000 |
| Chrysene | 7950 | 3200-8430 | 4800 |
| Dibenzofuran | 11900 | 4430-12500 | 6000 |
| 1,2-Dichlorobenzene | 10000 | 1490-10500 | 520* |
| 2,4-Dinitrotoluene | 7050 | 2310-7400 | 4300 |
| Bis(2-ethylhexyl)phthalat | 3790 | 1840-4590 | 0* |
| Fluorene | 3150 | 1170-3310 | 1800 |
| Naphthalene | 6480 | 1110-6800 | 1500 |
| Phenanthrene | 7740 | 2840-8130 | 4400 |
| Pyrene | 3120 | 1010-3460 | 1800 |
| 1,2,4-Trichlorobenzene | 8970 | 1610-9420 | 1400* |
| 2,4-Dinitrophenol | 9210 | 2450-9670 | 0* |
| 2-Methylphenol | 7760 | 2050-8150 | 710* |
| Pentachlorophenol | 9170 | 2280-9630 | 4600 |
| 2,4,5-Trichlorophenol | 7020 | 2140-7370 | 3500 |
| 2,4,6-Trichlorophenol | 6330 | 2260-6650 | 2900 |

* Value outside of advisory range

**Table F-35**
**CTO 0136 MIDWAY ISLAND PERFORMANCE EVALUATION RESULTS**
**PESTICIDES/PCBs--SOIL**

| ANALYTE | CERTIFIED VALUE (ug/kg) | ADVISORY RANGE (ug/kg) | LABORATORY RESULT (ug/kg) |
|---|---|---|---|
| Aldrin | 210 | 119-233 | 120 |
| beta-BHC | 376 | 188-414 | 130* |
| delta-BHC | 398 | 126-505 | 210 |
| gamma-BHC | 253 | 118-293 | 110* |
| alpha-Chlordane | 291 | 117-335 | 110* |
| 4,4'-DDD | 245 | 120-292 | 110* |
| 4,4'-DDE | 198 | 117-228 | 96* |
| 4,4'-DDT | 198 | 78.6-214 | 75* |
| Dieldrin | 304 | 159-344 | 140* |
| Endrin | 397 | 220-472 | 220 |
| Heptachlor | 250 | 148-278 | 120* |
| Heptachlor epoxide | 187 | 65.5-234 | 94* |
| Aroclor-1260 | 35 | 16.1-36.8 | 13* |

* Value outside advisory range

OGDEN

# DATA VALIDATION REPORT

CLEAN CONTRACT TASK ORDER #136
NAF Midway Site Investigations

ANALYSIS: SEMIVOLATILES

SAMPLE DELIVERY GROUP: 5811M

Prepared by

Ogden—Denver Operations
550 South Wadsworth Boulevard Suite 500
Lakewood, Colorado 80226

# CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

Ogden Environmental and Energy Services Co., Inc.
550 South Wadsworth Boulevard
Suite 500
Lakewood, CO 80226

Package ID: C136SV30
Task Order: 11019036
SDG No.: 5811M
No. of Analyses: 20

Laboratory: Ceimic
Reviewer: D. Ilczyszyn
Analysis/Method: Semivolatiles

Date: 9/25/96
Reviewer's Signature: [signature]

| ACTION ITEMS[a] | |
|---|---|
| 1. **Case Narrative Deficiencies** | |
| 2. **Out of Scope Analyses** | |
| 3. **Analyses Not Conducted** | |
| 4. **Missing Hardcopy Deliverables** | |
| 5. **Incorrect Hardcopy Deliverables** | |
| 6. **Deviations from Analysis Protocol, e.g.,** | Qualifications were given due to calibrations, internal standards, & method blanks. |
| Holding Times | |
| GC/MS Tune/Inst. Perform | ~~N-Nitrosodiphenylamine was not detected in any of the calibrations; therefore, this compound was rejected for all compounds samples.~~ DI 9/25/96 |
| Calibrations | |
| Blanks | |
| Surrogates | |
| Matrix Spike/Dup LCS | |
| Field QC | |
| Internal Standard Performance | DI 9/27/96 |
| Compound Identification and Quantitation | |
| System Performance | |

| COMMENTS[b] |
|---|
| |

[a] Subcontracted analytical laboratory is not meeting contract and/or method requirements.
[b] Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.

# 1. INTRODUCTION

| | |
|---|---|
| Task Order Title: | NAF Midway SI/RI |
| CLEAN Contract Task Order #: | 0136 |
| SDG#: | 5811M |
| CTO Manager: | J. Cotter |
| Project Contact: | M. Medeiros |
| Matrix: | Water/Soil |
| Analysis: | Semivolatiles |
| NEESA QC Level: | D |
| No. of Samples: | 20 |
| No. of Reanalyses/Dilutions: | 2 |
| Reviewer: | D. Ilczyszyn |
| Date of Review: | 9/25/96 |

The samples listed in Table 1 were validated based on the guidelines outlined in the Ogden *Project Procedures Manual, Comprehensive Long-Term Environmental Action Navy (CLEAN) Program* data validation procedure for Levels C and D semivolatile organics (DVP-3, Rev. 2), and the *National Functional Guidelines For Organic Data Review* (2/94). Any deviations from these procedures and guidelines are documented herein. These procedures and guidelines are designed to meet the data quality objectives required by the Naval Energy and Environmental Support Activity for all analyses at the requested QC levels. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

**Table 1. Sample identification**

| Client ID | EPA ID | Lab ID | Matrix | COC Method |
|---|---|---|---|---|
| M01TS06S01 | MC111 | 5811-01 | soil | OLM01.8B |
| M01TS06S02 | MC112 | 5811-02 | soil | OLM01.8B |
| M01TS07S01 | MC113 | 5811-03 | soil | OLM01.8B |
| M01TS07S02 | MC114 | 5811-04 | soil | OLM01.8B |
| M01TS07S02 | MC114RE | 5811-04RE | soil | OLM01.8B |
| M01TS08S01 | MC115 | 5811-05 | soil | OLM01.8B |
| M01TS08S02 | MC116 | 5811-06 | soil | OLM01.8B |
| M01TS08D02 | MC117 | 5811-08 | soil | OLM01.8B |
| M01TS09S01 | MC118 | 5811-09 | soil | OLM01.8B |
| M01TS09S02 | MC119 | 5811-10 | soil | OLM01.8B |
| M01TS10S01 | MC120 | 5811-11 | soil | OLM01.8B |
| M01TS10S02 | MC121 | 5811-12 | soil | OLM01.8B |
| M01TS11S01 | MC122 | 5811-13 | soil | OLM01.8B |
| M01TS11S02 | MC123 | 5811-14 | soil | OLM01.8B |
| M01TS12S01 | MC124 | 5811-15 | soil | OLM01.8B |
| M01TS12S02 | MC125 | 5811-16 | soil | OLM01.8B |
| M01TS13S01 | MC126 | 5811-17 | soil | OLM01.8B |
| M01TS13D01 | MC127 | 5811-18 | soil | OLM01.8B |
| M01TS13S02 | MC128 | 5811-19 | soil | OLM01.8B |
| M01TS14S01 | MC129 | 5811-20 | soil | OLM01.8B |
| M01QW01F01 | MC155 | 5811-07 | water ~~soil~~ | OLM01.8B |
| M01QW01F01 | MC155RX | 5811-07RX | water ~~soil~~ | OLM01.8B |

# 2. DATA VALIDATION FINDINGS

## 2.1 SAMPLE MANAGEMENT

Following are findings associated with sample management:

### 2.1.1 Sample Preservation, Handling, and Transport

All of the samples in this SDG were within temperature limits specified in NEESA 20.2-047B upon arrival at the laboratory. No problems were noted during sample handling and transport. No qualifications were given to the data.

### 2.1.2 Chain of Custody

All COCs were legible but were incomplete. All COCs were signed by field personnel. The laboraoratory did not complete the COCs. No signature of the person receiving the samples was on the COC and the questions regarding sample condition upon receipt were not answered on the COC. No qualifications were given based upon sample receipt information.

### 2.1.3 Holding Times

All samples, with the exception of MC155RX were extracted and analyzed within required holding times. The sample was rejected so no qualifications were required.

## 2.2 GC/MS TUNING

All tunes met the criteria specified in the organic CLP SOW (3/90) and were therefore acceptable. No qualifications were required. No transcription errors were found.

## 2.3 CALIBRATION

According to the CLP Forms VI and VII N-Nitrosodiphenylamine was not detected in any of the calibrations. A further examination of the raw data by the reviewer revealed that this compound was detected in all calibrations. The reviewer calculated all RRFs, %Ds, and %RSDs for this compound. Samples MC111, MC112, MC114, MC117, MC118, MC119, MC120, MC121, MC122, MC123 were qualified "UJ" due to a high %D in the associated continuing calibration. It was assumed by the reviewer that the method was being updated with the daily calibration and that N-Nitrosodiphenylamine was actually searched for in the samples requiring no qualifications. Calculations of RRFs, %Ds, and %RSDs were checked for some analytes from the raw data and no calculation errors were found. The initial calibrations from 7/9/96 and 7/18/96 had acceptable %RSD values for all compounds. The continuing calibrations had high %D values for several compounds. The affected samples and the qualifications given are listed in the following table.

| Calibration Findings | Affected Samples | Qualifications Given |
|---|---|---|
| For the continuing calibration dated 7/11/96 the following compounds had high %D values: 4-chloroaniline and carbazole. | MC111, MC112<br>MC114, MC117<br>MC118, MC119<br>MC120, MC121<br>MC122, MC123 | Nondetects qualified "UJ." |
| For the continuing calibration dated 7/12/96 the following compounds had high %D values: 4-chloroaniline, 3-nitroaniline, and 3,3´-dichlorobenzidine. | MC124, MC125<br>MC126, MC127<br>MC128, MC129<br>MC113, MC115<br>MC116 | Nondetects qualified "UJ." |

## 2.4 BLANKS

There was a water and three soil method blanks analyzed with the samples in this SDG. SBLK01 and SBLK04 were free from target compound and TIC detects. SBLK02 had detects for four TICs resulting in samples MC128 and MC129 having the common aldol condensation TIC rejected. No other qualifications were required due to method blank contamination.

## 2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

A water and a soil blank spike was analyzed with acceptable results. Qualifications were not required.

## 2.6 SURROGATE RECOVERY

Sample MC155 had zero recoveries of nitrobenzene-d5 and 2-fluorobiphenyl and low recovery of terphenyl-d14. Qualifications were not required since this was a field QC sample. All remaining samples had surrogate spike recoveries within control limits. No qualifications were needed based on the surrogate recoveries.

## 2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

MS/MSD analysis was performed on samples MC117 and MC127. Sample MC117 had low pentachlorophenol recovery in the MS sample resulting in a high RPD value. Sample MC127 had low pentachlorophenol recovery in the MS sample and zero recovery in the MSD sample resulting in a high RPD value. Qualifications were not required since the associated blank spike had acceptable recoveries.

## 2.8 FIELD QC SAMPLES

Field QC samples were evaluated and, if necessary, qualified based on method blanks only (see Section 2.4). Remaining detects were then used to qualify the samples. The following are findings associated with field QC samples:

### 2.8.1 Field Blanks and Equipment Rinsates

Samples MC145 and MC146 (SDG: 5812M) were identified as the equipment rinsates associated with this SDG. Sample MC155 (SDG: 5846M) was identified as the field blank associated with the samples in this SDG. All field QC was free from target compound detects and TICs; therefore, no Qualifications were required.

### 2.8.2 Duplicates

Samples MC116/MC117 and MC126/MC127 were field duplicate pairs associated with this SDG. Samples MC116 and MC117 each had common detects with acceptable RPDs for fluoranthene and pyrene. Sample MC116 had one unknown hydrocarbon TIC detected while MC117 had two unknown hydrocarbons detected. Sample MC127 had a detect for indeno(1,2,3-cd)pyrene which was not detected in MC126. MC126 and MC127 had common detects with acceptable RPDs for phenanthrene, fluoranthene, pyrene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, and benzo(a)pyrene. qualifications were not required.

## 2.9 INTERNAL STANDARDS PERFORMANCE

The retention times of all the internal standards for the samples were within $\pm 30$ seconds of the retention times for the associated calibration standards. Sample MC114 had low perylene-d12 recovery. The sample was reanalyzed with the same results and rejected. The original analysis had di-n-octylphthalate through benzo(g,h,i)perylene qualified "UJ" for nondetects and "J" for detects. The area counts for the remaining samples were within +100% and -50% of the associated calibration standards. No other qualifications were required.

## 2.10 TARGET COMPOUND LIST IDENTIFICATION

The laboratory analyzed for the CLP SOW (3/90) semivolatile target compounds. Chromatograms, retention times, and spectra were all examined and no problems were noted.

## 2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

The reporting limits were consistent with the latest version of the organic CLP SOW (3/90). The reporting limits were evaluated using the low level standard of the initial calibration and were found to be acceptable. Compound quantification and percent moisture adjustments were verified from detects in the samples.

## 2.12 TENTATIVELY IDENTIFIED COMPOUNDS

Samples with aldol condensation product TICs had these compounds rejected. All remaining TICs not rejected due to blank contamination were verified and qualified as "NJ." All TICs were properly identified from library spectra and quantitated from the nearest internal standard.

## 2.13 SYSTEM PERFORMANCE

A review of the chromatograms, spectral fits, and calibrations showed no identifiable problems with system performance.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC111

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-01

Sample wt/vol: 30.2 (g/ml) G Lab File ID: D1101

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 7 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/11/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 360. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 360. | U | | |
| 95-57-8 | 2-Chlorophenol | 360. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 360. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 360. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 360. | U | | |
| 95-48-7 | 2-Methylphenol | 360. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 360. | U | | |
| 106-44-5 | 4-Methylphenol | 360. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 360. | U | | |
| 67-72-1 | Hexachloroethane | 360. | U | | |
| 98-95-3 | Nitrobenzene | 360. | U | | |
| 78-59-1 | Isophorone | 360. | U | | |
| 88-75-5 | 2-Nitrophenol | 360. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 360. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 360. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 360. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 360. | U | | |
| 91-20-3 | Naphthalene | 360. | U | U | |
| 106-47-8 | 4-Chloroaniline | 360. | U | UJ | C |
| 87-68-3 | Hexachlorobutadiene | 360. | U | U | |
| 59-50-7 | 4-Chloro-3-methylphenol | 360. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 360. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 360. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 360. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 890. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 360. | U | | |
| 88-74-4 | 2-Nitroaniline | 890. | U | | |
| 131-11-3 | Dimethylphthalate | 360. | U | | |
| 208-96-8 | Acenaphthylene | 360. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 360. | U | | |
| 99-09-2 | 3-Nitroaniline | 890. | U | | |
| 83-32-9 | Acenaphthene | 360. | U | U | |

FORM I SV-1

OGDEN VALIDATED

LEVEL D

30

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC111

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-01

Sample wt/vol: 30.2 (g/ml) G Lab File ID: D1101

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 7 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/11/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 890. | U | U | |
| 100-02-7 | 4-Nitrophenol | 890. | U | | |
| 132-64-9 | Dibenzofuran | 360. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 360. | U | | |
| 84-66-2 | Diethylphthalate | 360. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 360. | U | | |
| 86-73-7 | Fluorene | 360. | U | | |
| 100-01-6 | 4-Nitroaniline | 890. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 890. | U | U | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 360. | U | ~~R~~ UJ | *3 C |
| 101-55-3 | 4-Bromophenyl-phenylether | 360. | U | U | |
| 118-74-1 | Hexachlorobenzene | 360. | U | | |
| 87-86-5 | Pentachlorophenol | 890. | U | | |
| 85-01-8 | Phenanthrene | 360. | U | | |
| 120-12-7 | Anthracene | 360. | U | U | |
| 86-74-8 | Carbazole | 360. | U | UJ | c |
| 84-74-2 | Di-n-butylphthalate | 360. | U | U | |
| 206-44-0 | Fluoranthene | 370. | | | |
| 129-00-0 | Pyrene | 400. | | | |
| 85-68-7 | Butylbenzylphthalate | 360. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 360. | U | U | |
| 56-55-3 | Benzo(a)anthracene | 210. | J | UJ | |
| 218-01-9 | Chrysene | 310. | J | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 360. | U | U | |
| 117-84-0 | Di-n-octylphthalate | 360. | U | U | |
| 205-99-2 | Benzo(b)fluoranthene | 240. | J | UJ | |
| 207-08-9 | Benzo(k)fluoranthene | 220. | J | | |
| 50-32-8 | Benzo(a)pyrene | 290. | J | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 190. | J | | |
| 53-70-3 | Dibenz(a,h)anthracene | 360. | U | U | |
| 191-24-2 | Benzo(g,h,i)perylene | 250. | J | UJ | |

(1) - Cannot be separated from Diphenylamine

9/27/96

OGDEN VALIDATED

40



LEVEL D

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC111

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-01

Sample wt/vol: 30.2 (g/ml) G Lab File ID: D1101

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 7 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/11/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2

Number TICs Found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Unknown Hydrocarbon | 2.36 | 3000. | J | NJ | |
| 2. | | | | | | |
| 3. | | | | | | |
| 4. | | | | | | |
| 5. | | | | | | |
| 6. | | | | | | |
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| 29. | | | | | | |
| 30. | | | | | | |

OGDEN VALIDATED



LEVEL D

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC112

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-02

Sample wt/vol: 30.2 (g/ml) G Lab File ID: D1102

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 11 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/11/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 370. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 370. | U | | |
| 95-57-8 | 2-Chlorophenol | 370. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 370. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 370. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 370. | U | | |
| 95-48-7 | 2-Methylphenol | 370. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 370. | U | | |
| 106-44-5 | 4-Methylphenol | 370. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 370. | U | | |
| 67-72-1 | Hexachloroethane | 370. | U | | |
| 98-95-3 | Nitrobenzene | 370. | U | | |
| 78-59-1 | Isophorone | 370. | U | | |
| 88-75-5 | 2-Nitrophenol | 370. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 370. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 370. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 370. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 370. | U | | |
| 91-20-3 | Naphthalene | 370. | U | U | |
| 106-47-8 | 4-Chloroaniline | 370. | U | UJ | c |
| 87-68-3 | Hexachlorobutadiene | 370. | U | U | |
| 59-50-7 | 4-Chloro-3-methylphenol | 370. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 370. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 370. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 370. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 930. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 370. | U | | |
| 88-74-4 | 2-Nitroaniline | 930. | U | | |
| 131-11-3 | Dimethylphthalate | 370. | U | | |
| 208-96-8 | Acenaphthylene | 370. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 370. | U | | |
| 99-09-2 | 3-Nitroaniline | 930. | U | | |
| 83-32-9 | Acenaphthene | 370. | U | U | |

OGDEN VALIDATED



LEVEL D

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC112

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CDSD  Case No.: NA  SAS No.: NA  SDG No.: 5811M

Matrix: (soil/water) SOIL  Lab Sample ID: 5811-02

Sample wt/vol: 30.2 (g/ml) G  Lab File ID: D1102

Level: (low/med) LOW  Date Received: 7/01/96

% Moisture: 11 decanted: (Y/N) N  Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/11/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 8.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 930. | U | U | |
| 100-02-7 | 4-Nitrophenol | 930. | U | | |
| 132-64-9 | Dibenzofuran | 370. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 370. | U | | |
| 84-66-2 | Diethylphthalate | 370. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 370. | U | | |
| 86-73-7 | Fluorene | 370. | U | | |
| 100-01-6 | 4-Nitroaniline | 930. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 930. | U | U | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 370. | U | ~~R~~ UJ | ~~J~~ C |
| 101-55-3 | 4-Bromophenyl-phenylether | 370. | U | U | |
| 118-74-1 | Hexachlorobenzene | 370. | U | | |
| 87-86-5 | Pentachlorophenol | 930. | U | | |
| 85-01-8 | Phenanthrene | 370. | U | | |
| 120-12-7 | Anthracene | 370. | U | U | |
| 86-74-8 | Carbazole | 370. | U | UJ | c |
| 84-74-2 | Di-n-butylphthalate | 370. | U | U | |
| 206-44-0 | Fluoranthene | 370. | U | | |
| 129-00-0 | Pyrene | 370. | U | | |
| 85-68-7 | Butylbenzylphthalate | 370. | U | | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 370. | U | | |
| 56-55-3 | Benzo(a)anthracene | 370. | U | | |
| 218-01-9 | Chrysene | 370. | U | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 370. | U | | |
| 117-84-0 | Di-n-octylphthalate | 370. | U | | |
| 205-99-2 | Benzo(b)fluoranthene | 370. | U | | |
| 207-08-9 | Benzo(k)fluoranthene | 370. | U | | |
| 50-32-8 | Benzo(a)pyrene | 370. | U | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 370. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 370. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 370. | U | U | |

(1) - Cannot be separated from Diphenylamine

DQ 9/27/96

OGDEN VALIDATED



LEVEL D

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC112

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-02

Sample wt/vol: 30.2 (g/ml) G Lab File ID: D1102

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 11 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/11/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0

Number TICs Found: 16

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Aldol Condensation Product | 5.88 | 2000. | JB | R | *12 |
| 2. | Unknown Hydrocarbon | 8.25 | 300. | J | NJ | |
| 3. | Unknown Hydrocarbon | 11.50 | 400. | J | | |
| 4. | Unknown Hydrocarbon | 12.45 | 700. | J | | |
| 5. | Unknown Hydrocarbon | 12.84 | 600. | J | | |
| 6. | Unknown Hydrocarbon | 12.95 | 1000. | J | | |
| 7. | Unknown Phthalate | 13.24 | 300. | J | | |
| 8. | Unknown Hydrocarbon | 13.35 | 700. | J | | |
| 9. | Unknown Hydrocarbon | 13.48 | 600. | J | | |
| 10. | Unknown Hydrocarbon | 13.82 | 1000. | J | | |
| 11. | Unknown Hydrocarbon | 14.06 | 400. | J | | |
| 12. | Unknown Hydrocarbon | 14.20 | 900. | J | | |
| 13. | Unknown Polyaromatic Hydroca | 14.94 | 6000. | J | | |
| 14. | Unknown Hydrocarbon | 15.89 | 1000. | J | | |
| 15. | Unknown Hydrocarbon | 16.05 | 1000. | J | | |
| 16. | Unknown Hydrocarbon | 16.29 | 1000. | J | NJ | |
| 17. | | | | | | |
| 18. | | | | | | |
| 19. | | | | | | |
| 20. | | | | | | |
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| 29. | | | | | | |
| 30. | | | | | | |

OGDEN VALIDATED



LEVEL D

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC113

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-03

Sample wt/vol: 30.4 (g/ml) G Lab File ID: D1103

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 9 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 360. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 360. | U | | |
| 95-57-8 | 2-Chlorophenol | 360. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 360. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 360. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 360. | U | | |
| 95-48-7 | 2-Methylphenol | 360. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 360. | U | | |
| 106-44-5 | 4-Methylphenol | 360. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 360. | U | | |
| 67-72-1 | Hexachloroethane | 360. | U | | |
| 98-95-3 | Nitrobenzene | 360. | U | | |
| 78-59-1 | Isophorone | 360. | U | | |
| 88-75-5 | 2-Nitrophenol | 360. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 360. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 360. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 360. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 360. | U | | |
| 91-20-3 | Naphthalene | 360. | U | | |
| 106-47-8 | 4-Chloroaniline | 360. | U | UJ | C |
| 87-68-3 | Hexachlorobutadiene | 360. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 360. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 360. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 360. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 360. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 900. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 360. | U | | |
| 88-74-4 | 2-Nitroaniline | 900. | U | | |
| 131-11-3 | Dimethylphthalate | 360. | U | | |
| 208-96-8 | Acenaphthylene | 360. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 360. | U | | |
| 99-09-2 | 3-Nitroaniline | 900. | U | UJ | C |
| 83-32-9 | Acenaphthene | 360. | U | | |

OGDEN VALIDATED



LEVEL D

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC113

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CDSD  Case No.: NA  SAS No.: NA  SDG No.: 5811M

Matrix: (soil/water) SOIL  Lab Sample ID: 5811-03

Sample wt/vol: 30.4 (g/ml) G  Lab File ID: D1103

Level: (low/med) LOW  Date Received: 7/01/96

% Moisture: 9 decanted: (Y/N) N  Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 8.3

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 900. | U | U | |
| 100-02-7 | 4-Nitrophenol | 900. | U | | |
| 132-64-9 | Dibenzofuran | 360. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 360. | U | | |
| 84-66-2 | Diethylphthalate | 360. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 360. | U | | |
| 86-73-7 | Fluorene | 360. | U | | |
| 100-01-6 | 4-Nitroaniline | 900. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 900. | U | U | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 360. | U | R UJ | ~~3~~ C |
| 101-55-3 | 4-Bromophenyl-phenylether | 360. | U | U | |
| 118-74-1 | Hexachlorobenzene | 360. | U | U | |
| 87-86-5 | Pentachlorophenol | 900. | U | U | |
| 85-01-8 | Phenanthrene | 220. | J | J | |
| 120-12-7 | Anthracene | 360. | U | U | |
| 86-74-8 | Carbazole | 360. | U | U | |
| 84-74-2 | Di-n-butylphthalate | 360. | U | U | |
| 206-44-0 | Fluoranthene | 560. | | | |
| 129-00-0 | Pyrene | 640. | | | |
| 85-68-7 | Butylbenzylphthalate | 360. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 360. | U | UJ | C |
| 56-55-3 | Benzo(a)anthracene | 330. | J | J | |
| 218-01-9 | Chrysene | 400. | | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 360. | U | U | |
| 117-84-0 | Di-n-octylphthalate | 360. | U | U | |
| 205-99-2 | Benzo(b)fluoranthene | 190. | J | J | |
| 207-08-9 | Benzo(k)fluoranthene | 660. | | | |
| 50-32-8 | Benzo(a)pyrene | 500. | | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 140. | J | J | |
| 53-70-3 | Dibenz(a,h)anthracene | 360. | U | U | |
| 191-24-2 | Benzo(g,h,i)perylene | 160. | J | J | |

(1) - Cannot be separated from Diphenylamine

DR 9/27/96

OGDEN VALIDATED



LEVEL D

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC113

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-03

Sample wt/vol: 30.4 (g/ml) G Lab File ID: D1103

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 9 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

Number TICs Found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|---|
| 1. | | Aldol Condensation Product | 5.89 | 2000. | JB | R | *12 |
| 2. | | Unknown Hydrocarbon | 8.27 | 300. | J | NJ | |
| 3. | | Unknown Hydrocarbon | 25.40 | 400. | J | NJ | |
| 4. | | | | | | | |
| 5. | | | | | | | |
| 6. | | | | | | | |
| 7. | | | | | | | |
| 8. | | | | | | | |
| 9. | | | | | | | |
| 10. | | | | | | | |
| 11. | | | | | | | |
| 12. | | | | | | | |
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| 27. | | | | | | | |
| 28. | | | | | | | |
| 29. | | | | | | | |
| 30. | | | | | | | |

OGDEN VALIDATED



LEVEL D

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC114

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-04

Sample wt/vol: 30.2 (g/ml) G Lab File ID: D1104

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 9 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/11/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 360. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 360. | U | | |
| 95-57-8 | 2-Chlorophenol | 360. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 360. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 360. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 360. | U | | |
| 95-48-7 | 2-Methylphenol | 360. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 360. | U | | |
| 106-44-5 | 4-Methylphenol | 360. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 360. | U | | |
| 67-72-1 | Hexachloroethane | 360. | U | | |
| 98-95-3 | Nitrobenzene | 360. | U | | |
| 78-59-1 | Isophorone | 360. | U | | |
| 88-75-5 | 2-Nitrophenol | 360. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 360. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 360. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 360. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 360. | U | U | |
| 91-20-3 | Naphthalene | 790. | | | |
| 106-47-8 | 4-Chloroaniline | 360. | U | UJ | C |
| 87-68-3 | Hexachlorobutadiene | 360. | U | U | |
| 59-50-7 | 4-Chloro-3-methylphenol | 160. | J | J | |
| 91-57-6 | 2-Methylnaphthalene | 900. | | | |
| 77-47-4 | Hexachlorocyclopentadiene | 360. | U | U | |
| 88-06-2 | 2,4,6-Trichlorophenol | 360. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 910. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 360. | U | | |
| 88-74-4 | 2-Nitroaniline | 910. | U | | |
| 131-11-3 | Dimethylphthalate | 360. | U | U | |
| 208-96-8 | Acenaphthylene | 350. | J | J | |
| 606-20-2 | 2,6-Dinitrotoluene | 360. | U | U | |
| 99-09-2 | 3-Nitroaniline | 910. | U | U | |
| 83-32-9 | Acenaphthene | 200. | J | J | |

OGDEN VALIDATED



LEVEL D

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC114

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CDSD  Case No.: NA  SAS No.: NA  SDG No.: 5811M

Matrix: (soil/water) SOIL  Lab Sample ID: 5811-04

Sample wt/vol: 30.2 (g/ml) G  Lab File ID: D1104

Level: (low/med) LOW  Date Received: 7/01/96

% Moisture: 9 decanted: (Y/N) N  Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/11/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 8.3

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 910. | U | U | |
| 100-02-7 | 4-Nitrophenol | 910. | U | | |
| 132-64-9 | Dibenzofuran | 360. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 360. | U | | |
| 84-66-2 | Diethylphthalate | 360. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 360. | U | U | |
| 86-73-7 | Fluorene | 620. | | | |
| 100-01-6 | 4-Nitroaniline | 910. | U | U | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 910. | U | U | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 360. | U | R UJ | ~~J~~ C |
| 101-55-3 | 4-Bromophenyl-phenylether | 360. | U | U | |
| 118-74-1 | Hexachlorobenzene | 360. | U | U | |
| 87-86-5 | Pentachlorophenol | 910. | U | U | |
| 85-01-8 | Phenanthrene | 890. | | | |
| 120-12-7 | Anthracene | 220. | J | J | |
| 86-74-8 | Carbazole | 360. | U | UJ | C |
| 84-74-2 | Di-n-butylphthalate | 360. | U | U | |
| 206-44-0 | Fluoranthene | 810. | | | |
| 129-00-0 | Pyrene | 1800. | | | |
| 85-68-7 | Butylbenzylphthalate | 360. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 360. | U | U | |
| 56-55-3 | Benzo(a)anthracene | 230. | J | J | |
| 218-01-9 | Chrysene | 430. | | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 310. | J | J | |
| 117-84-0 | Di-n-octylphthalate | 360. | U | UJ | I |
| 205-99-2 | Benzo(b)fluoranthene | 210. | J | J | |
| 207-08-9 | Benzo(k)fluoranthene | 230. | J | J | |
| 50-32-8 | Benzo(a)pyrene | 420. | | J | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 150. | J | J | |
| 53-70-3 | Dibenz(a,h)anthracene | 360. | U | UJ | |
| 191-24-2 | Benzo(g,h,i)perylene | 150. | J | J | I |

(1) - Cannot be separated from Diphenylamine

9/26/96

OGDEN VALIDATED



LEVEL D

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC114

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-04

Sample wt/vol: 30.2 (g/ml) G Lab File ID: D1104

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 9 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/11/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

Number TICs Found: 17

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rpv Qual | Qual Code |
|---|---|---|---|---|---|---|---|
| 1. | | Unknown Hydrocarbon | 8.59 | 5000. | J | NJ | |
| 2. | | Unknown Hydrocarbon | 9.34 | 7000. | J | | |
| 3. | | Unknown Hydrocarbon | 9.75 | 7000. | J | | |
| 4. | | Unknown Hydrocarbon | 9.98 | 5000. | J | | |
| 5. | | Unknown Hydrocarbon | 10.12 | 4000. | J | | |
| 6. | | Unknown Hydrocarbon | 11.04 | 4000. | J | | |
| 7. | | Unknown Hydrocarbon | 12.52 | 2000. | J | | |
| 8. | | Unknown Hydrocarbon | 12.72 | 5000. | J | | |
| 9. | | Unknown Hydrocarbon | 12.93 | 2000. | J | | |
| 10. | | Unknown Hydrocarbon | 13.12 | 2000. | J | | |
| 11. | | Unknown Hydrocarbon | 13.24 | 2000. | J | | |
| 12. | | Unknown Hydrocarbon | 13.51 | 7000. | J | | |
| 13. | | Unknown Hydrocarbon | 14.46 | 50000. | J | | |
| 14. | | Unknown Hydrocarbon | 15.81 | 7000. | J | | |
| 15. | | Unknown Hydrocarbon | 17.82 | 2000. | J | | |
| 16. | | Unknown Hydrocarbon | 18.40 | 2000. | J | | |
| 17. | | Unknown Hydrocarbon | 23.10 | 2000. | J | NJ | |
| 18. | | | | | | | |
| 19. | | | | | | | |
| 20. | | | | | | | |
| 21. | | | | | | | |
| 22. | | | | | | | |
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| 30. | | | | | | | |

OGDEN VALIDATED



LEVEL D

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC114RE

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-04RE

Sample wt/vol: 30.2 (g/ml) G Lab File ID: RE104

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 9 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 360. | U | R | D |
| 111-44-4 | bis(2-Chloroethyl)ether | 360. | U | | |
| 95-57-8 | 2-Chlorophenol | 360. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 360. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 360. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 360. | U | | |
| 95-48-7 | 2-Methylphenol | 360. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 360. | U | | |
| 106-44-5 | 4-Methylphenol | 360. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 360. | U | | |
| 67-72-1 | Hexachloroethane | 360. | U | | |
| 98-95-3 | Nitrobenzene | 360. | U | | |
| 78-59-1 | Isophorone | 360. | U | | |
| 88-75-5 | 2-Nitrophenol | 360. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 360. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 360. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 360. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 360. | U | | |
| 91-20-3 | Naphthalene | 850. | | | |
| 106-47-8 | 4-Chloroaniline | 360. | U | | |
| 87-68-3 | Hexachlorobutadiene | 360. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 360. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 940. | | | |
| 77-47-4 | Hexachlorocyclopentadiene | 360. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 360. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 910. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 360. | U | | |
| 88-74-4 | 2-Nitroaniline | 910. | U | | |
| 131-11-3 | Dimethylphthalate | 360. | U | | |
| 208-96-8 | Acenaphthylene | 350. | J | | |
| 606-20-2 | 2,6-Dinitrotoluene | 360. | U | | |
| 99-09-2 | 3-Nitroaniline | 910. | U | | |
| 83-32-9 | Acenaphthene | 360. | U | R | D |

OGDEN VALIDATED

FORM I SV-1 3/90

LEVEL D

51

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC114RE

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-04RE

Sample wt/vol: 30.2 (g/ml) G Lab File ID: RE104

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 9 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 910. | U | R | D |
| 100-02-7 | 4-Nitrophenol | 910. | U | | |
| 132-64-9 | Dibenzofuran | 360. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 360. | U | | |
| 84-66-2 | Diethylphthalate | 360. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 360. | U | | |
| 86-73-7 | Fluorene | 600. | | | |
| 100-01-6 | 4-Nitroaniline | 910. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 910. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 360. | U | | |
| 101-55-3 | 4-Bromophenyl-phenylether | 360. | U | | |
| 118-74-1 | Hexachlorobenzene | 360. | U | | |
| 87-86-5 | Pentachlorophenol | 910. | U | | |
| 85-01-8 | Phenanthrene | 980. | | | |
| 120-12-7 | Anthracene | 240. | J | | |
| 86-74-8 | Carbazole | 360. | U | | |
| 84-74-2 | Di-n-butylphthalate | 360. | U | | |
| 206-44-0 | Fluoranthene | 1000. | | | |
| 129-00-0 | Pyrene | 2400. | | | |
| 85-68-7 | Butylbenzylphthalate | 360. | U | | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 360. | U | | |
| 56-55-3 | Benzo(a)anthracene | 370. | | | |
| 218-01-9 | Chrysene | 440. | | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 310. | J | | |
| 117-84-0 | Di-n-octylphthalate | 360. | U | | |
| 205-99-2 | Benzo(b)fluoranthene | 360. | U | | |
| 207-08-9 | Benzo(k)fluoranthene | 360. | U | | |
| 50-32-8 | Benzo(a)pyrene | 260. | J | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 130. | J | | |
| 53-70-3 | Dibenz(a,h)anthracene | 360. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 360. | U | R | D |

(1) - Cannot be separated from Diphenylamine

OGDEN VALIDATED



LEVEL D

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC114RE

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-04RE

Sample wt/vol: 30.2 (g/ml) G Lab File ID: RE104

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 9 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

Number TICs Found: 17

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Unknown Hydrocarbon | 8.60 | 6000. | J | R | D |
| 2. | Unknown Hydrocarbon | 9.35 | 7000. | J | | |
| 3. | Unknown Hydrocarbon | 9.76 | 7000. | J | | |
| 4. | Unknown Hydrocarbon | 9.99 | 5000. | J | | |
| 5. | Unknown Hydrocarbon | 10.32 | 4000. | J | | |
| 6. | Unknown Hydrocarbon | 10.47 | 4000. | J | | |
| 7. | Unknown Hydrocarbon | 11.05 | 4000. | J | | |
| 8. | Unknown Polyaromatic Hydroca | 11.55 | 2000. | J | | |
| 9. | Unknown Hydrocarbon | 12.73 | 5000. | J | | |
| 10. | Unknown Hydrocarbon | 12.94 | 2000. | J | | |
| 11. | Unknown Hydrocarbon | 13.12 | 2000. | J | | |
| 12. | Unknown Hydrocarbon | 13.24 | 2000. | J | | |
| 13. | Unknown Hydrocarbon | 13.53 | 7000. | J | | |
| 14. | Unknown Hydrocarbon | 14.47 | 3000. | J | | |
| 15. | Unknown Hydrocarbon | 17.83 | 2000. | J | | |
| 16. | Unknown Hydrocarbon | 18.41 | 2000. | J | | |
| 17. | Unknown Hydrocarbon | 23.12 | 2000. | J | R | D |
| 18. | | | | | | |
| 19. | | | | | | |
| 20. | | | | | | |
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| 30. | | | | | | |

OGDEN VALIDATED



LEVEL D

53

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC115

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-05

Sample wt/vol: 30.1 (g/ml) G Lab File ID: D1105

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 12 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 380. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 380. | U | | |
| 95-57-8 | 2-Chlorophenol | 380. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 380. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 380. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 380. | U | | |
| 95-48-7 | 2-Methylphenol | 380. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 380. | U | | |
| 106-44-5 | 4-Methylphenol | 380. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 380. | U | | |
| 67-72-1 | Hexachloroethane | 380. | U | | |
| 98-95-3 | Nitrobenzene | 380. | U | | |
| 78-59-1 | Isophorone | 380. | U | | |
| 88-75-5 | 2-Nitrophenol | 380. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 380. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 380. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 380. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 380. | U | | |
| 91-20-3 | Naphthalene | 380. | U | | |
| 106-47-8 | 4-Chloroaniline | 380. | U | UJ | c |
| 87-68-3 | Hexachlorobutadiene | 380. | U | U | |
| 59-50-7 | 4-Chloro-3-methylphenol | 380. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 380. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 380. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 380. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 940. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 380. | U | | |
| 88-74-4 | 2-Nitroaniline | 940. | U | | |
| 131-11-3 | Dimethylphthalate | 380. | U | | |
| 208-96-8 | Acenaphthylene | 380. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 380. | U | U | |
| 99-09-2 | 3-Nitroaniline | 940. | U | UJ | c |
| 83-32-9 | Acenaphthene | 380. | U | U | |

OGDEN VALIDATED



LEVEL D

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC115

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-05

Sample wt/vol: 30.1 (g/ml) G Lab File ID: D1105

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 12 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 940. | U | U | |
| 100-02-7 | 4-Nitrophenol | 940. | U | | |
| 132-64-9 | Dibenzofuran | 380. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 380. | U | | |
| 84-66-2 | Diethylphthalate | 380. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 380. | U | | |
| 86-73-7 | Fluorene | 380. | U | | |
| 100-01-6 | 4-Nitroaniline | 940. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 940. | U | U | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 380. | U | ~~R~~ UJ | ~~J~~ 4 |
| 101-55-3 | 4-Bromophenyl-phenylether | 380. | U | U | |
| 118-74-1 | Hexachlorobenzene | 380. | U | U | |
| 87-86-5 | Pentachlorophenol | 940. | U | U | |
| 85-01-8 | Phenanthrene | 280. | J | J | |
| 120-12-7 | Anthracene | 380. | U | U | |
| 86-74-8 | Carbazole | 380. | U | U | |
| 84-74-2 | Di-n-butylphthalate | 380. | U | U | |
| 206-44-0 | Fluoranthene | 610. | | | |
| 129-00-0 | Pyrene | 560. | | | |
| 85-68-7 | Butylbenzylphthalate | 380. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 380. | U | UJ | c |
| 56-55-3 | Benzo(a)anthracene | 280. | J | J | |
| 218-01-9 | Chrysene | 380. | | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 220. | J | J | |
| 117-84-0 | Di-n-octylphthalate | 380. | U | U | |
| 205-99-2 | Benzo(b)fluoranthene | 210. | J | J | |
| 207-08-9 | Benzo(k)fluoranthene | 490. | | | |
| 50-32-8 | Benzo(a)pyrene | 270. | J | J | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 94. | J | J | |
| 53-70-3 | Dibenz(a,h)anthracene | 380. | U | U | |
| 191-24-2 | Benzo(g,h,i)perylene | 380. | U | U | |

(1) - Cannot be separated from Diphenylamine

DQ 9/27/96

OGDEN VALIDATED

FORM I SV-2 3/90

55

LEVEL D

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC115

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-05

Sample wt/vol: 30.1 (g/ml) G Lab File ID: D1105

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 12 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

Number TICs Found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Aldol Condensation Product | 5.89 | 1000. | JB | R | *12 |
| 2. | Unknown Hydrocarbon | 8.27 | 1000. | J | NJ | |
| 3. | Unknown Polychlorinated Biph | 23.27 | 900. | J | | |
| 4. | Unknown Polychlorinated Biph | 23.47 | 3000. | J | | |
| 5. | Unknown Polychlorinated Biph | 23.88 | 4000. | J | | |
| 6. | Unknown Polychlorinated Biph | 23.94 | 900. | J | | |
| 7. | Unknown Polychlorinated Biph | 24.09 | 1000. | J | | |
| 8. | Unknown Hydrocarbon | 24.25 | 600. | J | | |
| 9. | Unknown Polychlorinated Biph | 24.34 | 4000. | J | | |
| 10. | Unknown Polychlorinated Biph | 24.47 | 600. | J | | |
| 11. | Unknown Polychlorinated Biph | 24.60 | 3000. | J | | |
| 12. | Unknown Polychlorinated Biph | 24.69 | 2000. | J | | |
| 13. | Unknown Polychlorinated Biph | 24.87 | 500. | J | | |
| 14. | Unknown Polychlorinated Biph | 25.09 | 2000. | J | | |
| 15. | Unknown Polychlorinated Biph | 25.92 | 3000. | J | | |
| 16. | Unknown Polychlorinated Biph | 26.04 | 2000. | J | | |
| 17. | Unknown Polychlorinated Biph | 26.14 | 2000. | J | | |
| 18. | Unknown Polychlorinated Biph | 26.66 | 800. | J | | |
| 19. | Unknown Polychlorinated Biph | 26.99 | 3000. | J | | |
| 20. | Unknown Hydrocarbon | 33.69 | 3000. | J | NJ | |
| 21. | | | | | | |
| 22. | | | | | | |
| 23. | | | | | | |
| 24. | | | | | | |
| 25. | | | | | | |
| 26. | | | | | | |
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| 29. | | | | | | |
| 30. | | | | | | |

OGDEN VALIDATED



LEVEL D

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC116

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-06

Sample wt/vol: 30.0 (g/ml) G Lab File ID: D1106

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 10 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 370. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 370. | U | | |
| 95-57-8 | 2-Chlorophenol | 370. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 370. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 370. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 370. | U | | |
| 95-48-7 | 2-Methylphenol | 370. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 370. | U | | |
| 106-44-5 | 4-Methylphenol | 370. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 370. | U | | |
| 67-72-1 | Hexachloroethane | 370. | U | | |
| 98-95-3 | Nitrobenzene | 370. | U | | |
| 78-59-1 | Isophorone | 370. | U | | |
| 88-75-5 | 2-Nitrophenol | 370. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 370. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 370. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 370. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 370. | U | | |
| 91-20-3 | Naphthalene | 370. | U | UJ | |
| 106-47-8 | 4-Chloroaniline | 370. | U | UJ | C |
| 87-68-3 | Hexachlorobutadiene | 370. | U | UJ | |
| 59-50-7 | 4-Chloro-3-methylphenol | 370. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 370. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 370. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 370. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 920. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 370. | U | | |
| 88-74-4 | 2-Nitroaniline | 920. | U | | |
| 131-11-3 | Dimethylphthalate | 370. | U | | |
| 208-96-8 | Acenaphthylene | 370. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 370. | U | UJ | |
| 99-09-2 | 3-Nitroaniline | 920. | U | UJ | C |
| 83-32-9 | Acenaphthene | 370. | U | UJ | |

OGDEN VALIDATED



LEVEL D

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC116

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-06

Sample wt/vol: 30.0 (g/ml) G Lab File ID: D1106

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 10 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 920. | U | U | |
| 100-02-7 | 4-Nitrophenol | 920. | U | | |
| 132-64-9 | Dibenzofuran | 370. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 370. | U | | |
| 84-66-2 | Diethylphthalate | 370. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 370. | U | | |
| 86-73-7 | Fluorene | 370. | U | | |
| 100-01-6 | 4-Nitroaniline | 920. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 920. | U | U | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 370. | U | R UJ ~~J~~ | |
| 101-55-3 | 4-Bromophenyl-phenylether | 370. | U | U | |
| 118-74-1 | Hexachlorobenzene | 370. | U | | |
| 87-86-5 | Pentachlorophenol | 920. | U | | |
| 85-01-8 | Phenanthrene | 370. | U | | |
| 120-12-7 | Anthracene | 370. | U | | |
| 86-74-8 | Carbazole | 370. | U | | |
| 84-74-2 | Di-n-butylphthalate | 370. | U | U | |
| 206-44-0 | Fluoranthene | 180. | J | UJ | |
| 129-00-0 | Pyrene | 170. | J | | |
| 85-68-7 | Butylbenzylphthalate | 370. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 370. | U | UJ | C |
| 56-55-3 | Benzo(a)anthracene | 370. | U | U | |
| 218-01-9 | Chrysene | 370. | U | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 370. | U | | |
| 117-84-0 | Di-n-octylphthalate | 370. | U | | |
| 205-99-2 | Benzo(b)fluoranthene | 370. | U | | |
| 207-08-9 | Benzo(k)fluoranthene | 370. | U | | |
| 50-32-8 | Benzo(a)pyrene | 370. | U | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 370. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 370. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 370. | U | U | |

(1) - Cannot be separated from Diphenylamine

DQ 9/27/96

OGDEN VALIDATED

LEVEL D

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC116

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-06

Sample wt/vol: 30.0 (g/ml) G Lab File ID: D1106

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 10 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

Number TICs Found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Aldol Condensation Product | 5.88 | 400. | JB | R | X12 |
| 2. | Unknown Hydrocarbon | 8.26 | 400. | J | NJ | |
| 3. | | | | | | |
| 4. | | | | | | |
| 5. | | | | | | |
| 6. | | | | | | |
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| 29. | | | | | | |
| 30. | | | | | | |

OGDEN VALIDATED



LEVEL D

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC117

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-08

Sample wt/vol: 30.1 (g/ml) G Lab File ID: D1108

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 10 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/11/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 370. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 370. | U | | |
| 95-57-8 | 2-Chlorophenol | 370. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 370. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 370. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 370. | U | | |
| 95-48-7 | 2-Methylphenol | 370. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 370. | U | | |
| 106-44-5 | 4-Methylphenol | 370. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 370. | U | | |
| 67-72-1 | Hexachloroethane | 370. | U | | |
| 98-95-3 | Nitrobenzene | 370. | U | | |
| 78-59-1 | Isophorone | 370. | U | | |
| 88-75-5 | 2-Nitrophenol | 370. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 370. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 370. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 370. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 370. | U | | |
| 91-20-3 | Naphthalene | 370. | U | | |
| 106-47-8 | 4-Chloroaniline | 370. | U | U | C |
| 87-68-3 | Hexachlorobutadiene | 370. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 370. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 370. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 370. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 370. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 920. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 370. | U | | |
| 88-74-4 | 2-Nitroaniline | 920. | U | | |
| 131-11-3 | Dimethylphthalate | 370. | U | | |
| 208-96-8 | Acenaphthylene | 370. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 370. | U | | |
| 99-09-2 | 3-Nitroaniline | 920. | U | | |
| 83-32-9 | Acenaphthene | 370. | U | | |

OGDEN VALIDATED

LEVEL D

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC117

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-08

Sample wt/vol: 30.1 (g/ml) G Lab File ID: D1108

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 10 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/11/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 920. | U | U | |
| 100-02-7 | 4-Nitrophenol | 920. | U | | |
| 132-64-9 | Dibenzofuran | 370. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 370. | U | | |
| 84-66-2 | Diethylphthalate | 370. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 370. | U | | |
| 86-73-7 | Fluorene | 370. | U | | |
| 100-01-6 | 4-Nitroaniline | 920. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 920. | U | U | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 370. | U | RU5 | *3 C |
| 101-55-3 | 4-Bromophenyl-phenylether | 370. | U | U | |
| 118-74-1 | Hexachlorobenzene | 370. | U | | |
| 87-86-5 | Pentachlorophenol | 920. | U | | |
| 85-01-8 | Phenanthrene | 370. | U | | |
| 120-12-7 | Anthracene | 370. | U | U | |
| 86-74-8 | Carbazole | 370. | U | UJ | C |
| 84-74-2 | Di-n-butylphthalate | 370. | U | U | |
| 206-44-0 | Fluoranthene | 140. | J | UJ | |
| 129-00-0 | Pyrene | 160. | J | | |
| 85-68-7 | Butylbenzylphthalate | 370. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 370. | U | | |
| 56-55-3 | Benzo(a)anthracene | 370. | U | | |
| 218-01-9 | Chrysene | 370. | U | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 370. | U | | |
| 117-84-0 | Di-n-octylphthalate | 370. | U | | |
| 205-99-2 | Benzo(b)fluoranthene | 370. | U | | |
| 207-08-9 | Benzo(k)fluoranthene | 370. | U | | |
| 50-32-8 | Benzo(a)pyrene | 370. | U | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 370. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 370. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 370. | U | U | |

(1) - Cannot be separated from Diphenylamine

9/27/96

OGDEN VALIDATED



LEVEL B

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC117

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-08

Sample wt/vol: 30.1 (g/ml) G Lab File ID: D1108

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 10 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/11/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0

Number TICs Found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|---|
| 1. | | Aldol Condensation Product | 5.87 | 4000. | JB | R | X12 |
| 2. | | Unknown Hydrocarbon | 10.13 | 6000. | J | NJ | |
| 3. | | Unknown Hydrocarbon | 25.28 | 4000. | J | NJ | |
| 4. | | | | | | | |
| 5. | | | | | | | |
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| 30. | | | | | | | |

OGDEN VALIDATED



LEVEL D

63

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC118

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-09

Sample wt/vol: 30.4 (g/ml) G Lab File ID: D1109

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 10 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/11/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 360. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 360. | U | | |
| 95-57-8 | 2-Chlorophenol | 360. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 360. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 360. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 360. | U | | |
| 95-48-7 | 2-Methylphenol | 360. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 360. | U | | |
| 106-44-5 | 4-Methylphenol | 360. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 360. | U | | |
| 67-72-1 | Hexachloroethane | 360. | U | | |
| 98-95-3 | Nitrobenzene | 360. | U | | |
| 78-59-1 | Isophorone | 360. | U | | |
| 88-75-5 | 2-Nitrophenol | 360. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 360. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 360. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 360. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 360. | U | | |
| 91-20-3 | Naphthalene | 360. | U | U | |
| 106-47-8 | 4-Chloroaniline | 360. | U | UJ | K |
| 87-68-3 | Hexachlorobutadiene | 360. | U | U | |
| 59-50-7 | 4-Chloro-3-methylphenol | 360. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 360. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 360. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 360. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 910. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 360. | U | | |
| 88-74-4 | 2-Nitroaniline | 910. | U | | |
| 131-11-3 | Dimethylphthalate | 360. | U | | |
| 208-96-8 | Acenaphthylene | 360. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 360. | U | | |
| 99-09-2 | 3-Nitroaniline | 910. | U | | |
| 83-32-9 | Acenaphthene | 360. | U | U | |



OGDEN VALIDATED LEVEL 3

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC118

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-09

Sample wt/vol: 30.4 (g/ml) G Lab File ID: D1109

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 10 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/11/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 910. | U | U | |
| 100-02-7 | 4-Nitrophenol | 910. | U | | |
| 132-64-9 | Dibenzofuran | 360. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 360. | U | | |
| 84-66-2 | Diethylphthalate | 360. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 360. | U | | |
| 86-73-7 | Fluorene | 360. | U | | |
| 100-01-6 | 4-Nitroaniline | 910. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 910. | U | U | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 360. | U | R UJ | ~~J~~ C |
| 101-55-3 | 4-Bromophenyl-phenylether | 360. | U | U | |
| 118-74-1 | Hexachlorobenzene | 360. | U | U | |
| 87-86-5 | Pentachlorophenol | 910. | U | U | |
| 85-01-8 | Phenanthrene | 920. | | | |
| 120-12-7 | Anthracene | 280. | J | J | |
| 86-74-8 | Carbazole | 360. | U | UJ | C |
| 84-74-2 | Di-n-butylphthalate | 360. | U | U | |
| 206-44-0 | Fluoranthene | 2000. | | | |
| 129-00-0 | Pyrene | 2300. | | | |
| 85-68-7 | Butylbenzylphthalate | 360. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 360. | U | U | |
| 56-55-3 | Benzo(a)anthracene | 1300. | | | |
| 218-01-9 | Chrysene | 1500. | | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 360. | U | U | |
| 117-84-0 | Di-n-octylphthalate | 360. | U | U | |
| 205-99-2 | Benzo(b)fluoranthene | 700. | | | |
| 207-08-9 | Benzo(k)fluoranthene | 720. | | | |
| 50-32-8 | Benzo(a)pyrene | 980. | | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 300. | J | J | |
| 53-70-3 | Dibenz(a,h)anthracene | 160. | J | J | |
| 191-24-2 | Benzo(g,h,i)perylene | 280. | J | J | |

(1) - Cannot be separated from Diphenylamine

DR 9/27/96

OGDEN VALIDATED



LEVEL 0

03

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC118

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-09

Sample wt/vol: 30.4 (g/ml) G Lab File ID: D1109

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 10 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/11/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2

Number TICs Found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Aldol Condensation Product | 5.88 | 2000. | JB | R | *12 |
| 2. | Unknown Hydrocarbon | 10.13 | 400. | J | NJ | |
| 3. | Unknown Polyaromatic Hydroca | 20.55 | 300. | J | ↓ | |
| 4. | Unknown Polyaromatic Hydroca | 20.74 | 400. | J | ↓ | |
| 5. | Unknown Polyaromatic Hydroca | 23.26 | 400. | J | ↓ | |
| 6. | Unknown Hydrocarbon | 25.38 | 900. | J | ↓ | |
| 7. | Unknown Hydrocarbon | 26.77 | 1000. | J | NJ | |
| 8. | | | | | | |
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OGDEN VALIDATED



LEVEL D

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC119

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-10

Sample wt/vol: 30.1 (g/ml) G Lab File ID: D1110

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 9 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/11/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 360. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 360. | U | | |
| 95-57-8 | 2-Chlorophenol | 360. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 360. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 360. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 360. | U | | |
| 95-48-7 | 2-Methylphenol | 360. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 360. | U | | |
| 106-44-5 | 4-Methylphenol | 360. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 360. | U | | |
| 67-72-1 | Hexachloroethane | 360. | U | | |
| 98-95-3 | Nitrobenzene | 360. | U | | |
| 78-59-1 | Isophorone | 360. | U | | |
| 88-75-5 | 2-Nitrophenol | 360. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 360. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 360. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 360. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 360. | U | | |
| 91-20-3 | Naphthalene | 360. | U | U | |
| 106-47-8 | 4-Chloroaniline | 360. | U | UJ | C |
| 87-68-3 | Hexachlorobutadiene | 360. | U | U | |
| 59-50-7 | 4-Chloro-3-methylphenol | 360. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 360. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 360. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 360. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 910. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 360. | U | | |
| 88-74-4 | 2-Nitroaniline | 910. | U | | |
| 131-11-3 | Dimethylphthalate | 360. | U | | |
| 208-96-8 | Acenaphthylene | 360. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 360. | U | | |
| 99-09-2 | 3-Nitroaniline | 910. | U | | |
| 83-32-9 | Acenaphthene | 360. | U | U | |

OGDEN VALIDATED

70



LEVEL

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC119

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-10

Sample wt/vol: 30.1 (g/ml) G Lab File ID: D1110

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 9 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/11/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 910. | U | U | |
| 100-02-7 | 4-Nitrophenol | 910. | U | | |
| 132-64-9 | Dibenzofuran | 360. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 360. | U | | |
| 84-66-2 | Diethylphthalate | 360. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 360. | U | | |
| 86-73-7 | Fluorene | 360. | U | | |
| 100-01-6 | 4-Nitroaniline | 910. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 910. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 360. | U | R UJ | C |
| 101-55-3 | 4-Bromophenyl-phenylether | 360. | U | | |
| 118-74-1 | Hexachlorobenzene | 360. | U | | |
| 87-86-5 | Pentachlorophenol | 910. | U | | |
| 85-01-8 | Phenanthrene | 360. | U | | |
| 120-12-7 | Anthracene | 360. | U | | |
| 86-74-8 | Carbazole | 360. | U | UJ | C |
| 84-74-2 | Di-n-butylphthalate | 360. | U | | |
| 206-44-0 | Fluoranthene | 360. | U | | |
| 129-00-0 | Pyrene | 360. | U | | |
| 85-68-7 | Butylbenzylphthalate | 360. | U | | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 360. | U | | |
| 56-55-3 | Benzo(a)anthracene | 360. | U | | |
| 218-01-9 | Chrysene | 360. | U | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 360. | U | | |
| 117-84-0 | Di-n-octylphthalate | 360. | U | | |
| 205-99-2 | Benzo(b)fluoranthene | 360. | U | | |
| 207-08-9 | Benzo(k)fluoranthene | 180. | J | J | |
| 50-32-8 | Benzo(a)pyrene | 360. | U | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 360. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 360. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 360. | U | | |

(1) - Cannot be separated from Diphenylamine

OGDEN VALIDATED



LEVEL D

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC119

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-10

Sample wt/vol: 30.1 (g/ml) G Lab File ID: D1110

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 9 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/11/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9

Number TICs Found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|---|
| 1. | | Aldol Condensation Product | 5.86 | 70. | JB | R | *12 |
| 2. | | Unknown Hydrocarbon | 8.25 | 60. | J | NJ | |
| 3. | | Unknown Hydrocarbon | 10.14 | 70. | J | NJ | |
| 4. | | | | | | | |
| 5. | | | | | | | |
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OGDEN VALIDATED



LEVEL D

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC120

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-11

Sample wt/vol: 30.2 (g/ml) G Lab File ID: D1111

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 17 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/11/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 400. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 400. | U | | |
| 95-57-8 | 2-Chlorophenol | 400. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 400. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 400. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 400. | U | | |
| 95-48-7 | 2-Methylphenol | 400. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 400. | U | | |
| 106-44-5 | 4-Methylphenol | 400. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 400. | U | | |
| 67-72-1 | Hexachloroethane | 400. | U | | |
| 98-95-3 | Nitrobenzene | 400. | U | | |
| 78-59-1 | Isophorone | 400. | U | | |
| 88-75-5 | 2-Nitrophenol | 400. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 400. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 400. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 400. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 400. | U | | |
| 91-20-3 | Naphthalene | 400. | U | U | |
| 106-47-8 | 4-Chloroaniline | 400. | U | UJ | C |
| 87-68-3 | Hexachlorobutadiene | 400. | U | U | |
| 59-50-7 | 4-Chloro-3-methylphenol | 400. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 400. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 400. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 400. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 1000. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 400. | U | | |
| 88-74-4 | 2-Nitroaniline | 1000. | U | | |
| 131-11-3 | Dimethylphthalate | 400. | U | | |
| 208-96-8 | Acenaphthylene | 400. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 400. | U | | |
| 99-09-2 | 3-Nitroaniline | 1000. | U | | |
| 83-32-9 | Acenaphthene | 400. | U | U | |

OGDEN VALIDATED



LEVEL D

73

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC120

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-11

Sample wt/vol: 30.2 (g/ml) G Lab File ID: D1111

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 17 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/11/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 1000. | U | U | |
| 100-02-7 | 4-Nitrophenol | 1000. | U | | |
| 132-64-9 | Dibenzofuran | 400. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 400. | U | | |
| 84-66-2 | Diethylphthalate | 400. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 400. | U | | |
| 86-73-7 | Fluorene | 400. | U | | |
| 100-01-6 | 4-Nitroaniline | 1000. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 1000. | U | U | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 400. | U | R UJ | ~~X~~ C |
| 101-55-3 | 4-Bromophenyl-phenylether | 400. | U | U | |
| 118-74-1 | Hexachlorobenzene | 400. | U | | |
| 87-86-5 | Pentachlorophenol | 1000. | U | | |
| 85-01-8 | Phenanthrene | 400. | U | | |
| 120-12-7 | Anthracene | 400. | U | U | |
| 86-74-8 | Carbazole | 400. | U | UJ | C |
| 84-74-2 | Di-n-butylphthalate | 400. | U | U | |
| 206-44-0 | Fluoranthene | 170. | J | J | |
| 129-00-0 | Pyrene | 230. | J | J | |
| 85-68-7 | Butylbenzylphthalate | 400. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 400. | U | U | |
| 56-55-3 | Benzo(a)anthracene | 400. | U | U | |
| 218-01-9 | Chrysene | 190. | J | J | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 400. | U | U | |
| 117-84-0 | Di-n-octylphthalate | 400. | U | | |
| 205-99-2 | Benzo(b)fluoranthene | 400. | U | | |
| 207-08-9 | Benzo(k)fluoranthene | 400. | U | | |
| 50-32-8 | Benzo(a)pyrene | 400. | U | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 400. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 400. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 400. | U | U | |

(1) - Cannot be separated from Diphenylamine

OGDEN VALIDATED



LEVEL D

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC120

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-11

Sample wt/vol: 30.2 (g/ml) G Lab File ID: D1111

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 17 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/11/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0

Number TICs Found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Aldol Condensation Product | 5.88 | 900. | JB | R | *12 |
| 2. | Unknown Polyaromatic Hydroca | 14.93 | 2000. | J | NJ | |
| 3. | Unknown Polyaromatic Hydroca | 15.52 | 1000. | J | | |
| 4. | Unknown Polyaromatic Hydroca | 15.58 | 700. | J | | |
| 5. | Unknown Hydrocarbon | 15.79 | 300. | J | | |
| 6. | Unknown Hydrocarbon | 15.89 | 400. | J | | |
| 7. | Unknown Hydrocarbon | 16.03 | 900. | J | | |
| 8. | Unknown Hydrocarbon | 17.11 | 300. | J | | |
| 9. | Unknown Hydrocarbon | 18.39 | 300. | J | NJ | |
| 10. | | | | | | |
| 11. | | | | | | |
| 12. | | | | | | |
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| 30. | | | | | | |

OGDEN VALIDATED

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC121

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-12

Sample wt/vol: 30.2 (g/ml) G Lab File ID: D1112

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 18 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 400. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 400. | U | | |
| 95-57-8 | 2-Chlorophenol | 400. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 400. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 400. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 400. | U | | |
| 95-48-7 | 2-Methylphenol | 400. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 400. | U | | |
| 106-44-5 | 4-Methylphenol | 400. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 400. | U | | |
| 67-72-1 | Hexachloroethane | 400. | U | | |
| 98-95-3 | Nitrobenzene | 400. | U | | |
| 78-59-1 | Isophorone | 400. | U | | |
| 88-75-5 | 2-Nitrophenol | 400. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 400. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 400. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 400. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 400. | U | | |
| 91-20-3 | Naphthalene | 400. | U | U | |
| 106-47-8 | 4-Chloroaniline | 400. | U | UJ | C |
| 87-68-3 | Hexachlorobutadiene | 400. | U | U | |
| 59-50-7 | 4-Chloro-3-methylphenol | 400. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 400. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 400. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 400. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 1000. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 400. | U | | |
| 88-74-4 | 2-Nitroaniline | 1000. | U | | |
| 131-11-3 | Dimethylphthalate | 400. | U | | |
| 208-96-8 | Acenaphthylene | 400. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 400. | U | | |
| 99-09-2 | 3-Nitroaniline | 1000. | U | | |
| 83-32-9 | Acenaphthene | 400. | U | U | |

OGDEN VALIDATED



LEVEL D

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC121

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-12

Sample wt/vol: 30.2 (g/ml) G Lab File ID: D1112

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 18 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 1000. | U | U | |
| 100-02-7 | 4-Nitrophenol | 1000. | U | | |
| 132-64-9 | Dibenzofuran | 400. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 400. | U | | |
| 84-66-2 | Diethylphthalate | 400. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 400. | U | | |
| 86-73-7 | Fluorene | 400. | U | | |
| 100-01-6 | 4-Nitroaniline | 1000. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 1000. | U | U | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 400. | U | & UJ | *3 C |
| 101-55-3 | 4-Bromophenyl-phenylether | 400. | U | U | |
| 118-74-1 | Hexachlorobenzene | 400. | U | | |
| 87-86-5 | Pentachlorophenol | 1000. | U | | |
| 85-01-8 | Phenanthrene | 400. | U | | |
| 120-12-7 | Anthracene | 400. | U | U | |
| 86-74-8 | Carbazole | 400. | U | UJ | C |
| 84-74-2 | Di-n-butylphthalate | 400. | U | U | |
| 206-44-0 | Fluoranthene | 400. | U | | |
| 129-00-0 | Pyrene | 400. | U | | |
| 85-68-7 | Butylbenzylphthalate | 400. | U | | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 400. | U | | |
| 56-55-3 | Benzo(a)anthracene | 400. | U | | |
| 218-01-9 | Chrysene | 400. | U | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 400. | U | | |
| 117-84-0 | Di-n-octylphthalate | 400. | U | | |
| 205-99-2 | Benzo(b)fluoranthene | 400. | U | | |
| 207-08-9 | Benzo(k)fluoranthene | 400. | U | | |
| 50-32-8 | Benzo(a)pyrene | 400. | U | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 400. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 400. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 400. | U | U | |

(1) - Cannot be separated from Diphenylamine

OGDEN VALIDATED



LEVEL

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC121

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-12

Sample wt/vol: 30.2 (g/ml) G Lab File ID: D1112

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 18 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000:0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9

Number TICs Found: 11

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|---|
| 1. | | Aldol Condensation Product | 5.87 | 1000. | JB | R | *12 |
| 2. | | Unknown Hydrocarbon | 10.14 | 500. | J | NJ | |
| 3. | | Unknown Hydrocarbon | 18.32 | 300. | J | | |
| 4. | | Unknown Hydrocarbon | 18.39 | 500. | J | | |
| 5. | | Unknown Hydrocarbon | 20.21 | 700. | J | | |
| 6. | | Unknown Hydrocarbon | 21.10 | 700. | J | | |
| 7. | | Unknown Hydrocarbon | 21.95 | 700. | J | | |
| 8. | | Unknown Hydrocarbon | 22.75 | 700. | J | | |
| 9. | | Unknown Hydrocarbon | 23.52 | 400. | J | | |
| 10. | | Unknown Hydrocarbon | 24.96 | 500. | J | | |
| 11. | | Unknown Hydrocarbon | 33.62 | 2000. | J | NJ | |
| 12. | | | | | | | |
| 13. | | | | | | | |
| 14. | | | | | | | |
| 15. | | | | | | | |
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| 29. | | | | | | | |
| 30. | | | | | | | |

OGDEN VALIDATED



LEVEL D 43

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC122

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-13

Sample wt/vol: 30.1 (g/ml) G Lab File ID: D1113

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 10 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.5

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 370. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 370. | U | | |
| 95-57-8 | 2-Chlorophenol | 370. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 370. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 370. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 370. | U | | |
| 95-48-7 | 2-Methylphenol | 370. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 370. | U | | |
| 106-44-5 | 4-Methylphenol | 370. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 370. | U | | |
| 67-72-1 | Hexachloroethane | 370. | U | | |
| 98-95-3 | Nitrobenzene | 370. | U | | |
| 78-59-1 | Isophorone | 370. | U | | |
| 88-75-5 | 2-Nitrophenol | 370. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 370. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 370. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 370. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 370. | U | | |
| 91-20-3 | Naphthalene | 370. | U | U | |
| 106-47-8 | 4-Chloroaniline | 370. | U | UJ | C |
| 87-68-3 | Hexachlorobutadiene | 370. | U | U | |
| 59-50-7 | 4-Chloro-3-methylphenol | 370. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 370. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 370. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 370. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 920. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 370. | U | | |
| 88-74-4 | 2-Nitroaniline | 920. | U | | |
| 131-11-3 | Dimethylphthalate | 370. | U | | |
| 208-96-8 | Acenaphthylene | 370. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 370. | U | | |
| 99-09-2 | 3-Nitroaniline | 920. | U | | |
| 83-32-9 | Acenaphthene | 370. | U | U | |

OGDEN VALIDATED



LEVEL D

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC122

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-13

Sample wt/vol: 30.1 (g/ml) G Lab File ID: D1113

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 10 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.5

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 920. | U | U | |
| 100-02-7 | 4-Nitrophenol | 920. | U | | |
| 132-64-9 | Dibenzofuran | 370. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 370. | U | | |
| 84-66-2 | Diethylphthalate | 370. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 370. | U | | |
| 86-73-7 | Fluorene | 370. | U | | |
| 100-01-6 | 4-Nitroaniline | 920. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 920. | U | U | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 370. | U | ~~R~~ UJ | ~~*3~~ C |
| 101-55-3 | 4-Bromophenyl-phenylether | 370. | U | U | |
| 118-74-1 | Hexachlorobenzene | 370. | U | | |
| 87-86-5 | Pentachlorophenol | 920. | U | | |
| 85-01-8 | Phenanthrene | 370. | U | | |
| 120-12-7 | Anthracene | 370. | U | U | |
| 86-74-8 | Carbazole | 370. | U | UJ | C |
| 84-74-2 | Di-n-butylphthalate | 370. | U | U | |
| 206-44-0 | Fluoranthene | 210. | J | J | |
| 129-00-0 | Pyrene | 250. | J | J | |
| 85-68-7 | Butylbenzylphthalate | 370. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 370. | U | U | |
| 56-55-3 | Benzo(a)anthracene | 370. | U | U | |
| 218-01-9 | Chrysene | 210. | J | J | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 150. | J | J | |
| 117-84-0 | Di-n-octylphthalate | 370. | U | U | |
| 205-99-2 | Benzo(b)fluoranthene | 170. | J | J | |
| 207-08-9 | Benzo(k)fluoranthene | 370. | U | U | |
| 50-32-8 | Benzo(a)pyrene | 160. | J | J | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 370. | U | U | |
| 53-70-3 | Dibenz(a,h)anthracene | 370. | U | U | |
| 191-24-2 | Benzo(g,h,i)perylene | 370. | U | U | |

(1) - Cannot be separated from Diphenylamine

OGDEN VALIDATED



LEVEL D

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC122

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-13

Sample wt/vol: 30.1 (g/ml) G Lab File ID: D1113

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 10 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.5

Number TICs Found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Aldol Condensation Product | 5.88 | 700. | JB | R | *12 |
| 2. | Unknown Hydrocarbon | 8.26 | 400. | J | NJ | |
| 3. | Unknown Hydrocarbon | 10.17 | 900. | J | NJ | |
| 4. | | | | | | |
| 5. | | | | | | |
| 6. | | | | | | |
| 7. | | | | | | |
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| 29. | | | | | | |
| 30. | | | | | | |

OGDEN VALIDATED



LEVEL D

31

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC123

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-14

Sample wt/vol: 30.4 (g/ml) G Lab File ID: D1114

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 9 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 360. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 360. | U | | |
| 95-57-8 | 2-Chlorophenol | 360. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 360. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 360. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 360. | U | | |
| 95-48-7 | 2-Methylphenol | 360. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 360. | U | | |
| 106-44-5 | 4-Methylphenol | 360. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 360. | U | | |
| 67-72-1 | Hexachloroethane | 360. | U | | |
| 98-95-3 | Nitrobenzene | 360. | U | | |
| 78-59-1 | Isophorone | 360. | U | | |
| 88-75-5 | 2-Nitrophenol | 360. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 360. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 360. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 360. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 360. | U | | |
| 91-20-3 | Naphthalene | 360. | U | U | |
| 106-47-8 | 4-Chloroaniline | 360. | U | UJ | C |
| 87-68-3 | Hexachlorobutadiene | 360. | U | U | |
| 59-50-7 | 4-Chloro-3-methylphenol | 360. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 360. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 360. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 360. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 900. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 360. | U | | |
| 88-74-4 | 2-Nitroaniline | 900. | U | | |
| 131-11-3 | Dimethylphthalate | 360. | U | | |
| 208-96-8 | Acenaphthylene | 360. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 360. | U | | |
| 99-09-2 | 3-Nitroaniline | 900. | U | | |
| 83-32-9 | Acenaphthene | 360. | U | U | |

OGDEN VALIDATED



LEVEL 3

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC123

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-14

Sample wt/vol: 30.4 (g/ml) G Lab File ID: D1114

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 9 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 900. | U | U | |
| 100-02-7 | 4-Nitrophenol | 900. | U | | |
| 132-64-9 | Dibenzofuran | 360. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 360. | U | | |
| 84-66-2 | Diethylphthalate | 360. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 360. | U | | |
| 86-73-7 | Fluorene | 360. | U | | |
| 100-01-6 | 4-Nitroaniline | 900. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 900. | U | U | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 360. | U | R UJ ~~J~~ | C |
| 101-55-3 | 4-Bromophenyl-phenylether | 360. | U | U | |
| 118-74-1 | Hexachlorobenzene | 360. | U | U | |
| 87-86-5 | Pentachlorophenol | 900. | U | U | |
| 85-01-8 | Phenanthrene | 680. | | | |
| 120-12-7 | Anthracene | 210. | J | J | |
| 86-74-8 | Carbazole | 360. | U | UJ | C |
| 84-74-2 | Di-n-butylphthalate | 360. | U | U | |
| 206-44-0 | Fluoranthene | 890. | | | |
| 129-00-0 | Pyrene | 870. | | | |
| 85-68-7 | Butylbenzylphthalate | 360. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 360. | U | U | |
| 56-55-3 | Benzo(a)anthracene | 450. | | | |
| 218-01-9 | Chrysene | 630. | | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 360. | U | U | |
| 117-84-0 | Di-n-octylphthalate | 360. | U | U | |
| 205-99-2 | Benzo(b)fluoranthene | 360. | | | |
| 207-08-9 | Benzo(k)fluoranthene | 550. | | | |
| 50-32-8 | Benzo(a)pyrene | 470. | | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 360. | U | U | |
| 53-70-3 | Dibenz(a,h)anthracene | 360. | U | U | |
| 191-24-2 | Benzo(g,h,i)perylene | 210. | J | J | |

(1) - Cannot be separated from Diphenylamine

OGDEN VALIDATED



LEVEL D 33

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC123

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-14

Sample wt/vol: 30.4 (g/ml) G Lab File ID: D1114

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 9 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

Number TICs Found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|---|
| 1. | | Aldol Condensation Product | 5.89 | 1000. | JB | R | *12 |
| 2. | | Unknown Hydrocarbon | 8.25 | 400. | J | NJ | |
| 3. | | Unknown Hydrocarbon | 22.33 | 300. | J | ↓ | |
| 4. | | Unknown Hydrocarbon | 22.68 | 300. | J | ↓ | |
| 5. | | Unknown Hydrocarbon | 25.81 | 2000. | J | ↓ | |
| 6. | | Unknown Hydrocarbon | 25.41 | 500. | J | NJ | |
| 7. | | | | | | | |
| 8. | | | | | | | |
| 9. | | | | | | | |
| 10. | | | | | | | |
| 11. | | | | | | | |
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| 30. | | | | | | | |

OGDEN VALIDATED



LEVEL D

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC124

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-15

Sample wt/vol: 30.2 (g/ml) G Lab File ID: R1115

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 13 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 380. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 380. | U | | |
| 95-57-8 | 2-Chlorophenol | 380. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 380. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 380. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 380. | U | | |
| 95-48-7 | 2-Methylphenol | 380. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 380. | U | | |
| 106-44-5 | 4-Methylphenol | 380. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 380. | U | | |
| 67-72-1 | Hexachloroethane | 380. | U | | |
| 98-95-3 | Nitrobenzene | 380. | U | | |
| 78-59-1 | Isophorone | 380. | U | | |
| 88-75-5 | 2-Nitrophenol | 380. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 380. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 380. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 380. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 380. | U | | |
| 91-20-3 | Naphthalene | 380. | U | U | |
| 106-47-8 | 4-Chloroaniline | 380. | U | UJ | C |
| 87-68-3 | Hexachlorobutadiene | 380. | U | U | |
| 59-50-7 | 4-Chloro-3-methylphenol | 380. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 380. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 380. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 380. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 950. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 380. | U | | |
| 88-74-4 | 2-Nitroaniline | 950. | U | | |
| 131-11-3 | Dimethylphthalate | 380. | U | | |
| 208-96-8 | Acenaphthylene | 380. | U | U | |
| 606-20-2 | 2,6-Dinitrotoluene | 380. | U | U | |
| 99-09-2 | 3-Nitroaniline | 950. | U | UJ | C |
| 83-32-9 | Acenaphthene | 380. | U | U | |

OGDEN VALIDATED



LEVEL D

35

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC124

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-15

Sample wt/vol: 30.2 (g/ml) G Lab File ID: R1115

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 13 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 950. | U | U | |
| 100-02-7 | 4-Nitrophenol | 950. | U | | |
| 132-64-9 | Dibenzofuran | 380. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 380. | U | | |
| 84-66-2 | Diethylphthalate | 380. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 380. | U | | |
| 86-73-7 | Fluorene | 380. | U | | |
| 100-01-6 | 4-Nitroaniline | 950. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 950. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 380. | U | ~~R~~ U | *3 |
| 101-55-3 | 4-Bromophenyl-phenylether | 380. | U | | |
| 118-74-1 | Hexachlorobenzene | 380. | U | | |
| 87-86-5 | Pentachlorophenol | 950. | U | | |
| 85-01-8 | Phenanthrene | 210. | J | J | |
| 120-12-7 | Anthracene | 380. | U | | |
| 86-74-8 | Carbazole | 380. | U | | |
| 84-74-2 | Di-n-butylphthalate | 380. | U | | |
| 206-44-0 | Fluoranthene | 440. | | | |
| 129-00-0 | Pyrene | 510. | | | |
| 85-68-7 | Butylbenzylphthalate | 380. | U | | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 380. | U | | C |
| 56-55-3 | Benzo(a)anthracene | 220. | J | J | |
| 218-01-9 | Chrysene | 300. | J | J | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 380. | U | | |
| 117-84-0 | Di-n-octylphthalate | 380. | U | | |
| 205-99-2 | Benzo(b)fluoranthene | 200. | J | J | |
| 207-08-9 | Benzo(k)fluoranthene | 240. | J | J | |
| 50-32-8 | Benzo(a)pyrene | 230. | J | J | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 380. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 380. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 380. | U | | |

(1) - Cannot be separated from Diphenylamine

DR 9/20/96

9/10/96

OGDEN VALIDATED

FORM I SV-2 3/90

LEVEL 2

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC124

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-15

Sample wt/vol: 30.2 (g/ml) G Lab File ID: R1115

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 13 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0

Number TICs Found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|---|
| 1. | | Aldol Condensation Product | 5.88 | 1000. | JB | R | *12 |
| 2. | | Unknown Hydrocarbon | 8.27 | 1000. | J | NJ | |
| 3. | | | | | | | |
| 4. | | | | | | | |
| 5. | | | | | | | |
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| 29. | | | | | | | |
| 30. | | | | | | | |

OGDEN VALIDATED



LEVEL

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC125

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CDSD  Case No.: NA  SAS No.: NA  SDG No.: 5811M

Matrix: (soil/water) SOIL  Lab Sample ID: 5811-16

Sample wt/vol: 30.1 (g/ml) G  Lab File ID: D1116

Level: (low/med) LOW  Date Received: 7/01/96

% Moisture: 10 decanted: (Y/N) N  Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 8.3

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 370. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 370. | U | | |
| 95-57-8 | 2-Chlorophenol | 370. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 370. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 370. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 370. | U | | |
| 95-48-7 | 2-Methylphenol | 370. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 370. | U | | |
| 106-44-5 | 4-Methylphenol | 370. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 370. | U | | |
| 67-72-1 | Hexachloroethane | 370. | U | | |
| 98-95-3 | Nitrobenzene | 370. | U | | |
| 78-59-1 | Isophorone | 370. | U | | |
| 88-75-5 | 2-Nitrophenol | 370. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 370. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 370. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 370. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 370. | U | | |
| 91-20-3 | Naphthalene | 370. | U | | |
| 106-47-8 | 4-Chloroaniline | 370. | U | UJ | C |
| 87-68-3 | Hexachlorobutadiene | 370. | U | U | |
| 59-50-7 | 4-Chloro-3-methylphenol | 370. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 370. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 370. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 370. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 920. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 370. | U | | |
| 88-74-4 | 2-Nitroaniline | 920. | U | | |
| 131-11-3 | Dimethylphthalate | 370. | U | | |
| 208-96-8 | Acenaphthylene | 370. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 370. | U | | |
| 99-09-2 | 3-Nitroaniline | 920. | U | UJ | C |
| 83-32-9 | Acenaphthene | 370. | U | U | |

OGDEN VALIDATED



LEVEL

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC125

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-16

Sample wt/vol: 30.1 (g/ml) G Lab File ID: D1116

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 10 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 920. | U | U | |
| 100-02-7 | 4-Nitrophenol | 920. | U | | |
| 132-64-9 | Dibenzofuran | 370. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 370. | U | | |
| 84-66-2 | Diethylphthalate | 370. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 370. | U | | |
| 86-73-7 | Fluorene | 370. | U | | |
| 100-01-6 | 4-Nitroaniline | 920. | U | U | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 920. | U | U | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 370. | U | R U | *3 |
| 101-55-3 | 4-Bromophenyl-phenylether | 370. | U | U | |
| 118-74-1 | Hexachlorobenzene | 370. | U | | |
| 87-86-5 | Pentachlorophenol | 920. | U | | |
| 85-01-8 | Phenanthrene | 370. | U | | |
| 120-12-7 | Anthracene | 370. | U | | |
| 86-74-8 | Carbazole | 370. | U | | |
| 84-74-2 | Di-n-butylphthalate | 370. | U | U | |
| 206-44-0 | Fluoranthene | 370. | U | U | |
| 129-00-0 | Pyrene | 170. | J | J | |
| 85-68-7 | Butylbenzylphthalate | 370. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 370. | U | UJ | c |
| 56-55-3 | Benzo(a)anthracene | 370. | U | U | |
| 218-01-9 | Chrysene | 370. | U | U | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 380. | | | |
| 117-84-0 | Di-n-octylphthalate | 370. | U | U | |
| 205-99-2 | Benzo(b)fluoranthene | 370. | U | | |
| 207-08-9 | Benzo(k)fluoranthene | 370. | U | | |
| 50-32-8 | Benzo(a)pyrene | 370. | U | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 370. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 370. | U | U | |
| 191-24-2 | Benzo(g,h,i)perylene | 370. | U | U | |

(1) - Cannot be separated from Diphenylamine

OGDEN VALIDATED



LEVEL

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC125

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-16

Sample wt/vol: 30.1 (g/ml) G Lab File ID: D1116

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 10 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

Number TICs Found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|---|
| 1. | | Aldol Condensation Product | 5.89 | 1000. | JB | R | *12 |
| 2. | | Unknown Hydrocarbon | 10.15 | 600. | J | NJ | |
| 3. | | Unknown Hydrocarbon | 33.61 | 2000. | J | NJ | |
| 4. | | | | | | | |
| 5. | | | | | | | |
| 6. | | | | | | | |
| 7. | | | | | | | |
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| 30. | | | | | | | |

OGDEN VALIDATED



LEVEL II 30

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC126

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-17

Sample wt/vol: 30.4 (g/ml) G Lab File ID: D1117

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 11 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.7

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 370. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 370. | U | | |
| 95-57-8 | 2-Chlorophenol | 370. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 370. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 370. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 370. | U | | |
| 95-48-7 | 2-Methylphenol | 370. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 370. | U | | |
| 106-44-5 | 4-Methylphenol | 370. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 370. | U | | |
| 67-72-1 | Hexachloroethane | 370. | U | | |
| 98-95-3 | Nitrobenzene | 370. | U | | |
| 78-59-1 | Isophorone | 370. | U | | |
| 88-75-5 | 2-Nitrophenol | 370. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 370. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 370. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 370. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 370. | U | | |
| 91-20-3 | Naphthalene | 370. | U | U | |
| 106-47-8 | 4-Chloroaniline | 370. | U | UJ | C |
| 87-68-3 | Hexachlorobutadiene | 370. | U | U | |
| 59-50-7 | 4-Chloro-3-methylphenol | 370. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 370. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 370. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 370. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 920. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 370. | U | | |
| 88-74-4 | 2-Nitroaniline | 920. | U | | |
| 131-11-3 | Dimethylphthalate | 370. | U | | |
| 208-96-8 | Acenaphthylene | 370. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 370. | U | U | |
| 99-09-2 | 3-Nitroaniline | 920. | U | UJ | C |
| 83-32-9 | Acenaphthene | 370. | U | U | |

OGDEN VALIDATED



LEVEL

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC126

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-17

Sample wt/vol: 30.4 (g/ml) G Lab File ID: D1117

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 11 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.7

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 920. | U | U | |
| 100-02-7 | 4-Nitrophenol | 920. | U | | |
| 132-64-9 | Dibenzofuran | 370. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 370. | U | | |
| 84-66-2 | Diethylphthalate | 370. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 370. | U | | |
| 86-73-7 | Fluorene | 370. | U | | |
| 100-01-6 | 4-Nitroaniline | 920. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 920. | U | U | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 370. | U | R U | *5 |
| 101-55-3 | 4-Bromophenyl-phenylether | 370. | U | U | |
| 118-74-1 | Hexachlorobenzene | 370. | U | U | |
| 87-86-5 | Pentachlorophenol | 920. | U | U | |
| 85-01-8 | Phenanthrene | 450. | | | |
| 120-12-7 | Anthracene | 370. | U | U | |
| 86-74-8 | Carbazole | 370. | U | U | c |
| 84-74-2 | Di-n-butylphthalate | 370. | U | U | |
| 206-44-0 | Fluoranthene | 1100. | | | |
| 129-00-0 | Pyrene | 1100. | | | |
| 85-68-7 | Butylbenzylphthalate | 370. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 370. | U | UJ | c |
| 56-55-3 | Benzo(a)anthracene | 370. | U | U | |
| 218-01-9 | Chrysene | 340. | J | J | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 370. | U | U | |
| 117-84-0 | Di-n-octylphthalate | 370. | U | U | |
| 205-99-2 | Benzo(b)fluoranthene | 170. | J | J | |
| 207-08-9 | Benzo(k)fluoranthene | 240. | J | J | |
| 50-32-8 | Benzo(a)pyrene | 150. | J | J | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 370. | U | U | |
| 53-70-3 | Dibenz(a,h)anthracene | 370. | U | U | |
| 191-24-2 | Benzo(g,h,i)perylene | 370. | U | U | |

(1) - Cannot be separated from Diphenylamine

NQ 9/26/96

OGDEN VALIDATED



LEVEL D

33

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC126

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-17

Sample wt/vol: 30.4 (g/ml) G Lab File ID: D1117

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 11 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.7

Number TICs Found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Aldol Condensation Product | 5.88 | 500. | JB | R | *12 |
| 2. | Unknown Hydrocarbon | 10.15 | 400. | J | NJ | |
| 3. | Unknown Hydrocarbon | 24.50 | 300. | J | NJ | |
| 4. | Unknown Hydrocarbon | 33.67 | 5000. | J | NJ | |
| 5. | | | | | | |
| 6. | | | | | | |
| 7. | | | | | | |
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OGDEN VALIDATED



LEVEL

03

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC127

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-18

Sample wt/vol: 30.0 (g/ml) G Lab File ID: D1118

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 11 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 370. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 370. | U | | |
| 95-57-8 | 2-Chlorophenol | 370. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 370. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 370. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 370. | U | | |
| 95-48-7 | 2-Methylphenol | 370. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 370. | U | | |
| 106-44-5 | 4-Methylphenol | 370. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 370. | U | | |
| 67-72-1 | Hexachloroethane | 370. | U | | |
| 98-95-3 | Nitrobenzene | 370. | U | | |
| 78-59-1 | Isophorone | 370. | U | | |
| 88-75-5 | 2-Nitrophenol | 370. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 370. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 370. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 370. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 370. | U | | |
| 91-20-3 | Naphthalene | 370. | U | U | |
| 106-47-8 | 4-Chloroaniline | 370. | U | UJ | C |
| 87-68-3 | Hexachlorobutadiene | 370. | U | U | |
| 59-50-7 | 4-Chloro-3-methylphenol | 370. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 370. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 370. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 370. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 940. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 370. | U | | |
| 88-74-4 | 2-Nitroaniline | 940. | U | | |
| 131-11-3 | Dimethylphthalate | 370. | U | | |
| 208-96-8 | Acenaphthylene | 370. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 370. | U | U | |
| 99-09-2 | 3-Nitroaniline | 940. | U | UJ | C |
| 83-32-9 | Acenaphthene | 370. | U | U | |

OGDEN VALIDATED

FORM I SV-1 3/90

LEVEL D

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC127

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-18

Sample wt/vol: 30.0 (g/ml) G Lab File ID: D1118

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 11 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 940. | U | U | |
| 100-02-7 | 4-Nitrophenol | 940. | U | | |
| 132-64-9 | Dibenzofuran | 370. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 370. | U | | |
| 84-66-2 | Diethylphthalate | 370. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 370. | U | | |
| 86-73-7 | Fluorene | 370. | U | | |
| 100-01-6 | 4-Nitroaniline | 940. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 940. | U | U | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 370. | U | R U | *3 |
| 101-55-3 | 4-Bromophenyl-phenylether | 370. | U | U | |
| 118-74-1 | Hexachlorobenzene | 370. | U | | |
| 87-86-5 | Pentachlorophenol | 940. | U | | |
| 85-01-8 | Phenanthrene | 370. | U | | |
| 120-12-7 | Anthracene | 370. | U | | |
| 86-74-8 | Carbazole | 370. | U | | |
| 84-74-2 | Di-n-butylphthalate | 370. | U | U | |
| 206-44-0 | Fluoranthene | 670. | | | |
| 129-00-0 | Pyrene | 650. | | | |
| 85-68-7 | Butylbenzylphthalate | 100. | J | J | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 370. | U | UJ | c |
| 56-55-3 | Benzo(a)anthracene | 370. | U | U | |
| 218-01-9 | Chrysene | 380. | | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 370. | U | U | |
| 117-84-0 | Di-n-octylphthalate | 370. | U | U | |
| 205-99-2 | Benzo(b)fluoranthene | 190. | J | J | |
| 207-08-9 | Benzo(k)fluoranthene | 250. | J | J | |
| 50-32-8 | Benzo(a)pyrene | 160. | J | J | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 67. | J | J | |
| 53-70-3 | Dibenz(a,h)anthracene | 370. | U | U | |
| 191-24-2 | Benzo(g,h,i)perylene | 370. | U | U | |

(1) - Cannot be separated from Diphenylamine

OGDEN VALIDATED



LEVEL D

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC127

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-18

Sample wt/vol: 30.0 (g/ml) G Lab File ID: D1118

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 11 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0

Number TICs Found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Aldol Condensation Product | 5.88 | 400. | JB | R | *12 |
| 2. | Unknown Hydrocarbon | 33.68 | 4000. | J | NJ | |
| 3. | | | | | | |
| 4. | | | | | | |
| 5. | | | | | | |
| 6. | | | | | | |
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| 30. | | | | | | |

OGDEN VALIDATED



LEVEL D

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC128

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CDSD  Case No.: NA  SAS No.: NA  SDG No.: 5811M

Matrix: (soil/water) SOIL  Lab Sample ID: 5811-19

Sample wt/vol: 30.0 (g/ml) G  Lab File ID: D1119

Level: (low/med) LOW  Date Received: 7/01/96

% Moisture: 16 decanted: (Y/N) N  Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 8.3

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 400. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 400. | U | | |
| 95-57-8 | 2-Chlorophenol | 400. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 400. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 400. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 400. | U | | |
| 95-48-7 | 2-Methylphenol | 400. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 400. | U | | |
| 106-44-5 | 4-Methylphenol | 400. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 400. | U | | |
| 67-72-1 | Hexachloroethane | 400. | U | | |
| 98-95-3 | Nitrobenzene | 400. | U | | |
| 78-59-1 | Isophorone | 400. | U | | |
| 88-75-5 | 2-Nitrophenol | 400. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 400. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 400. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 400. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 400. | U | | |
| 91-20-3 | Naphthalene | 400. | U | U | |
| 106-47-8 | 4-Chloroaniline | 400. | U | UJ | C |
| 87-68-3 | Hexachlorobutadiene | 400. | U | U | |
| 59-50-7 | 4-Chloro-3-methylphenol | 400. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 400. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 400. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 400. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 990. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 400. | U | | |
| 88-74-4 | 2-Nitroaniline | 990. | U | | |
| 131-11-3 | Dimethylphthalate | 400. | U | | |
| 208-96-8 | Acenaphthylene | 400. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 400. | U | U | |
| 99-09-2 | 3-Nitroaniline | 990. | U | UJ | C |
| 83-32-9 | Acenaphthene | 180. | J | J | |

OGDEN VALIDATED
LEVEL D

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC128

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-19

Sample wt/vol: 30.0 (g/ml) G Lab File ID: D1119

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 16 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 990. | U | U | |
| 100-02-7 | 4-Nitrophenol | 990. | U | | |
| 132-64-9 | Dibenzofuran | 400. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 400. | U | | |
| 84-66-2 | Diethylphthalate | 400. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 400. | U | | |
| 86-73-7 | Fluorene | 400. | U | | |
| 100-01-6 | 4-Nitroaniline | 990. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 990. | U | U | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 400. | U | ~~R~~ U | *3 |
| 101-55-3 | 4-Bromophenyl-phenylether | 400. | U | U | |
| 118-74-1 | Hexachlorobenzene | 400. | U | U | |
| 87-86-5 | Pentachlorophenol | 990. | U | U | |
| 85-01-8 | Phenanthrene | 1900. | | | |
| 120-12-7 | Anthracene | 580. | | | |
| 86-74-8 | Carbazole | 250. | J | J | |
| 84-74-2 | Di-n-butylphthalate | 400. | U | U | |
| 206-44-0 | Fluoranthene | 4000. | | | |
| 129-00-0 | Pyrene | 3400. | | | |
| 85-68-7 | Butylbenzylphthalate | 400. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 400. | U | UJ | C |
| 56-55-3 | Benzo(a)anthracene | 1800. | | | |
| 218-01-9 | Chrysene | 2600. | | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 160. | J | J | |
| 117-84-0 | Di-n-octylphthalate | 400. | U | U | |
| 205-99-2 | Benzo(b)fluoranthene | 1800. | | | |
| 207-08-9 | Benzo(k)fluoranthene | 2000. | | | |
| 50-32-8 | Benzo(a)pyrene | 2000. | | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 630. | | | |
| 53-70-3 | Dibenz(a,h)anthracene | 390. | J | J | |
| 191-24-2 | Benzo(g,h,i)perylene | 520. | | | |

(1) - Cannot be separated from Diphenylamine

LADEN VALIDATED



LEVEL 1

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC128

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-19

Sample wt/vol: 30.0 (g/ml) G Lab File ID: D1119

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 16 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

Number TICs Found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|---|
| 1. | | Aldol Condensation Product | 5.88 | 600. | JB | R | B |
| 2. | | Unknown Hydrocarbon | 8.27 | 2000. | J | NJ | |
| 3. | | Unknown Polyaromatic Hydroca | 20.53 | 300. | J | | |
| 4. | | Unknown Polyaromatic Hydroca | 20.60 | 400. | J | | |
| 5. | | Unknown Polyaromatic Hydroca | 20.77 | 800. | J | | |
| 6. | | Unknown Polyaromatic Hydroca | 21.22 | 200. | J | | |
| 7. | | Unknown Hydrocarbon | 22.40 | 300. | J | | |
| 8. | | Unknown Hydrocarbon | 22.70 | 300. | J | | |
| 9. | | Unknown Polyaromatic Hydroca | 23.07 | 300. | J | | |
| 10. | | Unknown Polyaromatic Hydroca | 23.30 | 800. | J | NJ | |
| 11. | | | | | | | |
| 12. | | | | | | | |
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OGDEN VALIDATED



LEVEL B

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC129

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-20

Sample wt/vol: 30.0 (g/ml) G Lab File ID: D1120

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 9 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.5

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 370. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 370. | U | | |
| 95-57-8 | 2-Chlorophenol | 370. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 370. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 370. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 370. | U | | |
| 95-48-7 | 2-Methylphenol | 370. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 370. | U | | |
| 106-44-5 | 4-Methylphenol | 370. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 370. | U | | |
| 67-72-1 | Hexachloroethane | 370. | U | | |
| 98-95-3 | Nitrobenzene | 370. | U | | |
| 78-59-1 | Isophorone | 370. | U | | |
| 88-75-5 | 2-Nitrophenol | 370. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 370. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 370. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 370. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 370. | U | | |
| 91-20-3 | Naphthalene | 370. | U | U | |
| 106-47-8 | 4-Chloroaniline | 370. | U | UJ | C |
| 87-68-3 | Hexachlorobutadiene | 370. | U | U | |
| 59-50-7 | 4-Chloro-3-methylphenol | 370. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 370. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 370. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 370. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 920. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 370. | U | | |
| 88-74-4 | 2-Nitroaniline | 920. | U | | |
| 131-11-3 | Dimethylphthalate | 370. | U | | |
| 208-96-8 | Acenaphthylene | 370. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 370. | U | U | |
| 99-09-2 | 3-Nitroaniline | 920. | U | UJ | C |
| 83-32-9 | Acenaphthene | 370. | U | U | |

OGDEN VALIDATED



LEVEL D

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC129

Lab Name:CEIMIC CORPORATION, SD  Contract:CTO 136

Lab Code:CDSD  Case No.:NA  SAS No.:NA  SDG No.:5811M

Matrix: (soil/water) SOIL  Lab Sample ID:5811-20

Sample wt/vol: 30.0 (g/ml) G  Lab File ID: D1120

Level: (low/med) LOW  Date Received: 7/01/96

% Moisture: 9 decanted: (Y/N) N  Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 8.5

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 920. | U | U | |
| 100-02-7 | 4-Nitrophenol | 920. | U | | |
| 132-64-9 | Dibenzofuran | 370. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 370. | U | | |
| 84-66-2 | Diethylphthalate | 370. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 370. | U | | |
| 86-73-7 | Fluorene | 370. | U | | |
| 100-01-6 | 4-Nitroaniline | 920. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 920. | U | U | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 370. | U | ~~R~~ U | ~~*3~~ |
| 101-55-3 | 4-Bromophenyl-phenylether | 370. | U | U | |
| 118-74-1 | Hexachlorobenzene | 370. | U | | |
| 87-86-5 | Pentachlorophenol | 920. | U | | |
| 85-01-8 | Phenanthrene | 370. | U | | |
| 120-12-7 | Anthracene | 370. | U | | |
| 86-74-8 | Carbazole | 370. | U | | |
| 84-74-2 | Di-n-butylphthalate | 370. | U | | |
| 206-44-0 | Fluoranthene | 370. | U | | |
| 129-00-0 | Pyrene | 370. | U | | |
| 85-68-7 | Butylbenzylphthalate | 370. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 370. | U | ~~U~~ | c |
| 56-55-3 | Benzo(a)anthracene | 370. | U | U | |
| 218-01-9 | Chrysene | 370. | U | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 370. | U | | |
| 117-84-0 | Di-n-octylphthalate | 370. | U | | |
| 205-99-2 | Benzo(b)fluoranthene | 370. | U | | |
| 207-08-9 | Benzo(k)fluoranthene | 370. | U | | |
| 50-32-8 | Benzo(a)pyrene | 370. | U | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 370. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 370. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 370. | U | U | |

(1) - Cannot be separated from Diphenylamine

OGDEN VALIDATED



LEVEL I 5

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC129

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) SOIL Lab Sample ID:5811-20

Sample wt/vol: 30.0 (g/ml) G Lab File ID: D1120

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: 9 decanted: (Y/N) N Date Extracted: 7/03/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.5

Number TICs Found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Unknown Hydrocarbon | 4.82 | 300. | J | NJ | |
| 2. | Aldol Condensation Product | 5.88 | 400. | J | R | B |
| 3. | Unknown Hydrocarbon | 8.27 | 600. | J | NJ | |
| 4. | | | | | | |
| 5. | | | | | | |
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OGDEN VALIDATED
LEVEL D

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC155

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CDSD  Case No.: NA  SAS No.: NA  SDG No.: 5811M

Matrix: (soil/water) WATER  Lab Sample ID: 5811-07

Sample wt/vol: 1000.0 (g/ml) ML  Lab File ID: D1107

Level: (low/med) LOW  Date Received: 7/01/96

% Moisture: decanted: (Y/N)  Date Extracted: 7/01/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/13/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) N  pH: 7.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 10. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 10. | U | | |
| 95-57-8 | 2-Chlorophenol | 10. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 10. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 10. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 10. | U | | |
| 95-48-7 | 2-Methylphenol | 10. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10. | U | | |
| 106-44-5 | 4-Methylphenol | 10. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 10. | U | | |
| 67-72-1 | Hexachloroethane | 10. | U | | |
| 98-95-3 | Nitrobenzene | 10. | U | | |
| 78-59-1 | Isophorone | 10. | U | | |
| 88-75-5 | 2-Nitrophenol | 10. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 10. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 10. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 10. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10. | U | | |
| 91-20-3 | Naphthalene | 10. | U | | |
| 106-47-8 | 4-Chloroaniline | 10. | U | | |
| 87-68-3 | Hexachlorobutadiene | 10. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 10. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 10. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 10. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 10. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 25. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 10. | U | | |
| 88-74-4 | 2-Nitroaniline | 25. | U | | |
| 131-11-3 | Dimethylphthalate | 10. | U | | |
| 208-96-8 | Acenaphthylene | 10. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 10. | U | | |
| 99-09-2 | 3-Nitroaniline | 25. | U | | |
| 83-32-9 | Acenaphthene | 10. | U | U | |

FORM I SV-1

OGDEN VALIDATED

LEVEL D

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC155

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) WATER Lab Sample ID:5811-07

Sample wt/vol: 1000.0 (g/ml) ML Lab File ID: D1107

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: decanted: (Y/N) Date Extracted: 7/01/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/13/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 25. | U | U | |
| 100-02-7 | 4-Nitrophenol | 25. | U | | |
| 132-64-9 | Dibenzofuran | 10. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 10. | U | | |
| 84-66-2 | Diethylphthalate | 10. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10. | U | | |
| 86-73-7 | Fluorene | 10. | U | | |
| 100-01-6 | 4-Nitroaniline | 25. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25. | U | U | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10. | U | ~~R~~ U | *3 |
| 101-55-3 | 4-Bromophenyl-phenylether | 10. | U | U | |
| 118-74-1 | Hexachlorobenzene | 10. | U | | |
| 87-86-5 | Pentachlorophenol | 25. | U | | |
| 85-01-8 | Phenanthrene | 10. | U | | |
| 120-12-7 | Anthracene | 10. | U | | |
| 86-74-8 | Carbazole | 10. | U | | |
| 84-74-2 | Di-n-butylphthalate | 10. | U | | |
| 206-44-0 | Fluoranthene | 10. | U | | |
| 129-00-0 | Pyrene | 10. | U | | |
| 85-68-7 | Butylbenzylphthalate | 10. | U | | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10. | U | | |
| 56-55-3 | Benzo(a)anthracene | 10. | U | | |
| 218-01-9 | Chrysene | 10. | U | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 10. | U | | |
| 117-84-0 | Di-n-octylphthalate | 10. | U | | |
| 205-99-2 | Benzo(b)fluoranthene | 10. | U | | |
| 207-08-9 | Benzo(k)fluoranthene | 10. | U | | |
| 50-32-8 | Benzo(a)pyrene | 10. | U | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 10. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 10. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 10. | U | U | |

(1) - Cannot be separated from Diphenylamine

OGDEN VALIDATED

FORM I SV-2

LEVEL D

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC155

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CDSD  Case No.: NA  SAS No.: NA  SDG No.: 5811M

Matrix: (soil/water) WATER  Lab Sample ID: 5811-07

Sample wt/vol: 1000.0 (g/ml) ML  Lab File ID: D1107

Level: (low/med) LOW  Date Received: 7/01/96

% Moisture: decanted: (Y/N)  Date Extracted: 7/01/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/13/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) N  pH: 7.0

Number TICs Found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Unknown Hydrocarbon | 8.90 | 100. | J | | |
| 2. | Unknown Hydrocarbon | 9.04 | 5. | J | | |
| 3. | Unknown Hydrocarbon | 12.71 | 5. | J | | |
| 4. | | | | | | |
| 5. | | | | | | |
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OGDEN VALIDATED
LEVEL D

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC155RX

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) WATER Lab Sample ID:5811-07RX

Sample wt/vol: 1000.0 (g/ml) ML Lab File ID: XX107

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: decanted: (Y/N) Date Extracted: 7/16/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/19/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 10. | U | R | D |
| 111-44-4 | bis(2-Chloroethyl)ether | 10. | U | | |
| 95-57-8 | 2-Chlorophenol | 10. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 10. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 10. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 10. | U | | |
| 95-48-7 | 2-Methylphenol | 10. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10. | U | | |
| 106-44-5 | 4-Methylphenol | 10. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 10. | U | | |
| 67-72-1 | Hexachloroethane | 10. | U | | |
| 98-95-3 | Nitrobenzene | 10. | U | | |
| 78-59-1 | Isophorone | 10. | U | | |
| 88-75-5 | 2-Nitrophenol | 10. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 10. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 10. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 10. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10. | U | | |
| 91-20-3 | Naphthalene | 10. | U | | |
| 106-47-8 | 4-Chloroaniline | 10. | U | | |
| 87-68-3 | Hexachlorobutadiene | 10. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 10. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 10. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 10. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 10. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 25. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 10. | U | | |
| 88-74-4 | 2-Nitroaniline | 25. | U | | |
| 131-11-3 | Dimethylphthalate | 10. | U | | |
| 208-96-8 | Acenaphthylene | 10. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 10. | U | | |
| 99-09-2 | 3-Nitroaniline | 25. | U | | |
| 83-32-9 | Acenaphthene | 10. | U | R | D |

FORM I SV-1

LEVEL D

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC155RX

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) WATER Lab Sample ID:5811-07RX

Sample wt/vol: 1000.0 (g/ml) ML Lab File ID: XX107

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: decanted: (Y/N) Date Extracted: 7/16/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/19/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 25. | U | R | D |
| 100-02-7 | 4-Nitrophenol | 25. | U | | |
| 132-64-9 | Dibenzofuran | 10. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 10. | U | | |
| 84-66-2 | Diethylphthalate | 10. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10. | U | | |
| 86-73-7 | Fluorene | 10. | U | | |
| 100-01-6 | 4-Nitroaniline | 25. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10. | U | | |
| 101-55-3 | 4-Bromophenyl-phenylether | 10. | U | | |
| 118-74-1 | Hexachlorobenzene | 10. | U | | |
| 87-86-5 | Pentachlorophenol | 25. | U | | |
| 85-01-8 | Phenanthrene | 10. | U | | |
| 120-12-7 | Anthracene | 10. | U | | |
| 86-74-8 | Carbazole | 10. | U | | |
| 84-74-2 | Di-n-butylphthalate | 10. | U | | |
| 206-44-0 | Fluoranthene | 10. | U | | |
| 129-00-0 | Pyrene | 10. | U | | |
| 85-68-7 | Butylbenzylphthalate | 10. | U | | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10. | U | | |
| 56-55-3 | Benzo(a)anthracene | 10. | U | | |
| 218-01-9 | Chrysene | 10. | U | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 10. | U | | |
| 117-84-0 | Di-n-octylphthalate | 10. | U | | |
| 205-99-2 | Benzo(b)fluoranthene | 10. | U | | |
| 207-08-9 | Benzo(k)fluoranthene | 10. | U | | |
| 50-32-8 | Benzo(a)pyrene | 10. | U | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 10. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 10. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 10. | U | R | D |

(1) - Cannot be separated from Diphenylamine

OGDEN VALIDATED

LEVEL D

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC155RX

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CDSD Case No.:NA SAS No.:NA SDG No.:5811M

Matrix: (soil/water) WATER Lab Sample ID:5811-07RX

Sample wt/vol: 1000.0 (g/ml) ML Lab File ID: XX107

Level: (low/med) LOW Date Received: 7/01/96

% Moisture: decanted: (Y/N) Date Extracted: 7/16/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/19/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |
| 5. | | | | | |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | |
| 9. | | | | | |
| 10. | | | | | |
| 11. | | | | | |
| 12. | | | | | |
| 13. | | | | | |
| 14. | | | | | |
| 15. | | | | | |
| 16. | | | | | |
| 17. | | | | | |
| 18. | | | | | |
| 19. | | | | | |
| 20. | | | | | |
| 21. | | | | | |
| 22. | | | | | |
| 23. | | | | | |
| 24. | | | | | |
| 25. | | | | | |
| 26. | | | | | |
| 27. | | | | | |
| 28. | | | | | |
| 29. | | | | | |
| 30. | | | | | |

OGDEN VALIDATED 1-3



LEVEL D

OGDEN

# DATA VALIDATION REPORT

CLEAN CONTRACT TASK ORDER #136
NAF Midway Site Investigations

ANALYSIS: PESTICIDES/PCBs
SAMPLE DELIVERY GROUP: 5811M

Prepared by

Ogden—Denver Operations
550 South Wadsworth Boulevard, Suite 500
Lakewood, Colorado 80226

# CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

Ogden Environmental and Energy Services Co., Inc.
550 South Wadsworth Boulevard
Suite 500
Lakewood, CO 80226

Package ID: C136PP57
Task Order: 136
SDG No.: 5811M
No. of Analyses: 20

Laboratory: CEIMIC
Reviewer: H.Chang
Analysis/Method: Pesticides/PCBs

Date: 10/14/96
Reviewer's Signature: H. Chang

| ACTION ITEMS[a] | |
|---|---|
| 1. **Case Narrative Deficiencies** | |
| 2. **Out of Scope Analyses** | |
| 3. **Analyses Not Conducted** | |
| 4. **Missing Hardcopy Deliverables** | |
| 5. **Incorrect Hardcopy Deliverables** | Incorrect version of the SOW used for Summary Forms.<br>Form 6H, 6I, 6J are filled out incorrectly. |
| 6. **Deviations from Analysis Protocol, e.g.,** | The run time ~~inadequate~~ too short for adequate resolution. |
| Holding Times | % Resolution low in IndB on DB-1701 |
| GC/MS Tune/Inst. Perform | No GPC cleanup performed. |
| Calibrations | No GC/MS confirmation performed |
| Blanks | Two samples do not have valid method blank associated with them. |
| Surrogates | MS and MSD were extracted in a separate |
| Matrix Spike/Dup LCS | batch. MS MSD pair must be prepped in |
| Field QC | a same batch. |
| Internal Standard Performance | Overall system performance was poor. |
| Compound Identification and Quantitation | |
| System Performance | |

| COMMENTS[b] |
|---|
| |

[a] Subcontracted analytical laboratory is not meeting contract and/or method requirements.
[b] Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.

# 1. INTRODUCTION

| | |
|---|---|
| Task Order Title: | NAF Midway Site Investigations |
| CLEAN Contract Task Order #: | 0136 |
| SDG#: | 5811M |
| CTO Manager: | J. Cotter |
| Project Contact: | M. Medeiros |
| Matrix: | Soil/Water |
| Analysis: | Pesticides/PCBs |
| NEESA QC Level: | D |
| No. of Samples: | 20 |
| No. of Reanalyses/Dilutions: | 1 |
| Reviewer: | H.Chang |
| Date of Review: | October 10, 1996 |

The samples listed in Table 1 were validated based on the guidelines outlined in the Ogden *Project Procedures Manual, Comprehensive Long-Term Environmental Action Navy (CLEAN) Program* data validation procedure for Level C and D pesticides/PCBs (DVP-4, Rev. 2) and the *National Functional Guidelines For Organic Data Review* (2/94). Any deviations from these procedures are documented herein. These procedures are designed to meet the data quality objectives required by the Naval Energy and Environmental Support Activity for all analyses at the requested QC level. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

## Table 1. Sample identification

| Client ID | EPA ID | Laboratory ID | Matrix | COC Method |
|---|---|---|---|---|
| M01TS06S01 | MC111 | 5811-01DL | soil | OLM03.1P |
| M01TS06S02 | MC112 | 5811-02 | soil | OLM03.1P |
| M01TS07S01 | MC113 | 5811-03DL1 | soil | OLM03.1P |
| M01TS07S02 | MC114 | 5811-04DL1 | soil | OLM03.1P |
| M01TS08S01 | MC115 | 5811-05DL1 | soil | OLM03.1P |
| M01TS08S02 | MC116 | 5811-06DL1 | soil | OLM03.1P |
| M01TS08D02 | MC117 | 5811-08DL1 | soil | OLM03.1P |
| M01TS09S01 | MC118 | 5811-09DL1 | soil | OLM03.1P |
| M01TS09S02 | MC119 | 5811-10DL | soil | OLM03.1P |
| M01TS10S01 | MC120 | 5811-11DL | soil | OLM03.1P |
| M01TS10S02 | MC121 | 5811-12DL | soil | OLM03.1P |
| M01TS11S01 | MC122 | 5811-13DL1 | soil | OLM03.1P |
| M01TS11S01 | MC122DL | 5811-13DL | soil | OLM03.1P |
| M01TS11S02 | MC123 | 5811-14DL1 | soil | OLM03.1P |
| M01TS12S01 | MC124 | 5811-15DL | soil | OLM03.1P |
| M01TS12S02 | MC125 | 5811-16DL1 | soil | OLM03.1P |
| M01TS13S01 | MC126 | 5811-17 | soil | OLM03.1P |
| M01TS13D01 | MC127 | 5811-18 | soil | OLM03.1P |
| M01TS13S02 | MC128 | 5811-19DL1 | soil | OLM03.1P |
| M01TS14S01 | MC129 | 5811-20 | soil | OLM03.1P |
| M01QW01F01 | MC155 | 5811-07 | water | OLM03.1P |

# 2. DATA VALIDATION FINDINGS

## 2.1 SAMPLE MANAGEMENT

The following are findings associated with sample management:

### 2.1.1 Sample Preservation, Handling, and Transport

No preservations were required for pesticide/PCB analysis. There were no information regarding sample handling ad transport. No cooler temperatures were recorded on the COC. No qualifications were required.

### 2.1.2 Chain of Custody

All COCs were legible but were incomplete. All COCs were signed by field personnel. The laboratory did not complete the COCs. No signature of the person receiving the samples was on the COC and the questions regarding sample conditions were not answered on the COC. No qualifications were required based on sample receipt information.

### 2.1.3 Holding Times

All samples in this SDG were extracted and analyzed within the allowed holding times. No qualifications were assigned.

## 2.2 PESTICIDES INSTRUMENT PERFORMANCE

According to the summary forms and review of the raw data, the endrin/4,4´-DDT degradations were within QC limits. All surrogate retention times for the samples were within the allowed retention time windows as established by the initial calibrations. All calibration standard peaks were within established retention time windows. No qualifications were required.

All reported %resolutions in the initial resolution check were above 60% and were considered acceptable. However, several compounds in the continuing calibration check standards had %resolution below the 90% QC criteria for gamma chlordane/alpha chlordane on DB-1701 column. In addition, alpha chlordane/endosulfan I, dieldrin/4,4'-DDE, and endosulfan II/4,4'-DDD were noted to have overlapping retention time windows on the DB608 column, while endosulfan II/4,4'-DDD and alpha chlordane/gamma chlordane had overlapping retention time windows on the DB-1701. Poor resolution and overlapping retention time windows were a result of insufficient run times. The run time of 15 minutes was inadequate to provide adequate resolution and chromatography. The recommended instrument setup requires 30 to 35 minute run time. Customarily, the 15 minute run time is used for screening purposes to determine the initial dilution factors and is not adequate for an analytical run. Qualifications assigned due to possible coelution are noted in Section 2.10 and 2.11.

The Form 6H, Form 6I, and Form 6J for Individual Mixes and PEM resolution summary were filled out incorrectly. Percent resolution between two analytes should be recorded next to the analyte eluting earlier, and the last analyte on the Form should not have any %resolution recorded. The laboratory personnel were inconsistent in recording the resolution. Additionally, the actual resolution could not be accurately verified due to the poor presentation of the chromatograms.

In some of the samples, baseline rise was observed indicating possible column bleed. The column bleed may be the result of the sample matrix, as it was noted that many samples were highly contaminated with Aroclor 1260 and other pesticides. The erratic baseline caused poor integration of late eluting peaks, especially the surrogate DCB, causing elevated results. There were no evidence of the manual reintegration to correct the problems.

## 2.3 CALIBRATION

The following are findings associated with calibration:

### 2.3.1 Analytical Sequence

The analytical sequence met the requirements set in the CLP SOW OLM03.1 and was therefore acceptable.

### 2.3.2 Initial Calibration

The %RSDs were within the QC limit of 20% for all target compounds. No qualifications were assigned.

### 2.3.3 Continuing Calibration

The %Ds were within the QC limit of 25% for all target compounds. No transcription or calculation errors were noted; therefore, no qualifications were assigned to the data. The Form VII was reported using RPD notation which was used in the CLP SOW OLM01.8 or earlier version. The laboratory is using the incorrect version of the SOW for the summary forms.

## 2.4 BLANKS

Following are the findings associated with the blanks:

### 2.4.1 Instrument Blanks

No summary forms were supplied for the instrument blanks. Chromatograms and quantitation reports were reviewed for all instrument blanks and found no pesticide/PCB contamination above 1/2 the CRQLs; therefore, no qualifications were required.

### 2.4.2 Method Blanks

Two soil and one water method blank were extracted and analyzed with this SDG. No target compounds were detected in the method blanks, however, the soil method blanks had low level non-target compound contamination. No qualifications were assigned to the data.

The laboratory performed GPC clean up on one of the soil blank but not on the samples associated with this blank. The method blank must be process through same steps as the samples. Since the method blank was put through an additional cleanup stage, this method blank cannot be used to properly identify the contaminant in the samples introduced in the laboratory. Samples MC128 and MC129 associated with this blank cannot be evaluated for blank contamination. It is customary to reject detects in samples with no applicable method blank since the validity of detects are in question due to lack of evidence that the no contamination was introduced during analytical procedure. However, upon evaluation of the two samples in question, it was noted that the level of detects in these samples were very high and the analytes detected in the samples were consistent with the detects in the other samples from the same site; therefore, it is reviewer's professional judgement that it is highly improbable the detects in these samples are laboratory artifact and the detects were not rejected. Although no qualification resulted, it should be noted that this practice is not only non-compliant with the SOW, it is a very poor laboratory practice which can jeopardize the validity of the data.

## 2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

One water and two soil blank spike were extracted and analyzed with the samples in this SDG. The percent recoveries of all spiked compounds were within QC limits for both blank spikes; therefore, no qualifications were required. The reviewer noted that blank spike QC limits were the same as CLP MS/MSD limits.

## 2.6 SURROGATE RECOVERY

All samples, blanks, and spikes were noted to contain surrogate compounds. Review of the raw data indicated that a ten-fold dilution or greater resulted in non-quantifiable surrogate recoveries; therefore, samples analyzed at a 10× dilution or greater were not evaluated for surrogate performance. The reviewer noted that incorrect surrogate limits of 60 to 150 percent were used by the laboratory. The correct limits in CLP SOW OLM03.1, 30 to 150 %, were used to evaluate the data. The lab is using an earlier version of CLP SOW for the summary forms as noted in Section 2.3.3 which resulted in use of incorrect surrogate limits.

Three out of four surrogate recoveries were high in sample MC122 and one out of four surrogate recoveries were high in sample MC125. The evaluation of the chromatograms indicated that the high surrogate recoveries are due to baseline rise resulting in poor peak integration, which falsely elevated the peak area. No qualification was assigned to the samples.

## 2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

MS/MSD analyses were performed on sample MC117 and MC127. All %Rs and RPDs were within the QC limits for MC127MS/MSD. MC117MS/MSD were analyzed at 10× dilution resulting in many of the spiked analytes being diluted out; therefore, no evaluation could be made based on this MS/MSD pair. No qualifications were applied based on MS/MSD results.

MC127MS and MC127MSD were extracted in a different batch to one another. This is noncompliant with the SOW and a poor laboratory practice. The MS and MSD pair must be extracted in a same batch.

## 2.8 SAMPLE CLEANUP PERFORMANCE

Florisil cleanup was performed on all samples as required with acceptable recoveries for the florisil check sample. No GPC cleanup was performed for the soil samples as required by the CLP SOW OLM03.1; therefore, the laboratory is non-compliant with the SOW. However, no qualification of the data is required as omission of the cleanup does not necessarily affect the quantitation of the data. All sample chromatograms are evaluated for possible false positives resulting from interferences that may be present in the samples which would have been removed by GPC cleanup procedure.

## 2.9 FIELD QC SAMPLES

Field QC samples are evaluated, and if necessary, qualified based only on method blanks. Any remaining detects are used to evaluate the associated samples. The following are findings associated with field QC samples:

### 2.9.1 Field Blanks and Equipment Rinsates

Sample MC155 was identified as the field blank and MC145 and MC146 were identified as the equipment rinsates associated with the samples in this SDG. There were no detects for target compounds in any of the field QC samples; therefore, no qualifications were necessary.

### 2.9.2 Field Duplicates

Qualifications are not assigned to the data based on field duplicate results. Samples MC116/MC117 and MC126/MC127 were identified as the field duplicate pairs. Both MC116 and MC117 had detects for dieldrin, 4,4′-DDE, 4,4′-DDT, and Aroclor 1260 with RPDs below 100%. In sample MC126 and MC127, there was a detect for 4,4′-DDE in both samples with an RPD below 100%.

## 2.10 COMPOUND IDENTIFICATION

Compound identification was performed by the reviewer. Several potential false positives were identified by the reviewer. Raw data was reviewed to determine pattern matching for multicomponent compounds. Based on calculations of the Aroclors' peak ratio to the calibration standard and pattern matching, the reviewer determined that the single peak pesticides were identified as detects using same peaks used for Aroclor identification. Many of the Aroclor peaks fell within the retention time windows of the single peak pesticides on both columns. These detects for single peak pesticides in the presence of the Aroclor is highly suspect and should not be considered a valid identification. The following table summarizes the qualifications:

| Findings | Associated Samples | Qualification of Data |
|---|---|---|
| Aroclor-1260 peaks were used for the identification of endosulfan II. | MC112 | Endosulfan II was qualified as tentatively identified, "N" in the samples. |
| Aroclor-1260 peaks were used for the identification of endrin. | MC112<br>MC114<br>MC122<br>MC124<br>MC129 | Endrin was qualified as tentatively identified, "N" in the samples. |
| Aroclor-1260 peaks were used for the identification of endrin aldehyde. | MC112<br>MC113<br>MC114<br>MC115<br>MC128<br>MC129 | Endrin aldehyde was qualified as tentatively identified, "N" in the samples. |

The %Ds between the two column results exceeded 100% for several compounds and samples. The samples were qualified as follows:

| Findings | Associated Samples | Qualification of Data |
|---|---|---|
| The %D for 4,4´-DDD exceeded 100%. | MC114<br>MC115<br>MC122 | The samples were qualified as tentatively identified, "N." |
| The %D for 4,4´-DDT exceeded 100%. | MC113<br>MC115<br>MC116<br>MC117<br>MC121<br>MC122<br>MC123<br>MC125<br>MC124<br>MC128 | The samples were qualified as tentatively identified, "N." |

| Findings | Associated Samples | Qualification of Data |
|---|---|---|
| The %D for gamma-chlordane exceeded 100%. | MC122<br>MC124<br>MC125<br>MC128 | The samples were qualified as tentatively identified, "N." |

It should be noted that 4,4-´-DDD, 4,4´-DDT, dieldrin, and gamma-chlordane coelute with Aroclor 1260 on one of the columns; therefore, the two column confirmation of the detects for any of these compounds are not adequate. Although no additional qualification of the data was assigned, the data should be used with caution.

Sample MC126 had a detect for 4,4´-DDE at a concentration slightly below the CRQL, which the laboratory did not report. It was changed to a detect below the CRQL and was qualified "J."

There were several samples with detects at a concentration above the level required for GC/MS confirmation; however, there were no evidence of confirmation analysis in the data package. This is noncompliant with the CLP SOW OLM03.1.

## 2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantification was verified in the samples in this SDG. Samples MC135, MC138, MC141, MC142, and MC143 were analyzed at a 10× dilution. Sample MC137 was analyzed at a 2× dilution, sample MC136 was analyzed at 5× dilution, sample MC148 was analyzed at 20× and 200× dilution, and sample MC141 at a 100× dilution. Dilutions were performed due to high concentrations of Aroclors, 4,4´-DDE, and 4,4´-DDT. All reporting limits were consistent with the CRQLs listed in the CLP SOW OLM03.1 after adjustments for percent moisture, sample volume, and dilution factors.

The reported detects

| Findings | Associated Samples | Qualification of Data |
|---|---|---|
| Aroclor-1260 peaks were used for the quantitation of endosulfan II. | MC112 | Endosulfan II was qualified as estimated, "J" in the samples. |
| Aroclor-1260 peaks were used for the quantitation of endrin. | MC112<br>MC114<br>MC122<br>MC124<br>MC129 | Endrin was qualified as estimated, "J" in the samples. |
| Aroclor-1260 peaks were used for the quantitation of endrin aldehyde. | MC112<br>MC113<br>MC114<br>MC115<br>MC128<br>MC129 | Endrin aldehyde was qualified as tentatively identified, "J" in the samples. |

The %Ds between two column quantitations for several compounds exceeded 25% and were qualified as follows:

| Findings | Associated Samples | Qualification of Data |
|---|---|---|
| The %D for 4,4´-DDE exceeded 25%. | MC112<br>MC114<br>MC124<br>MC129 | The samples were qualified as estimated, "J." |
| The %D for 4,4´-DDD exceeded 25%. | MC112<br>MC114<br>MC115<br>MC121<br>MC122 | The samples were qualified as estimated, "J." |
| The %D for 4,4´-DDT exceeded 25%. | MC113<br>MC115<br>MC116<br>MC117<br>MC121<br>MC122<br>MC123<br>MC124<br>MC125<br>MC128<br>MC129 | The samples were qualified as estimated, "J." |
| The %D for dieldrin exceeded 25%. | MC117<br>MC124<br>MC128 | The samples were qualified as estimated, "J." |
| The %D for alpha-chlordane exceeded 25%. | MC124 | The samples were qualified as estimated, "J." |
| The %D for gamma-chlordane exceeded 25%. | MC122<br>MC123<br>MC124<br>MC125<br>MC128 | The samples were qualified as estimated, "J." |
| The %D for Aroclor-1260 exceeded 25%. | MC112<br>MC114<br>MC122<br>MC123<br>MC125<br>MC128 | The samples were qualified as estimated, "J." |

Quantitation results for Aroclor 1260 in samples MC112, MC116, MC117, MC123, MC124, and MC128 were recalculated on one of the two columns because a single target peak coeluting with Aroclor 1260were also used as one of the quantitation peaks for the Aroclor 1260. Concentrations were recalculated without those peaks. Reported concentration of Aroclor 1260 on the Form I in only two of the samples, MC124 and MC128, were affected by recalculation and the Form Is were corrected. Also the%D between two column quantitation results were recalculated. Samples MC112 initially had %D above 100%, the recalculated %Ds were below 100% but was above 25% and was qualified as noted in above table. Samples MC116, MC117, MC124 initially had %Ds above 25% but the recalculated %Ds were below 25% and required no qualifications. In sample MC128, %D was initially below 25% but the adjusted %D was above 25%. It was qualified as noted in the above table.

Sample MC122 was initially analyzed at 20× dilution and was reanalyzed at 5× dilution. Since the sample noted as MC122DL analyzed at 20× was an over-dilution, all analytes in this sample were rejected in favor of the better analysis of the sample, MC122.

Samples MC111, MC115, and MC118 were noted to have been analyzed at a dilution higher than appropriate.

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC111

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5811M

Matrix: (soil/water)SOIL Lab Sample ID: 5811-01DL

Sample wt/vol: 30.0 (g/ml)G Lab File ID:

% Moisture: 7 decanted: (Y/N) N Date Received: 7/01/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/02/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 7/13/96

Injection Volume: 1.0 (uL) Dilution Factor: 50.0

GPC Cleanup: (Y/N)N pH: 8.2 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg)UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 91. | U | u | |
| 319-85-7 | beta-BHC | 91. | U | | |
| 319-86-8 | delta-BHC | 91. | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 91. | U | | |
| 76-44-8 | Heptachlor | 91. | U | | |
| 309-00-2 | Aldrin | 91. | U | | |
| 1024-57-3 | Heptachlor epoxide | 91. | U | | |
| 959-98-8 | Endosulfan I | 91. | U | | |
| 60-57-1 | Dieldrin | 180. | U | | |
| 72-55-9 | 4,4'-DDE | 180. | U | | |
| 72-20-8 | Endrin | 180. | U | | |
| 33213-65-9 | Endosulfan II | 180. | U | | |
| 72-54-8 | 4,4'-DDD | 180. | U | | |
| 1031-07-8 | Endosulfan sulfate | 180. | U | | |
| 50-29-3 | 4,4'-DDT | 180. | U | | |
| 72-43-5 | Methoxychlor | 910. | U | | |
| 53494-70-5 | Endrin ketone | 180. | U | | |
| 7421-36-3 | Endrin aldehyde | 180. | U | | |
| 5103-71-9 | alpha-Chlordane | 91. | U | | |
| 5103-74-2 | gamma-Chlordane | 91. | U | | |
| 8001-35-2 | Toxaphene | 9100. | U | | |
| 12674-11-2 | Aroclor-1016 | 1800. | U | | |
| 11104-28-2 | Aroclor-1221 | 3600. | U | | |
| 11141-16-5 | Aroclor-1232 | 1800. | U | | |
| 53469-21-9 | Aroclor-1242 | 1800. | U | | |
| 12672-29-6 | Aroclor-1248 | 1800. | U | | |
| 11097-69-1 | Aroclor-1254 | 1800. | U | | |
| 11096-82-5 | Aroclor-1260 | 2000. | | | |



LEVEL D

OGDEN VALIDATED

11

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC112

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5811M

Matrix: (soil/water) SOIL  Lab Sample ID: 5811-02

Sample wt/vol: 30.3 (g/ml) G  Lab File ID:

% Moisture: 11 decanted: (Y/N) N  Date Received: 7/01/96

Extraction: (SepF/Cont/Sonc) SONC  Date Extracted: 7/02/96

Concentrated Extract Volume: 10000 (uL)  Date Analyzed: 7/17/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) N  pH: 8.0  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 1.9 | U | U | |
| 319-85-7 | beta-BHC | 1.9 | U | | |
| 319-86-8 | delta-BHC | 1.9 | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 1.9 | U | | |
| 76-44-8 | Heptachlor | 1.9 | U | | |
| 309-00-2 | Aldrin | 1.9 | U | | |
| 1024-57-3 | Heptachlor epoxide | 1.9 | U | | |
| 959-98-8 | Endosulfan I | 1.9 | U | | |
| 60-57-1 | Dieldrin | 3.7 | U | | |
| 72-55-9 | 4,4'-DDE | 14. | P | J | *11 |
| 72-20-8 | Endrin | 11. | P | NJ | *10 *11 |
| 33213-65-9 | Endosulfan II | 6.6 | P | NJ | *10 *11 |
| 72-54-8 | 4,4'-DDD | 22. | P | J | *11 |
| 1031-07-8 | Endosulfan sulfate | 3.7 | U | U | |
| 50-29-3 | 4,4'-DDT | 3.7 | U | | |
| 72-43-5 | Methoxychlor | 19. | U | | |
| 53494-70-5 | Endrin ketone | 3.7 | U | | |
| 7421-36-3 | Endrin aldehyde | 13. | | NJ | *10 *11 |
| 5103-71-9 | alpha-Chlordane | 3.1 | | | |
| 5103-74-2 | gamma-Chlordane | 1.9 | U | U | |
| 8001-35-2 | Toxaphene | 190. | U | | |
| 12674-11-2 | Aroclor-1016 | 37. | U | | |
| 11104-28-2 | Aroclor-1221 | 75. | U | | |
| 11141-16-5 | Aroclor-1232 | 37. | U | | |
| 53469-21-9 | Aroclor-1242 | 37. | U | | |
| 12672-29-6 | Aroclor-1248 | 37. | U | | |
| 11097-69-1 | Aroclor-1254 | 37. | U | | |
| 11096-82-5 | Aroclor-1260 | 230. | P | J | *11 |



LEVEL D

OGDEN VALIDATED

12

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC113

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5811M

Matrix: (soil/water) SOIL  Lab Sample ID: 5811-03DL1

Sample wt/vol: 30.4 (g/ml) G  Lab File ID:

% Moisture: 9 decanted: (Y/N) N  Date Received: 7/01/96

Extraction: (SepF/Cont/Sonc) SONC  Date Extracted: 7/02/96

Concentrated Extract Volume: 10000 (uL)  Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL)  Dilution Factor: 10.0

GPC Cleanup: (Y/N) N  pH: 8.3  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 18. | U | U | |
| 319-85-7 | beta-BHC | 18. | U | | |
| 319-86-8 | delta-BHC | 18. | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 18. | U | | |
| 76-44-8 | Heptachlor | 18. | U | | |
| 309-00-2 | Aldrin | 18. | U | | |
| 1024-57-3 | Heptachlor epoxide | 18. | U | | |
| 959-98-8 | Endosulfan I | 18. | U | | |
| 60-57-1 | Dieldrin | 36. | U | | |
| 72-55-9 | 4,4'-DDE | 36. | U | | |
| 72-20-8 | Endrin | 36. | U | | |
| 33213-65-9 | Endosulfan II | 36. | U | | |
| 72-54-8 | 4,4'-DDD | 36. | U | | |
| 1031-07-8 | Endosulfan sulfate | 36. | U | | |
| 50-29-3 | 4,4'-DDT | 44. | P | NJ | *10 *11 |
| 72-43-5 | Methoxychlor | 180. | U | U | |
| 53494-70-5 | Endrin ketone | 36. | U | U | |
| 7421-36-3 | Endrin aldehyde | 64. | P | NJ | *10 *11 |
| 5103-71-9 | alpha-Chlordane | 18. | U | U | |
| 5103-74-2 | gamma-Chlordane | 18. | U | | |
| 8001-35-2 | Toxaphene | 1800. | U | | |
| 12674-11-2 | Aroclor-1016 | 360. | U | | |
| 11104-28-2 | Aroclor-1221 | 730. | U | | |
| 11141-16-5 | Aroclor-1232 | 360. | U | | |
| 53469-21-9 | Aroclor-1242 | 360. | U | | |
| 12672-29-6 | Aroclor-1248 | 360. | U | | |
| 11097-69-1 | Aroclor-1254 | 360. | U | | |
| 11096-82-5 | Aroclor-1260 | 1200. | | | |

LEVEL D



OGDEN VALIDATED

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC114

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5811M

Matrix: (soil/water) SOIL  Lab Sample ID: 5811-04DL1

Sample wt/vol: 30.2 (g/ml) G  Lab File ID:

% Moisture: 9 decanted: (Y/N) N  Date Received: 7/01/96

Extraction: (SepF/Cont/Sonc) SONC  Date Extracted: 7/02/96

Concentrated Extract Volume: 10000 (uL)  Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL)  Dilution Factor: 10.0

GPC Cleanup: (Y/N) N  pH: 8.3  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 19. | U | U | |
| 319-85-7 | beta-BHC | 19. | U | | |
| 319-86-8 | delta-BHC | 19. | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 19. | U | | |
| 76-44-8 | Heptachlor | 19. | U | | |
| 309-00-2 | Aldrin | 19. | U | | |
| 1024-57-3 | Heptachlor epoxide | 19. | U | | |
| 959-98-8 | Endosulfan I | 19. | U | | |
| 60-57-1 | Dieldrin | 36. | U | | |
| 72-55-9 | 4,4'-DDE | 36. | P | J | *11 |
| 72-20-8 | Endrin | 45. | P | NJ | *10 *11 |
| 33213-65-9 | Endosulfan II | 36. | U | U | |
| 72-54-8 | 4,4'-DDD | 68. | P | NJ | *10 *11 |
| 1031-07-8 | Endosulfan sulfate | 36. | U | U | |
| 50-29-3 | 4,4'-DDT | 36. | U | | |
| 72-43-5 | Methoxychlor | 190. | U | | |
| 53494-70-5 | Endrin ketone | 36. | U | | |
| 7421-36-3 | Endrin aldehyde | 40. | | NJ | *10 *11 |
| 5103-71-9 | alpha-Chlordane | 19. | U | U | |
| 5103-74-2 | gamma-Chlordane | 19. | U | | |
| 8001-35-2 | Toxaphene | 1900. | U | | |
| 12674-11-2 | Aroclor-1016 | 360. | U | | |
| 11104-28-2 | Aroclor-1221 | 730. | U | | |
| 11141-16-5 | Aroclor-1232 | 360. | U | | |
| 53469-21-9 | Aroclor-1242 | 360. | U | | |
| 12672-29-6 | Aroclor-1248 | 360. | U | | |
| 11097-69-1 | Aroclor-1254 | 360. | U | | |
| 11096-82-5 | Aroclor-1260 | 700. | P | J | *11 |



LEVEL D

OGDEN VALIDATED

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC115

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5811M

Matrix: (soil/water) SOIL  Lab Sample ID: 5811-05DL1

Sample wt/vol: 30.4 (g/ml) G  Lab File ID:

% Moisture: 12 decanted: (Y/N) N  Date Received: 7/01/96

Extraction: (SepF/Cont/Sonc) SONC  Date Extracted: 7/02/96

Concentrated Extract Volume: 10000 (uL)  Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL)  Dilution Factor: 50.0

GPC Cleanup: (Y/N) N  pH: 8.1  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 95. | U | U | |
| 319-85-7 | beta-BHC | 95. | U | | |
| 319-86-8 | delta-BHC | 95. | U | | |
| 58-89-9 | gamma-BHC (Lindane) | 95. | U | | |
| 76-44-8 | Heptachlor | 95. | U | | |
| 309-00-2 | Aldrin | 95. | U | | |
| 1024-57-3 | Heptachlor epoxide | 95. | U | | |
| 959-98-8 | Endosulfan I | 95. | U | | |
| 60-57-1 | Dieldrin | 190. | U | | |
| 72-55-9 | 4,4'-DDE | 460. | | | |
| 72-20-8 | Endrin | 190. | U | U | |
| 33213-65-9 | Endosulfan II | 190. | U | U | |
| 72-54-8 | 4,4'-DDD | 200. | P | NJ | *10 *11 |
| 1031-07-8 | Endosulfan sulfate | 190. | U | U | |
| 50-29-3 | 4,4'-DDT | 670. | P | NJ | *10 *11 |
| 72-43-5 | Methoxychlor | 950. | U | U | |
| 53494-70-5 | Endrin ketone | 190. | U | U | |
| 7421-36-3 | Endrin aldehyde | 190. | P | NJ | *10 *11 |
| 5103-71-9 | alpha-Chlordane | 95. | U | U | |
| 5103-74-2 | gamma-Chlordane | 95. | U | | |
| 8001-35-2 | Toxaphene | 9500. | U | | |
| 12674-11-2 | Aroclor-1016 | 1900. | U | | |
| 11104-28-2 | Aroclor-1221 | 3800. | U | | |
| 11141-16-5 | Aroclor-1232 | 1900. | U | | |
| 53469-21-9 | Aroclor-1242 | 1900. | U | | |
| 12672-29-6 | Aroclor-1248 | 1900. | U | | |
| 11097-69-1 | Aroclor-1254 | 1900. | U | | |
| 11096-82-5 | Aroclor-1260 | 4600. | P | | |



OGDEN VALIDATED

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC116

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5811M

Matrix: (soil/water)SOIL Lab Sample ID: 5811-06DL1

Sample wt/vol: 30.0 (g/ml)G Lab File ID:

% Moisture: 10 decanted: (Y/N) N Date Received: 7/01/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/02/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N)N pH: 8.1 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg)UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 19. | U | U | |
| 319-85-7 | beta-BHC | 19. | U | | |
| 319-86-8 | delta-BHC | 19. | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 19. | U | | |
| 76-44-8 | Heptachlor | 19. | U | | |
| 309-00-2 | Aldrin | 19. | U | | |
| 1024-57-3 | Heptachlor epoxide | 19. | U | | |
| 959-98-8 | Endosulfan I | 19. | U | | |
| 60-57-1 | Dieldrin | 110. | | | |
| 72-55-9 | 4,4'-DDE | 80. | | | |
| 72-20-8 | Endrin | 37. | U | U | |
| 33213-65-9 | Endosulfan II | 37. | U | | |
| 72-54-8 | 4,4'-DDD | 37. | U | | |
| 1031-07-8 | Endosulfan sulfate | 37. | U | | |
| 50-29-3 | 4,4'-DDT | 120. | P | NJ | #10 #11 |
| 72-43-5 | Methoxychlor | 190. | U | U | |
| 53494-70-5 | Endrin ketone | 37. | U | | |
| 7421-36-3 | Endrin aldehyde | 37. | U | | |
| 5103-71-9 | alpha-Chlordane | 19. | U | | |
| 5103-74-2 | gamma-Chlordane | 19. | U | | |
| 8001-35-2 | Toxaphene | 1900. | U | | |
| 12674-11-2 | Aroclor-1016 | 370. | U | | |
| 11104-28-2 | Aroclor-1221 | 740. | U | | |
| 11141-16-5 | Aroclor-1232 | 370. | U | | |
| 53469-21-9 | Aroclor-1242 | 370. | U | | |
| 12672-29-6 | Aroclor-1248 | 370. | U | | |
| 11097-69-1 | Aroclor-1254 | 370. | U | | |
| 11096-82-5 | Aroclor-1260 | 770. | P | | |



LEVEL D
OGDEN VALIDATED

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC117

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5811M

Matrix: (soil/water)SOIL Lab Sample ID: 5811-08DL1

Sample wt/vol: 30.1 (g/ml)G Lab File ID:

% Moisture: 10 decanted: (Y/N) N Date Received: 7/01/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/02/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N)N pH: 8.1 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg)UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 19. | U | U | |
| 319-85-7 | beta-BHC | 19. | U | | |
| 319-86-8 | delta-BHC | 19. | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 19. | U | | |
| 76-44-8 | Heptachlor | 19. | U | | |
| 309-00-2 | Aldrin | 19. | U | | |
| 1024-57-3 | Heptachlor epoxide | 19. | U | | |
| 959-98-8 | Endosulfan I | 19. | U | | |
| 60-57-1 | Dieldrin | 100. | P | J | *11 |
| 72-55-9 | 4,4'-DDE | 81. | | | |
| 72-20-8 | Endrin | 37. | U | U | |
| 33213-65-9 | Endosulfan II | 37. | U | | |
| 72-54-8 | 4,4'-DDD | 37. | U | | |
| 1031-07-8 | Endosulfan sulfate | 37. | U | | |
| 50-29-3 | 4,4'-DDT | 91. | P | NJ | *10 *11 |
| 72-43-5 | Methoxychlor | 190. | U | U | |
| 53494-70-5 | Endrin ketone | 37. | U | | |
| 7421-36-3 | Endrin aldehyde | 37. | U | | |
| 5103-71-9 | alpha-Chlordane | 19. | U | | |
| 5103-74-2 | gamma-Chlordane | 19. | U | | |
| 8001-35-2 | Toxaphene | 1900. | U | | |
| 12674-11-2 | Aroclor-1016 | 370. | U | | |
| 11104-28-2 | Aroclor-1221 | 740. | U | | |
| 11141-16-5 | Aroclor-1232 | 370. | U | | |
| 53469-21-9 | Aroclor-1242 | 370. | U | | |
| 12672-29-6 | Aroclor-1248 | 370. | U | | |
| 11097-69-1 | Aroclor-1254 | 370. | U | | |
| 11096-82-5 | Aroclor-1260 | 760. | P | | |



LEVEL D

017

OGDEN VALIDATED

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC118

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5811M

Matrix: (soil/water) SOIL  Lab Sample ID: 5811-09DL1

Sample wt/vol: 30.3 (g/ml) G  Lab File ID:

% Moisture: 10 decanted: (Y/N) N  Date Received: 7/01/96

Extraction: (SepF/Cont/Sonc) SONC  Date Extracted: 7/02/96

Concentrated Extract Volume: 10000 (uL)  Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL)  Dilution Factor: 10.0

GPC Cleanup: (Y/N) N  pH: 8.2  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 19. | U | U | |
| 319-85-7 | beta-BHC | 19. | U | | |
| 319-86-8 | delta-BHC | 19. | U | | |
| 58-89-9 | gamma-BHC (Lindane) | 19. | U | | |
| 76-44-8 | Heptachlor | 19. | U | | |
| 309-00-2 | Aldrin | 19. | U | | |
| 1024-57-3 | Heptachlor epoxide | 19. | U | | |
| 959-98-8 | Endosulfan I | 19. | U | | |
| 60-57-1 | Dieldrin | 36. | U | | |
| 72-55-9 | 4,4'-DDE | 38. | | | |
| 72-20-8 | Endrin | 36. | U | U | |
| 33213-65-9 | Endosulfan II | 36. | U | | |
| 72-54-8 | 4,4'-DDD | 36. | U | | |
| 1031-07-8 | Endosulfan sulfate | 36. | U | | |
| 50-29-3 | 4,4'-DDT | 36. | U | | |
| 72-43-5 | Methoxychlor | 190. | U | | |
| 53494-70-5 | Endrin ketone | 36. | U | | |
| 7421-36-3 | Endrin aldehyde | 36. | U | | |
| 5103-71-9 | alpha-Chlordane | 19. | U | | |
| 5103-74-2 | gamma-Chlordane | 19. | U | | |
| 8001-35-2 | Toxaphene | 1900. | U | | |
| 12674-11-2 | Aroclor-1016 | 360. | U | | |
| 11104-28-2 | Aroclor-1221 | 740. | U | | |
| 11141-16-5 | Aroclor-1232 | 360. | U | | |
| 53469-21-9 | Aroclor-1242 | 360. | U | | |
| 12672-29-6 | Aroclor-1248 | 360. | U | | |
| 11097-69-1 | Aroclor-1254 | 360. | U | | |
| 11096-82-5 | Aroclor-1260 | 670. | | | |

LEVEL D



OGDEN VALIDATED

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC119

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5811M

Matrix: (soil/water)SOIL Lab Sample ID: 5811-10DL

Sample wt/vol: 30.0 (g/ml)G Lab File ID:

% Moisture: 9 decanted: (Y/N) N Date Received: 7/01/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/02/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 7/13/96

Injection Volume: 1.0 (uL) Dilution Factor: 50.0

GPC Cleanup: (Y/N)N pH: 7.9 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg)UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 93. | U | U | |
| 319-85-7 | beta-BHC | 93. | U | | |
| 319-86-8 | delta-BHC | 93. | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 93. | U | | |
| 76-44-8 | Heptachlor | 93. | U | | |
| 309-00-2 | Aldrin | 93. | U | | |
| 1024-57-3 | Heptachlor epoxide | 93. | U | | |
| 959-98-8 | Endosulfan I | 93. | U | | |
| 60-57-1 | Dieldrin | 180. | U | | |
| 72-55-9 | 4,4'-DDE | 180. | U | | |
| 72-20-8 | Endrin | 180. | U | | |
| 33213-65-9 | Endosulfan II | 180. | U | | |
| 72-54-8 | 4,4'-DDD | 180. | U | | |
| 1031-07-8 | Endosulfan sulfate | 180. | U | | |
| 50-29-3 | 4,4'-DDT | 180. | U | | |
| 72-43-5 | Methoxychlor | 930. | U | | |
| 53494-70-5 | Endrin ketone | 180. | U | | |
| 7421-36-3 | Endrin aldehyde | 180. | U | | |
| 5103-71-9 | alpha-Chlordane | 93. | U | | |
| 5103-74-2 | gamma-Chlordane | 93. | U | | |
| 8001-35-2 | Toxaphene | 9300. | U | | |
| 12674-11-2 | Aroclor-1016 | 1800. | U | | |
| 11104-28-2 | Aroclor-1221 | 3700. | U | | |
| 11141-16-5 | Aroclor-1232 | 1800. | U | | |
| 53469-21-9 | Aroclor-1242 | 1800. | U | | |
| 12672-29-6 | Aroclor-1248 | 1800. | U | | |
| 11097-69-1 | Aroclor-1254 | 1800. | U | | |
| 11096-82-5 | Aroclor-1260 | 2400. | | | |

FORM I PEST 3/90

LEVEL D

019

OGDEN VALIDATED

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC120

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5811M

Matrix: (soil/water) SOIL  Lab Sample ID: 5811-11DL

Sample wt/vol: 30.0 (g/ml) G  Lab File ID:

% Moisture: 17 decanted: (Y/N) N  Date Received: 7/01/96

Extraction: (SepF/Cont/Sonc) SONC  Date Extracted: 7/02/96

Concentrated Extract Volume: 10000 (uL)  Date Analyzed: 7/13/96

Injection Volume: 1.0 (uL)  Dilution Factor: 50.0

GPC Cleanup: (Y/N) N  pH: 8.0  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 100. | U | U | |
| 319-85-7 | beta-BHC | 100. | U | | |
| 319-86-8 | delta-BHC | 100. | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 100. | U | | |
| 76-44-8 | Heptachlor | 100. | U | | |
| 309-00-2 | Aldrin | 100. | U | | |
| 1024-57-3 | Heptachlor epoxide | 100. | U | | |
| 959-98-8 | Endosulfan I | 100. | U | | |
| 60-57-1 | Dieldrin | 200. | U | | |
| 72-55-9 | 4,4'-DDE | 200. | U | | |
| 72-20-8 | Endrin | 200. | U | | |
| 33213-65-9 | Endosulfan II | 200. | U | | |
| 72-54-8 | 4,4'-DDD | 200. | U | | |
| 1031-07-8 | Endosulfan sulfate | 200. | U | | |
| 50-29-3 | 4,4'-DDT | 200. | U | | |
| 72-43-5 | Methoxychlor | 1000. | U | | |
| 53494-70-5 | Endrin ketone | 200. | U | | |
| 7421-36-3 | Endrin aldehyde | 200. | U | | |
| 5103-71-9 | alpha-Chlordane | 100. | U | | |
| 5103-74-2 | gamma-Chlordane | 100. | U | | |
| 8001-35-2 | Toxaphene | 10000. | U | | |
| 12674-11-2 | Aroclor-1016 | 2000. | U | | |
| 11104-28-2 | Aroclor-1221 | 4000. | U | | |
| 11141-16-5 | Aroclor-1232 | 2000. | U | | |
| 53469-21-9 | Aroclor-1242 | 2000. | U | | |
| 12672-29-6 | Aroclor-1248 | 2000. | U | | |
| 11097-69-1 | Aroclor-1254 | 2000. | U | | |
| 11096-82-5 | Aroclor-1260 | 2000. | | | |



LEVEL D

020

OGDEN VALIDATED

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC121

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5811M

Matrix: (soil/water)SOIL Lab Sample ID: 5811-12DL

Sample wt/vol: 30.4 (g/ml)G Lab File ID:

% Moisture: 18 decanted: (Y/N) N Date Received: 7/01/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/02/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 7/13/96

Injection Volume: 1.0 (uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N)N pH: 7.9 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg)UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 41. | U | U | |
| 319-85-7 | beta-BHC | 41. | U | | |
| 319-86-8 | delta-BHC | 41. | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 41. | U | | |
| 76-44-8 | Heptachlor | 41. | U | | |
| 309-00-2 | Aldrin | 41. | U | | |
| 1024-57-3 | Heptachlor epoxide | 41. | U | | |
| 959-98-8 | Endosulfan I | 41. | U | | |
| 60-57-1 | Dieldrin | 79. | U | | |
| 72-55-9 | 4,4'-DDE | 320. | | | |
| 72-20-8 | Endrin | 79. | U | U | |
| 33213-65-9 | Endosulfan II | 79. | U | U | |
| 72-54-8 | 4,4'-DDD | 100. | P | J | #11 |
| 1031-07-8 | Endosulfan sulfate | 79. | U | | |
| 50-29-3 | 4,4'-DDT | 140. | P | NJ | #10 #11 |
| 72-43-5 | Methoxychlor | 410. | U | U | |
| 53494-70-5 | Endrin ketone | 79. | U | | |
| 7421-36-3 | Endrin aldehyde | 79. | U | | |
| 5103-71-9 | alpha-Chlordane | 41. | U | | |
| 5103-74-2 | gamma-Chlordane | 41. | U | | |
| 8001-35-2 | Toxaphene | 4100. | U | | |
| 12674-11-2 | Aroclor-1016 | 790. | U | | |
| 11104-28-2 | Aroclor-1221 | 1600. | U | | |
| 11141-16-5 | Aroclor-1232 | 790. | U | | |
| 53469-21-9 | Aroclor-1242 | 790. | U | | |
| 12672-29-6 | Aroclor-1248 | 790. | U | | |
| 11097-69-1 | Aroclor-1254 | 790. | U | | |
| 11096-82-5 | Aroclor-1260 | 830. | | | |



LEVEL D 021

OGDEN VALIDATED

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC122

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5811M

Matrix: (soil/water) SOIL  Lab Sample ID: 5811-13DL1

Sample wt/vol: 30.4 (g/ml) G  Lab File ID:

% Moisture: 10 decanted: (Y/N) N  Date Received: 7/01/96

Extraction: (SepF/Cont/Sonc) SONC  Date Extracted: 7/02/96

Concentrated Extract Volume: 10000 (uL)  Date Analyzed: 7/17/96

Injection Volume: 1.0 (uL)  Dilution Factor: 5.0

GPC Cleanup: (Y/N) N  pH: 8.5  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 9.3 | U | U | |
| 319-85-7 | beta-BHC | 9.3 | U | | |
| 319-86-8 | delta-BHC | 9.3 | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 9.3 | U | | |
| 76-44-8 | Heptachlor | 9.3 | U | | |
| 309-00-2 | Aldrin | 9.3 | U | | |
| 1024-57-3 | Heptachlor epoxide | 9.3 | U | | |
| 959-98-8 | Endosulfan I | 9.3 | U | | |
| 60-57-1 | Dieldrin | 18. | U | | |
| 72-55-9 | 4,4'-DDE | 110. | | | |
| 72-20-8 | Endrin | 36. | P | NJ | *10 *11 |
| 33213-65-9 | Endosulfan II | 18. | U | U | |
| 72-54-8 | 4,4'-DDD | 19. | P | NJ | *10 *11 |
| 1031-07-8 | Endosulfan sulfate | 18. | U | U | |
| 50-29-3 | 4,4'-DDT | 84. | P | NJ | *10 *11 |
| 72-43-5 | Methoxychlor | 93. | U | U | |
| 53494-70-5 | Endrin ketone | 18. | U | | |
| 7421-36-3 | Endrin aldehyde | 18. | U | | |
| 5103-71-9 | alpha-Chlordane | 140. | | | |
| 5103-74-2 | gamma-Chlordane | 160. | P | NJ | *10 *11 |
| 8001-35-2 | Toxaphene | 930. | U | U | |
| 12674-11-2 | Aroclor-1016 | 180. | U | | |
| 11104-28-2 | Aroclor-1221 | 370. | U | | |
| 11141-16-5 | Aroclor-1232 | 180. | U | | |
| 53469-21-9 | Aroclor-1242 | 180. | U | | |
| 12672-29-6 | Aroclor-1248 | 180. | U | | |
| 11097-69-1 | Aroclor-1254 | 180. | U | | |
| 11096-82-5 | Aroclor-1260 | 520. | P | J | *11 |



LEVEL D

022

OGDEN VALIDATED

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC122DL

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5811M

Matrix: (soil/water)SOIL Lab Sample ID: 5811-13DL

Sample wt/vol: 30.4 (g/ml)G Lab File ID:

% Moisture: 10 decanted: (Y/N) N Date Received: 7/01/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/02/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 7/13/96

Injection Volume: 1.0 (uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N)N pH: 8.5 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg)UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 37. | U | R | D |
| 319-85-7 | beta-BHC | 37. | U | | |
| 319-86-8 | delta-BHC | 37. | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 37. | U | | |
| 76-44-8 | Heptachlor | 37. | U | | |
| 309-00-2 | Aldrin | 37. | U | | |
| 1024-57-3 | Heptachlor epoxide | 37. | U | | |
| 959-98-8 | Endosulfan I | 37. | U | | |
| 60-57-1 | Dieldrin | 72. | U | | |
| 72-55-9 | 4,4'-DDE | 120. | D | | |
| 72-20-8 | Endrin | 72. | U | | |
| 33213-65-9 | Endosulfan II | 72. | U | | |
| 72-54-8 | 4,4'-DDD | 72. | U | | |
| 1031-07-8 | Endosulfan sulfate | 72. | U | | |
| 50-29-3 | 4,4'-DDT | 87. | DP | | |
| 72-43-5 | Methoxychlor | 370. | U | | |
| 53494-70-5 | Endrin ketone | 72. | U | | |
| 7421-36-3 | Endrin aldehyde | 72. | U | | |
| 5103-71-9 | alpha-Chlordane | 190. | D | | |
| 5103-74-2 | gamma-Chlordane | 200. | DP | | |
| 8001-35-2 | Toxaphene | 3700. | U | | |
| 12674-11-2 | Aroclor-1016 | 720. | U | | |
| 11104-28-2 | Aroclor-1221 | 1500. | U | | |
| 11141-16-5 | Aroclor-1232 | 720. | U | | |
| 53469-21-9 | Aroclor-1242 | 720. | U | | |
| 12672-29-6 | Aroclor-1248 | 720. | U | | |
| 11097-69-1 | Aroclor-1254 | 720. | U | | |
| 11096-82-5 | Aroclor-1260 | 720. | U | | |



OGDEN VALIDATED

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC123

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5811M

Matrix: (soil/water) SOIL  Lab Sample ID: 5811-14DL1

Sample wt/vol: 30.1 (g/ml) G  Lab File ID:

% Moisture: 9 decanted: (Y/N) N  Date Received: 7/01/96

Extraction: (SepF/Cont/Sonc) SONC  Date Extracted: 7/02/96

Concentrated Extract Volume: 10000 (uL)  Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL)  Dilution Factor: 20.0

GPC Cleanup: (Y/N) N  pH: 8.3  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | Rev. Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 37. | U | U | |
| 319-85-7 | beta-BHC | 37. | U | | |
| 319-86-8 | delta-BHC | 37. | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 37. | U | | |
| 76-44-8 | Heptachlor | 37. | U | | |
| 309-00-2 | Aldrin | 37. | U | | |
| 1024-57-3 | Heptachlor epoxide | 37. | U | | |
| 959-98-8 | Endosulfan I | 37. | U | | |
| 60-57-1 | Dieldrin | 72. | U | | |
| 72-55-9 | 4,4'-DDE | 300. | | | |
| 72-20-8 | Endrin | 72. | U | U | |
| 33213-65-9 | Endosulfan II | 72. | U | | |
| 72-54-8 | 4,4'-DDD | 72. | U | | |
| 1031-07-8 | Endosulfan sulfate | 72. | U | | |
| 50-29-3 | 4,4'-DDT | 160. | P | NJ | *10 *11 |
| 72-43-5 | Methoxychlor | 370. | U | U | |
| 53494-70-5 | Endrin ketone | 72. | U | | |
| 7421-36-3 | Endrin aldehyde | 72. | U | | |
| 5103-71-9 | alpha-Chlordane | 470. | | | |
| 5103-74-2 | gamma-Chlordane | 500. | P | J | *11 |
| 8001-35-2 | Toxaphene | 3700. | U | U | |
| 12674-11-2 | Aroclor-1016 | 720. | U | | |
| 11104-28-2 | Aroclor-1221 | 1500. | U | | |
| 11141-16-5 | Aroclor-1232 | 720. | U | | |
| 53469-21-9 | Aroclor-1242 | 720. | U | | |
| 12672-29-6 | Aroclor-1248 | 720. | U | | |
| 11097-69-1 | Aroclor-1254 | 720. | U | | |
| 11096-82-5 | Aroclor-1260 | 1400. | P | J | *11 |



LEVEL D 024

OGDEN VALIDATED

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC124

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5811M

Matrix: (soil/water) SOIL  Lab Sample ID: 5811-15DL

Sample wt/vol: 30.0 (g/ml) G  Lab File ID:

% Moisture: 13 decanted: (Y/N) N  Date Received: 7/01/96

Extraction: (SepF/Cont/Sonc) SONC  Date Extracted: 7/02/96

Concentrated Extract Volume: 10000 (uL)  Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL)  Dilution Factor: 10.0

GPC Cleanup: (Y/N) N  pH: 8.0  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 20. | U | U | |
| 319-85-7 | beta-BHC | 20. | U | | |
| 319-86-8 | delta-BHC | 20. | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 20. | U | | |
| 76-44-8 | Heptachlor | 20. | U | | |
| 309-00-2 | Aldrin | 20. | U | | |
| 1024-57-3 | Heptachlor epoxide | 20. | U | | |
| 959-98-8 | Endosulfan I | 20. | U | | |
| 60-57-1 | Dieldrin | 60. | P | J | *11 |
| 72-55-9 | 4,4'-DDE | 100. | P | J | *11 |
| 72-20-8 | Endrin | 50. | P | NJ | *10 *11 |
| 33213-65-9 | Endosulfan II | 38. | U | U | |
| 72-54-8 | 4,4'-DDD | 38. | U | | |
| 1031-07-8 | Endosulfan sulfate | 38. | U | | |
| 50-29-3 | 4,4'-DDT | 86. | P | NJ | *10 *11 |
| 72-43-5 | Methoxychlor | 200. | U | U | |
| 53494-70-5 | Endrin ketone | 38. | U | | |
| 7421-36-3 | Endrin aldehyde | 38. | U | | |
| 5103-71-9 | alpha-Chlordane | 94. | P | J | *11 |
| 5103-74-2 | gamma-Chlordane | 120. | P | NJ | *10 *11 |
| 8001-35-2 | Toxaphene | 2000. | U | U | |
| 12674-11-2 | Aroclor-1016 | 380. | U | | |
| 11104-28-2 | Aroclor-1221 | 770. | U | | |
| 11141-16-5 | Aroclor-1232 | 380. | U | | |
| 53469-21-9 | Aroclor-1242 | 380. | U | | |
| 12672-29-6 | Aroclor-1248 | 380. | U | | |
| 11097-69-1 | Aroclor-1254 | 380. | U | | |
| 11096-82-5 | Aroclor-1260 | 520 ~~600.~~ | P | | $, ~~*11~~ |



LEVEL D 025

10/15/96

OGDEN VALIDATED

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC125

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5811M

Matrix: (soil/water) SOIL  Lab Sample ID: 5811-16DL1

Sample wt/vol: 30.1 (g/ml) G  Lab File ID:

% Moisture: 10 decanted: (Y/N) N  Date Received: 7/01/96

Extraction: (SepF/Cont/Sonc) SONC  Date Extracted: 7/02/96

Concentrated Extract Volume: 10000 (uL)  Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL)  Dilution Factor: 5.0

GPC Cleanup: (Y/N) N  pH: 8.3  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 9.4 | U | U | |
| 319-85-7 | beta-BHC | 9.4 | U | | |
| 319-86-8 | delta-BHC | 9.4 | U | | |
| 58-89-9 | gamma-BHC (Lindane) | 9.4 | U | | |
| 76-44-8 | Heptachlor | 9.4 | U | | |
| 309-00-2 | Aldrin | 9.4 | U | | |
| 1024-57-3 | Heptachlor epoxide | 9.4 | U | | |
| 959-98-8 | Endosulfan I | 9.4 | U | | |
| 60-57-1 | Dieldrin | 18. | U | | |
| 72-55-9 | 4,4'-DDE | 130. | | | |
| 72-20-8 | Endrin | 18. | U | U | |
| 33213-65-9 | Endosulfan II | 18. | U | | |
| 72-54-8 | 4,4'-DDD | 18. | U | | |
| 1031-07-8 | Endosulfan sulfate | 18. | U | | |
| 50-29-3 | 4,4'-DDT | 49. | P | NJ | *10 *11 |
| 72-43-5 | Methoxychlor | 94. | U | U | |
| 53494-70-5 | Endrin ketone | 18. | U | | |
| 7421-36-3 | Endrin aldehyde | 18. | U | | |
| 5103-71-9 | alpha-Chlordane | 55. | | | |
| 5103-74-2 | gamma-Chlordane | 63. | P | NJ | *10 *11 |
| 8001-35-2 | Toxaphene | 940. | U | U | |
| 12674-11-2 | Aroclor-1016 | 180. | U | | |
| 11104-28-2 | Aroclor-1221 | 370. | U | | |
| 11141-16-5 | Aroclor-1232 | 180. | U | | |
| 53469-21-9 | Aroclor-1242 | 180. | U | | |
| 12672-29-6 | Aroclor-1248 | 180. | U | | |
| 11097-69-1 | Aroclor-1254 | 180. | U | | |
| 11096-82-5 | Aroclor-1260 | 410. | P | J | *11 |



LEVEL D

026

OGDEN VALIDATED

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC126

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5811M

Matrix: (soil/water)SOIL Lab Sample ID: 5811-17

Sample wt/vol: 30.4 (g/ml)G Lab File ID:

% Moisture: 11 decanted: (Y/N) N Date Received: 7/01/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/02/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 7/16/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N)N pH: 7.7 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg)UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 1.9 | U | u | |
| 319-85-7 | beta-BHC | 1.9 | U | | |
| 319-86-8 | delta-BHC | 1.9 | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 1.9 | U | | |
| 76-44-8 | Heptachlor | 1.9 | U | | |
| 309-00-2 | Aldrin | 1.9 | U | | |
| 1024-57-3 | Heptachlor epoxide | 1.9 | U | | |
| 959-98-8 | Endosulfan I | 1.9 | U | | |
| 60-57-1 | Dieldrin | 3.7 | U | | |
| 72-55-9 | 4,4'-DDE | 3.1 ~~3.7~~ | U | | - |
| 72-20-8 | Endrin | 3.7 | U | | |
| 33213-65-9 | Endosulfan II | 3.7 | U | | |
| 72-54-8 | 4,4'-DDD | 3.7 | U | | |
| 1031-07-8 | Endosulfan sulfate | 3.7 | U | | |
| 50-29-3 | 4,4'-DDT | 3.7 | U | | |
| 72-43-5 | Methoxychlor | 19. | U | | |
| 53494-70-5 | Endrin ketone | 3.7 | U | | |
| 7421-36-3 | Endrin aldehyde | 3.7 | U | | |
| 5103-71-9 | alpha-Chlordane | 1.9 | U | | |
| 5103-74-2 | gamma-Chlordane | 1.9 | U | | |
| 8001-35-2 | Toxaphene | 190. | U | | |
| 12674-11-2 | Aroclor-1016 | 37. | U | | |
| 11104-28-2 | Aroclor-1221 | 74. | U | | |
| 11141-16-5 | Aroclor-1232 | 37. | U | | |
| 53469-21-9 | Aroclor-1242 | 37. | U | | |
| 12672-29-6 | Aroclor-1248 | 37. | U | | |
| 11097-69-1 | Aroclor-1254 | 37. | U | | |
| 11096-82-5 | Aroclor-1260 | 37. | U | | |



LEVEL D 027

OGDEN VALIDATED

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC127

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5811M

Matrix: (soil/water)SOIL Lab Sample ID: 5811-18

Sample wt/vol: 30.2 (g/ml)G Lab File ID:

% Moisture: 11 decanted: (Y/N) N Date Received: 7/01/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/02/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 7/16/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N)N pH: 8.0 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg)UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 1.9 | U | U | |
| 319-85-7 | beta-BHC | 1.9 | U | | |
| 319-86-8 | delta-BHC | 1.9 | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 1.9 | U | | |
| 76-44-8 | Heptachlor | 1.9 | U | | |
| 309-00-2 | Aldrin | 1.9 | U | | |
| 1024-57-3 | Heptachlor epoxide | 1.9 | U | | |
| 959-98-8 | Endosulfan I | 1.9 | U | | |
| 60-57-1 | Dieldrin | 3.7 | U | | |
| 72-55-9 | 4,4'-DDE | 4.4 | | | |
| 72-20-8 | Endrin | 3.7 | U | U | |
| 33213-65-9 | Endosulfan II | 3.7 | U | | |
| 72-54-8 | 4,4'-DDD | 3.7 | U | | |
| 1031-07-8 | Endosulfan sulfate | 3.7 | U | | |
| 50-29-3 | 4,4'-DDT | 3.7 | U | | |
| 72-43-5 | Methoxychlor | 19. | U | | |
| 53494-70-5 | Endrin ketone | 3.7 | U | | |
| 7421-36-3 | Endrin aldehyde | 3.7 | U | | |
| 5103-71-9 | alpha-Chlordane | 1.9 | U | | |
| 5103-74-2 | gamma-Chlordane | 1.9 | U | | |
| 8001-35-2 | Toxaphene | 190. | U | | |
| 12674-11-2 | Aroclor-1016 | 37. | U | | |
| 11104-28-2 | Aroclor-1221 | 75. | U | | |
| 11141-16-5 | Aroclor-1232 | 37. | U | | |
| 53469-21-9 | Aroclor-1242 | 37. | U | | |
| 12672-29-6 | Aroclor-1248 | 37. | U | | |
| 11097-69-1 | Aroclor-1254 | 37. | U | | |
| 11096-82-5 | Aroclor-1260 | 37. | U | | |



LEVEL D 028

OGDEN VALIDATED

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC128

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5811M

Matrix: (soil/water)SOIL Lab Sample ID: 5811-19DL1

Sample wt/vol: 30.2 (g/ml)G Lab File ID:

% Moisture: 16 decanted: (Y/N) N Date Received: 7/01/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/02/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 7/16/96

Injection Volume: 1.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N)N pH: 8.3 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg)UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 10. | U | U | |
| 319-85-7 | beta-BHC | 10. | U | | |
| 319-86-8 | delta-BHC | 10. | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 10. | U | | |
| 76-44-8 | Heptachlor | 10. | U | | |
| 309-00-2 | Aldrin | 10. | U | | |
| 1024-57-3 | Heptachlor epoxide | 10. | U | | |
| 959-98-8 | Endosulfan I | 10. | U | | |
| 60-57-1 | Dieldrin | 26. | P | J | *11 |
| 72-55-9 | 4,4'-DDE | 110. | | | |
| 72-20-8 | Endrin | 20. | U | U | |
| 33213-65-9 | Endosulfan II | 20. | U | | |
| 72-54-8 | 4,4'-DDD | 20. | U | | |
| 1031-07-8 | Endosulfan sulfate | 20. | U | | |
| 50-29-3 | 4,4'-DDT | 31. | P | NJ | *10 *11 |
| 72-43-5 | Methoxychlor | 100. | U | U | |
| 53494-70-5 | Endrin ketone | 20. | U | U | |
| 7421-36-3 | Endrin aldehyde | 39. | P | NJ | *10 *11 |
| 5103-71-9 | alpha-Chlordane | 25. | | | |
| 5103-74-2 | gamma-Chlordane | 19. | P | NJ | *10 *11 |
| 8001-35-2 | Toxaphene | 1000. | U | U | |
| 12674-11-2 | Aroclor-1016 | 200. | U | | |
| 11104-28-2 | Aroclor-1221 | 400. | U | | |
| 11141-16-5 | Aroclor-1232 | 200. | U | | |
| 53469-21-9 | Aroclor-1242 | 200. | U | | |
| 12672-29-6 | Aroclor-1248 | 200. | U | | |
| 11097-69-1 | Aroclor-1254 | 200. | U | | |
| 11096-82-5 | Aroclor-1260 | 605 ~~740~~. | | J | $, *11 |

FORM I PEST 3/90

LEVEL D
029

OGDEN VALIDATED

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC129

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5811M

Matrix: (soil/water) SOIL  Lab Sample ID: 5811-20

Sample wt/vol: 30.3 (g/ml) G  Lab File ID:

% Moisture: 9 decanted: (Y/N) N  Date Received: 7/01/96

Extraction: (SepF/Cont/Sonc) SONC  Date Extracted: 7/02/96

Concentrated Extract Volume: 10000 (uL)  Date Analyzed: 7/16/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) N  pH: 8.5  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 1.8 | U | U | |
| 319-85-7 | beta-BHC | 1.8 | U | | |
| 319-86-8 | delta-BHC | 1.8 | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 1.8 | U | | |
| 76-44-8 | Heptachlor | 1.8 | U | | |
| 309-00-2 | Aldrin | 1.8 | U | | |
| 1024-57-3 | Heptachlor epoxide | 1.8 | U | | |
| 959-98-8 | Endosulfan I | 1.8 | U | | |
| 60-57-1 | Dieldrin | 3.6 | U | | |
| 72-55-9 | 4,4'-DDE | 48. | P | J | *11 |
| 72-20-8 | Endrin | 8.3 | P | NJ | *10 *11 |
| 33213-65-9 | Endosulfan II | 3.6 | U | U | |
| 72-54-8 | 4,4'-DDD | 23. | | | |
| 1031-07-8 | Endosulfan sulfate | 3.6 | U | U | |
| 50-29-3 | 4,4'-DDT | 63. | P | J | *11 |
| 72-43-5 | Methoxychlor | 18. | U | U | |
| 53494-70-5 | Endrin ketone | 3.6 | U | U | |
| 7421-36-3 | Endrin aldehyde | 7.3 | P | NJ | *10 *11 |
| 5103-71-9 | alpha-Chlordane | 1.8 | U | U | |
| 5103-74-2 | gamma-Chlordane | 1.8 | U | | |
| 8001-35-2 | Toxaphene | 180. | U | | |
| 12674-11-2 | Aroclor-1016 | 36. | U | | |
| 11104-28-2 | Aroclor-1221 | 73. | U | | |
| 11141-16-5 | Aroclor-1232 | 36. | U | | |
| 53469-21-9 | Aroclor-1242 | 36. | U | | |
| 12672-29-6 | Aroclor-1248 | 36. | U | | |
| 11097-69-1 | Aroclor-1254 | 36. | U | | |
| 11096-82-5 | Aroclor-1260 | 150. | | | |



OGDEN VALIDATED

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC155

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5811M

Matrix: (soil/water) WATER  Lab Sample ID: 5811-07

Sample wt/vol: 1000 (g/ml) ML  Lab File ID:

% Moisture: decanted: (Y/N)  Date Received: 7/01/96

Extraction: (SepF/Cont/Sonc) CONT  Date Extracted: 7/01/96

Concentrated Extract Volume: 10000 (uL)  Date Analyzed: 7/11/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) N  pH: 0.0  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.05 | U | U | |
| 319-85-7 | beta-BHC | 0.05 | U | | |
| 319-86-8 | delta-BHC | 0.05 | U | | |
| 58-89-9 | gamma-BHC (Lindane) | 0.05 | U | | |
| 76-44-8 | Heptachlor | 0.05 | U | | |
| 309-00-2 | Aldrin | 0.05 | U | | |
| 1024-57-3 | Heptachlor epoxide | 0.05 | U | | |
| 959-98-8 | Endosulfan I | 0.05 | U | | |
| 60-57-1 | Dieldrin | 0.10 | U | | |
| 72-55-9 | 4,4'-DDE | 0.10 | U | | |
| 72-20-8 | Endrin | 0.10 | U | | |
| 33213-65-9 | Endosulfan II | 0.10 | U | | |
| 72-54-8 | 4,4'-DDD | 0.10 | U | | |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U | | |
| 50-29-3 | 4,4'-DDT | 0.10 | U | | |
| 72-43-5 | Methoxychlor | 0.50 | U | | |
| 53494-70-5 | Endrin ketone | 0.10 | U | | |
| 7421-36-3 | Endrin aldehyde | 0.10 | U | | |
| 5103-71-9 | alpha-Chlordane | 0.05 | U | | |
| 5103-74-2 | gamma-Chlordane | 0.05 | U | | |
| 8001-35-2 | Toxaphene | 5.0 | U | | |
| 12674-11-2 | Aroclor-1016 | 1.0 | U | | |
| 11104-28-2 | Aroclor-1221 | 2.0 | U | | |
| 11141-16-5 | Aroclor-1232 | 1.0 | U | | |
| 53469-21-9 | Aroclor-1242 | 1.0 | U | | |
| 12672-29-6 | Aroclor-1248 | 1.0 | U | | |
| 11097-69-1 | Aroclor-1254 | 1.0 | U | | |
| 11096-82-5 | Aroclor-1260 | 1.0 | U | | |

LEVEL D



OGDEN VALIDATED

OGDEN

# DATA VALIDATION REPORT

CLEAN CONTRACT TASK ORDER #136
NAF Midway Site Investigations

ANALYSIS: SEMIVOLATILES

SAMPLE DELIVERY GROUP: 5812M

Prepared by

Ogden—Denver Operations
550 South Wadsworth Boulevard Suite 500
Lakewood, Colorado 80226

# CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

Ogden Environmental and Energy Services Co., Inc.
550 South Wadsworth Boulevard
Suite 500
Lakewood, CO 80226

Package ID C136SV31
Task Order 11619013b
SDG No. 5812M
No. of Analyses 17

Laboratory Cimic
Reviewer D. Ilczyszyn
Analysis/Method Semivolatiles

Date: 9/26/96
Reviewer's Signature

| ACTION ITEMS[a] | |
|---|---|
| 1. **Case Narrative Deficiencies** | |
| 2. **Out of Scope Analyses** | |
| 3. **Analyses Not Conducted** | |
| 4. **Missing Hardcopy Deliverables** | |
| 5. **Incorrect Hardcopy Deliverables** | |
| 6. **Deviations from Analysis Protocol, e.g.,** | Qual's were given due to calibrations & blanks. |
| Holding Times | |
| GC/MS Tune/Inst. Perform | |
| Calibrations | |
| Blanks | |
| Surrogates | |
| Matrix Spike/Dup LCS | |
| Field QC | |
| Internal Standard Performance | |
| Compound Identification and Quantitation | |
| System Performance | |

| COMMENTS[b] |
|---|
| |

[a] Subcontracted analytical laboratory is not meeting contract and/or method requirements.
[b] Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.

# 1. INTRODUCTION

| | |
|---|---|
| Task Order Title: | NAF Midway SI/RI |
| CLEAN Contract Task Order #: | 0136 |
| SDG#: | 5812M |
| CTO Manager: | J. Cotter |
| Project Contact: | M. Medeiros |
| Matrix: | Water/Soil |
| Analysis: | Semivolatiles |
| NEESA QC Level: | D |
| No. of Samples: | 17 |
| No. of Reanalyses/Dilutions: | 2 |
| Reviewer: | D. Ilczyszyn |
| Date of Review: | 9/25/96 |

The samples listed in Table 1 were validated based on the guidelines outlined in the Ogden *Project Procedures Manual, Comprehensive Long-Term Environmental Action Navy (CLEAN) Program* data validation procedure for Levels C and D semivolatile organics (DVP-3, Rev. 2), and the *National Functional Guidelines For Organic Data Review* (2/94). Any deviations from these procedures and guidelines are documented herein. These procedures and guidelines are designed to meet the data quality objectives required by the Naval Energy and Environmental Support Activity for all analyses at the requested QC levels. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

**Table 1. Sample identification**

| Client ID | EPA ID | Lab ID | Matrix | COC Method |
|---|---|---|---|---|
| M01TS01S01 | MC100 | 5812-01 | soil | |
| M01TS01S02 | MC101 | 5812-02 | soil | OLM01.8B |
| M01TS02S01 | MC102 | 5812-03 | soil | OLM01.8B |
| M01TS02S02 | MC103 | 5812-04 | soil | OLM01.8B |
| M01TS03S01 | MC104 | 5812-05 | soil | OLM01.8B |
| M01TS03S02 | MC105 | 5812-06 | soil | OLM01.8B |
| M01TS04S01 | MC106 | 5812-10 | soil | OLM01.8B |
| M01TS04S02 | MC107 | 5812-11 | soil | OLM01.8B |
| M01TS05S01 | MC108 | 5812-12 | soil | OLM01.8B |
| M01TS05D01 | MC109 | 5812-13 | soil | OLM01.8B |
| M01TS05S02 | MC110 | 5812-14 | soil | OLM01.8B |
| M01TS14S02 | MC130 | 5812-16 | soil | OLM01.8B |
| M01TS15S01 | MC131 | 5812-17 | soil | OLM01.8B |
| M01TS15S02 | MC132 | 5812-18 | soil | OLM01.8B |
| M01PS01S01 | MC144 | 5812-07 | soil | OLM01.8B |
| M01PS01S01A | MC144A | 5812-09 | soil | OLM01.8B |
| M01QW02E02 | MC145 | 5812-08 | water | OLM01.8B |
| M01QW02E02 | MC145RX | 5812-08RX | water | OLM01.8B |
| M01QW14E02 | MC146 | 5812-15 | water | OLM01.8B |

# 2. DATA VALIDATION FINDINGS

## 2.1 SAMPLE MANAGEMENT

Following are findings associated with sample management:

### 2.1.1 Sample Preservation, Handling, and Transport

All of the samples in this SDG were within temperature limits specified in NEESA 20.2-047B upon arrival at the laboratory. No problems were noted during sample handling and transport. No qualifications were given to the data.

### 2.1.2 Chain of Custody

All COCs were legible but were incomplete. All COCs were signed by field personnel. The laboraoratory did not complete the COCs. No signature of the person receiving the samples was on the COC and the questions regarding sample condition upon receipt were not answered on the COC. Per B. Wessel, Ogden - honolulu, the Client ID for sample MC144A was amended to M01PS01S01A. No qualifications were given based upon sample receipt information.

### 2.1.3 Holding Times

All samples, with the exception of MC145RX, were extracted and analyzed within required holding times. Sample MC145RX was rejected for all compounds so no qualifications were required due to holding times.

## 2.2 GC/MS TUNING

All tunes met the criteria specified in the organic CLP SOW (3/90) and were therefore acceptable. No qualifications were required. No transcription errors were found.

## 2.3 CALIBRATION

According to the CLP Forms VI and VII N-Nitrosodiphenylamine was not detected in any of the calibrations. A further examination of the raw data by the reviewer revealed that this compound was detected in all calibrations. The reviewer calculated all RRFs, %Ds, and %RSDs for this compound with no problems found. It was assumed by the reviewer that the method was being updated with the daily calibration and that N-Nitrosodiphenylamine was actually searched for in the samples requiring no qualifications. Calculations of RRFs, %Ds, and %RSDs were checked for some analytes from the raw data and no calculation errors were found. The initial calibrations from 7/9/96 and 7/7/96 had acceptable %RSD values for all compounds. The continuing calibrations had high %D values for several compounds. The affected samples and the qualifications given are listed in the following table.

| Calibration Findings | Affected Samples | Qualifications Given |
|---|---|---|
| For the continuing calibration dated 7/14/96 (HP3) the following compounds had high %D values: phenol, hexachlorocyclopentadiene, 2-nitroaniline, 2,4-dinitrophenol, fluorene, carbazole, di-n-octyl-phthalate, and benzo(b)fluoranthene. | MC101, MC102 MC103, MC131 MC110 | Nondetects qualified "UJ." Detects qualified "J." |
| For the continuing calibration dated 7/15/96 (HP3) the following compounds had high %D values: 3-nitroaniline, 2,4-dinitrophenol, fluorene, and 3,3´-dichlorobenzidine. | MC104, MC105 MC130 | Nondetects qualified "UJ." Detects qualified "J." |
| For the continuing calibration dated 7/7/96 (HP7) the following compounds had high %D values: 4-chloroaniline and 3,3´-dichlorobenzidine. | MC106, MC144 MC107, MC109 MC108, MC100 MC132 | Nondetects qualified "UJ." |

## 2.4 BLANKS

There were two water blanks and one soil method blank analyzed with the samples in this SDG. SBLK02 and SBLK03 were free from target compound and TIC detects. SBLK01 had detects for bis(2-ethylhexyl)phthalate and ten TICs. All soil samples, with the exception of MC105, had common TICs rejected. All soil samples had bis(2-ethylhexyl)phthalate qualified as a nondetect if the value was below the reporting limit or an estimated nondetect if the value was above the reporting limit. No other qualifications were required due to method blank contamination.

## 2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

Two water and a soil blank spike were analyzed with acceptable results. Qualifications were not required.

## 2.6 SURROGATE RECOVERY

Sample MC145 had low recoveries of 2-fluorophenol and 2-chlorophenol-d4. The sample was reextracted outside of holding time with acceptable results. Sample MC145 is a field QC sample requiring no qualifications due to low surrogate recoveries; therefore, the reextraction was rejected for all compounds. All remaining samples had surrogate spike recoveries within control limits. No qualifications were needed based on the surrogate recoveries.

## 2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

MS/MSD analysis was performed on sample MC109 with low pentachlorophenol recoveries. All RPD values were acceptable. Qualifications were not required since the blank spike samples had acceptable recoveries.

## 2.8 FIELD QC SAMPLES

Field QC samples were evaluated and, if necessary, qualified based on method blanks only (see Section 2.4). Remaining detects were then used to qualify the samples. The following are findings associated with field QC samples:

### 2.8.1 Field Blanks and Equipment Rinsates

Samples MC145 and MC146 were the equipment rinsates associated with this SDG. Sample MC155 (SDG: 5811M) was the field blank associated with the samples in this SDG. All field QC samples were free from target compound detects and TICs; therefore, no qualifications were required.

### 2.8.2 Duplicates

Samples MC108/MC109 were identified as field duplicate samples associated with this SDG. The samples were free from target compound detects; however, each sample had several TICs detected. Qualifications were not required.

## 2.9 INTERNAL STANDARDS PERFORMANCE

The retention times of all the internal standards for the samples were within ±30 seconds of the retention times for the associated calibration standards. The area counts for the samples were within +100% and -50% of the associated calibration standards. No qualifications were required.

## 2.10 TARGET COMPOUND LIST IDENTIFICATION

The laboratory analyzed for the CLP SOW (3/90) semivolatile target compounds. Chromatograms, retention times, and spectra were all examined and no problems were noted.

## 2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

The reporting limits were consistent with the latest version of the organic CLP SOW (3/90). The reporting limits were evaluated using the low level standard of the initial calibration and were found to be acceptable. Compound quantification and percent moisture adjustments were verified from detects in the samples.

Sample MC144 was identified as a performance evaluation sample. The results are summarized in the following table.

| Analyte | Certified Value (µg/kg) | Advisory Range (µg/kg) | Laboratory Result (µg/kg) |
|---|---|---|---|
| Anthracene | 9930 | 2020-10400 | 4000 |
| Benzo(b)fluoranthene | 7270 | 3030-8870 | 4000 |
| Benzo(a)pyrene | 3700 | 1190-3890 | 1600 |
| Butylbenzylphthalate | 4400 | 1810-5060 | 2700 |
| 4-Chlorophenyl-phenylether | 5510 | 3020-5790 | 4000 |
| Chrysene | 7950 | 3200-8430 | 4800 |
| Dibenzofuran | 11900 | 4430-12500 | 6000 |
| 1,2-Dichlorobenzene | 10000 | 1490-10500 | 520* |
| 2,4-Dinitrotoluene | 7050 | 2310-7400 | 4300 |
| Bis(2-ethylhexyl)phthalate | 3790 | 1840-4590 | 0* |
| Fluorene | 3150 | 1170-3310 | 1800 |
| Naphthalene | 6480 | 1110-6800 | 1500 |
| Phenanthrene | 7740 | 2840-8130 | 4400 |
| Pyrene | 3120 | 1010-3460 | 1800 |
| 1,2,4-Trichlorobenzene | 8970 | 1610-9420 | 1400* |
| 2,4-Dinitrophenol | 9210 | 2450-9670 | 0* |
| 2-Methylphenol | 7760 | 2050-8150 | 710* |
| Pentachlorophenol | 9170 | 2280-9630 | 4600 |
| 2,4,5-Trichlorophenol | 7020 | 2140-7370 | 3500 |
| 2,4,6-Trichlorophenol | 6330 | 2260-6650 | 2900 |

* value was outside of advisory range

## 2.12 TENTATIVELY IDENTIFIED COMPOUNDS

All TICs not rejected due to blank contamination were verified and qualified as "NJ." All TICs were properly identified from library spectra and quantitated from the nearest internal standard.

## 2.13 SYSTEM PERFORMANCE

A review of the chromatograms, spectral fits, and calibrations showed no identifiable problems with system performance.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC100

Lab Name:CEIMIC CORPORATION, SD  Contract:CTO 136

Lab Code:CCSD  Case No.:  SAS No.:  SDG No.:5812M

Matrix: (soil/water) SOIL  Lab Sample ID:5812-01

Sample wt/vol: 30.4 (g/ml) G  Lab File ID: AA180

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: 11 decanted: (Y/N) N  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL)  Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y  pH: 8.2

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 740. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 740. | U | | |
| 95-57-8 | 2-Chlorophenol | 740. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 740. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 740. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 740. | U | | |
| 95-48-7 | 2-Methylphenol | 740. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 740. | U | | |
| 106-44-5 | 4-Methylphenol | 740. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 740. | U | | |
| 67-72-1 | Hexachloroethane | 740. | U | | |
| 98-95-3 | Nitrobenzene | 740. | U | | |
| 78-59-1 | Isophorone | 740. | U | | |
| 88-75-5 | 2-Nitrophenol | 740. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 740. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 740. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 740. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 740. | U | | |
| 91-20-3 | Naphthalene | 740. | U | U | |
| 106-47-8 | 4-Chloroaniline | 740. | U | UJ | C |
| 87-68-3 | Hexachlorobutadiene | 740. | U | U | |
| 59-50-7 | 4-Chloro-3-methylphenol | 740. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 740. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 740. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 740. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 1800. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 740. | U | | |
| 88-74-4 | 2-Nitroaniline | 1800. | U | | |
| 131-11-3 | Dimethylphthalate | 740. | U | | |
| 208-96-8 | Acenaphthylene | 740. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 740. | U | | |
| 99-09-2 | 3-Nitroaniline | 1800. | U | | |
| 83-32-9 | Acenaphthene | 740. | U | U | |

Rev 1 DQ 10/3/96



OGDEN VALIDATED

/90

LEVEL

19

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC100

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No.:  SAS No.:  SDG No.: 5812M

Matrix: (soil/water) SOIL  Lab Sample ID: 5812-01

Sample wt/vol: 30.4 (g/ml) G  Lab File ID: AA180

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: 11 decanted: (Y/N) N  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL)  Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y  pH: 8.2

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 1800. | U | U | |
| 100-02-7 | 4-Nitrophenol | 1800. | U | | |
| 132-64-9 | Dibenzofuran | 740. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 740. | U | | |
| 84-66-2 | Diethylphthalate | 740. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 740. | U | | |
| 86-73-7 | Fluorene | 740. | U | | |
| 100-01-6 | 4-Nitroaniline | 1800. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 1800. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 740. | U | RU | ~~8~~ *3 |
| 101-55-3 | 4-Bromophenyl-phenylether | 740. | U | | |
| 118-74-1 | Hexachlorobenzene | 740. | U | | |
| 87-86-5 | Pentachlorophenol | 1800. | U | | |
| 85-01-8 | Phenanthrene | 740. | U | | |
| 120-12-7 | Anthracene | 740. | U | | |
| 86-74-8 | Carbazole | 740. | U | | |
| 84-74-2 | Di-n-butylphthalate | 740. | U | U | |
| 206-44-0 | Fluoranthene | 220. | J | J | |
| 129-00-0 | Pyrene | 230. | J | J | |
| 85-68-7 | Butylbenzylphthalate | 740. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 740. | U | UJ | C |
| 56-55-3 | Benzo(a)anthracene | 740. | U | U | |
| 218-01-9 | Chrysene | 150. | J | J | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 740 ~~640~~. | JB | U | B |
| 117-84-0 | Di-n-octylphthalate | 740. | U | U | |
| 205-99-2 | Benzo(b)fluoranthene | 150. | J | J | |
| 207-08-9 | Benzo(k)fluoranthene | 150. | J | J | |
| 50-32-8 | Benzo(a)pyrene | 740. | U | U | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 740. | U | U | |
| 53-70-3 | Dibenz(a,h)anthracene | 740. | U | U | |
| 191-24-2 | Benzo(g,h,i)perylene | 740. | U | U | |

(1) - Cannot be separated from Diphenylamine

OGDEN VALIDATED

LEVEL D

DL 9/26/96

Rev1 DL 10/3/96

FORM I SV-2

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC100

Lab Name:CEIMIC CORPORATION, SD  Contract:CTO 136

Lab Code:CCSD  Case No.:  SAS No.:  SDG No.:5812M

Matrix: (soil/water) SOIL  Lab Sample ID:5812-01

Sample wt/vol: 30.4 (g/ml) G  Lab File ID: AA180

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: 11 decanted: (Y/N) N  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL)  Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y  pH: 8.2

Number TICs Found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Unknown Hydrocarbon | 3.53 | 2000. | J | NJ | |
| 2. | Aldol Condensation Product | 4.69 | 2000. | JB | R | B |
| 3. | Unknown Hydrocarbon | 19.11 | 600. | J | NJ | |
| 4. | Unknown Hydrocarbon | 19.85 | 600. | J | NJ | |
| 5. | | | | | | |
| 6. | | | | | | |
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OGDEN VALIDATED

LEVEL D

Rev 1 DJ 10/3/96

FORM I SV-TIC  3/90

21

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC101

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) SOIL Lab Sample ID:5812-02

Sample wt/vol: 30.1 (g/ml) G Lab File ID: 01202

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: 7 decanted: (Y/N) N Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 8.3

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 720. | U | UJ | C |
| 111-44-4 | bis(2-Chloroethyl)ether | 720. | U | U | |
| 95-57-8 | 2-Chlorophenol | 720. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 720. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 720. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 720. | U | | |
| 95-48-7 | 2-Methylphenol | 720. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 720. | U | | |
| 106-44-5 | 4-Methylphenol | 720. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 720. | U | | |
| 67-72-1 | Hexachloroethane | 720. | U | | |
| 98-95-3 | Nitrobenzene | 720. | U | | |
| 78-59-1 | Isophorone | 720. | U | | |
| 88-75-5 | 2-Nitrophenol | 720. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 720. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 720. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 720. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 720. | U | | |
| 91-20-3 | Naphthalene | 720. | U | | |
| 106-47-8 | 4-Chloroaniline | 720. | U | | |
| 87-68-3 | Hexachlorobutadiene | 720. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 720. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 720. | U | U | |
| 77-47-4 | Hexachlorocyclopentadiene | 720. | U | UJ | C |
| 88-06-2 | 2,4,6-Trichlorophenol | 720. | U | U | |
| 95-95-4 | 2,4,5-Trichlorophenol | 1800. | U | U | |
| 91-58-7 | 2-Chloronaphthalene | 720. | U | U | |
| 88-74-4 | 2-Nitroaniline | 1800. | U | UJ | C |
| 131-11-3 | Dimethylphthalate | 720. | U | U | |
| 208-96-8 | Acenaphthylene | 720. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 720. | U | | |
| 99-09-2 | 3-Nitroaniline | 1800. | U | | |
| 83-32-9 | Acenaphthene | 720. | U | U | |

FORM I SV-1

OGDEN VALIDATED
3/90
LEVEL D

Rev1
DQ 10/7/96
22

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC101

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No.:  SAS No.:  SDG No.: 5812M

Matrix: (soil/water) SOIL  Lab Sample ID: 5812-02

Sample wt/vol: 30.1 (g/ml) G  Lab File ID: 01202

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: 7 decanted: (Y/N) N  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL)  Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y  pH: 8.3

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 1800. | U | UJ | C |
| 100-02-7 | 4-Nitrophenol | 1800. | U | U | |
| 132-64-9 | Dibenzofuran | 720. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 720. | U | | |
| 84-66-2 | Diethylphthalate | 720. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 720. | U | U | |
| 86-73-7 | Fluorene | 720. | U | UJ | C |
| 100-01-6 | 4-Nitroaniline | 1800. | U | U | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 1800. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 720. | U | RU | ~~B~~ ~~C~~ |
| 101-55-3 | 4-Bromophenyl-phenylether | 720. | U | | |
| 118-74-1 | Hexachlorobenzene | 720. | U | | |
| 87-86-5 | Pentachlorophenol | 1800. | U | U | |
| 85-01-8 | Phenanthrene | 420. | J | J | |
| 120-12-7 | Anthracene | 720. | U | U | |
| 86-74-8 | Carbazole | 720. | U | UJ | C |
| 84-74-2 | Di-n-butylphthalate | 720. | U | U | |
| 206-44-0 | Fluoranthene | 1800. | | | |
| 129-00-0 | Pyrene | 2100. | | | |
| 85-68-7 | Butylbenzylphthalate | 720. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 720. | U | U | |
| 56-55-3 | Benzo(a)anthracene | 1100. | | | |
| 218-01-9 | Chrysene | 1200. | | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 830. | B | UJ | B |
| 117-84-0 | Di-n-octylphthalate | 720. | U | UJ | C |
| 205-99-2 | Benzo(b)fluoranthene | 770. | | J | C |
| 207-08-9 | Benzo(k)fluoranthene | 740. | | | |
| 50-32-8 | Benzo(a)pyrene | 820. | | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 720. | U | U | |
| 53-70-3 | Dibenz(a,h)anthracene | 720. | U | U | |
| 191-24-2 | Benzo(g,h,i)perylene | 720. | U | U | |

(1) - Cannot be separated from Diphenylamine

OGDEN VALIDATED DQ 9/26/96

LEVEL D Rev1 23 DQ 12/3/96

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC101

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) SOIL Lab Sample ID:5812-02

Sample wt/vol: 30.1 (g/ml) G Lab File ID: 01202

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: 7 decanted: (Y/N) N Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 8.3

Number TICs Found: 23

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|---|
| 1. | | Unknown Hydrocarbon | 2.71 | 1000. | J | NJ | |
| 2. | | Unknown Hydrocarbon | 4.04 | 700. | J | NJ | |
| 3. | | Aldol Condensation Product | 6.08 | 1000. | JB | R | B |
| 4. | | Unknown Hydrocarbon | 22.24 | 600. | J | NJ | |
| 5. | | Unknown Hydrocarbon | 24.32 | 2000. | J | | |
| 6. | | Unknown Hydrocarbon | 24.67 | 2000. | J | | |
| 7. | | Unknown Hydrocarbon | 26.16 | 900. | J | | |
| 8. | | Unknown Hydrocarbon | 28.22 | 1000. | J | | |
| 9. | | Unknown Hydrocarbon | 29.29 | 1000. | J | | |
| 10. | | Unknown Hydrocarbon | 29.75 | 2000. | J | | |
| 11. | | Unknown Hydrocarbon | 30.51 | 1000. | J | | |
| 12. | | Unknown Hydrocarbon | 31.57 | 1000. | J | NJ | |
| 13. | | | | | | | |
| 14. | | | | | | | |
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OGDEN VALIDATED
LEVEL D

Rev 12/3/96

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC102

Lab Name:CEIMIC CORPORATION, SD  Contract:CTO 136

Lab Code:CCSD  Case No.:  SAS No.:  SDG No.:5812M

Matrix: (soil/water) SOIL  Lab Sample ID:5812-03

Sample wt/vol: 30.0 (g/ml) G  Lab File ID: O1203

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: 6 decanted: (Y/N) N  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 8.3

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 350. | U | UJ | C |
| 111-44-4 | bis(2-Chloroethyl)ether | 350. | U | U | |
| 95-57-8 | 2-Chlorophenol | 350. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 350. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 350. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 350. | U | | |
| 95-48-7 | 2-Methylphenol | 350. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 350. | U | | |
| 106-44-5 | 4-Methylphenol | 350. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 350. | U | | |
| 67-72-1 | Hexachloroethane | 350. | U | | |
| 98-95-3 | Nitrobenzene | 350. | U | | |
| 78-59-1 | Isophorone | 350. | U | | |
| 88-75-5 | 2-Nitrophenol | 350. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 350. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 350. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 350. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 350. | U | | |
| 91-20-3 | Naphthalene | 350. | U | | |
| 106-47-8 | 4-Chloroaniline | 350. | U | | |
| 87-68-3 | Hexachlorobutadiene | 350. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 350. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 350. | U | U | |
| 77-47-4 | Hexachlorocyclopentadiene | 350. | U | UJ | C |
| 88-06-2 | 2,4,6-Trichlorophenol | 350. | U | U | |
| 95-95-4 | 2,4,5-Trichlorophenol | 890. | U | U | |
| 91-58-7 | 2-Chloronaphthalene | 350. | U | U | |
| 88-74-4 | 2-Nitroaniline | 890. | U | UJ | C |
| 131-11-3 | Dimethylphthalate | 350. | U | U | |
| 208-96-8 | Acenaphthylene | 350. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 350. | U | | |
| 99-09-2 | 3-Nitroaniline | 890. | U | | |
| 83-32-9 | Acenaphthene | 350. | U | U | |

OGDEN VALIDATED
LEVEL D

Rev'd 10/3/96

FORM I SV-1

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC102

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No.:  SAS No.:  SDG No.: 5812M

Matrix: (soil/water) SOIL  Lab Sample ID: 5812-03

Sample wt/vol: 30.0 (g/ml) G  Lab File ID: O1203

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: 6 decanted: (Y/N) N  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 8.3

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 890. | U | UJ | C |
| 100-02-7 | 4-Nitrophenol | 890. | U | U | |
| 132-64-9 | Dibenzofuran | 350. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 350. | U | | |
| 84-66-2 | Diethylphthalate | 350. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 350. | U | U | |
| 86-73-7 | Fluorene | 350. | U | UJ | C |
| 100-01-6 | 4-Nitroaniline | 890. | U | U | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 890. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 350. | U | RU | D *3 |
| 101-55-3 | 4-Bromophenyl-phenylether | 350. | U | | |
| 118-74-1 | Hexachlorobenzene | 350. | U | | |
| 87-86-5 | Pentachlorophenol | 890. | U | | |
| 85-01-8 | Phenanthrene | 350. | U | | |
| 120-12-7 | Anthracene | 350. | U | U | |
| 86-74-8 | Carbazole | 350. | U | UJ | C |
| 84-74-2 | Di-n-butylphthalate | 350. | U | U | |
| 206-44-0 | Fluoranthene | 420. | | | |
| 129-00-0 | Pyrene | 490. | | | |
| 85-68-7 | Butylbenzylphthalate | 350. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 350. | U | U | |
| 56-55-3 | Benzo(a)anthracene | 280. | J | J | |
| 218-01-9 | Chrysene | 360. | | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 840. | B | UJ | B |
| 117-84-0 | Di-n-octylphthalate | 350. | U | UJ | C |
| 205-99-2 | Benzo(b)fluoranthene | 240. | J | J | C |
| 207-08-9 | Benzo(k)fluoranthene | 300. | J | J | |
| 50-32-8 | Benzo(a)pyrene | 350. | U | U | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 350. | U | U | |
| 53-70-3 | Dibenz(a,h)anthracene | 350. | U | U | |
| 191-24-2 | Benzo(g,h,i)perylene | 350. | U | U | |

(1) - Cannot be separated from Diphenylamine

OGDEN VALIDATED

Rev1 DE 10/3/96

DE 9/26/96

LEVEL D

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC102

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No.:  SAS No.:  SDG No.: 5812M

Matrix: (soil/water) SOIL  Lab Sample ID: 5812-03

Sample wt/vol: 30.0 (g/ml) G  Lab File ID: O1203

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: 6 decanted: (Y/N) N  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 8.3

Number TICs Found: 31

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Unknown Hydrocarbon | 2.56 | 300. | J | NJ | |
| 2. | Unknown Hydrocarbon | 2.70 | 1000. | J | | |
| 3. | Unknown Hydrocarbon | 2.84 | 400. | J | | |
| 4. | Unknown Hydrocarbon | 5.05 | 600. | J | NJ | |
| 5. | Aldol Condensation Product | 6.12 | 5000. | JB | R | B |
| 6. | Unknown Hydrocarbon | 8.40 | 300. | J | NJ | |
| 7. | Unknown Hydrocarbon | 22.24 | 600. | J | | |
| 8. | Unknown Polychlorinated Biph | 23.17 | 600. | J | | |
| 9. | Unknown Polychlorinated Biph | 23.57 | 400. | J | | |
| 10. | Unknown Hydrocarbon | 23.71 | 500. | J | | |
| 11. | Unknown Phthalate | 23.82 | 400. | J | | |
| 12. | Unknown Polychlorinated Biph | 23.96 | 400. | J | | |
| 13. | Unknown Hydrocarbon | 24.31 | 2000. | J | | |
| 14. | Unknown Hydrocarbon | 24.68 | 2000. | J | | |
| 15. | Unknown Hydrocarbon | 26.10 | 400. | J | | |
| 16. | Unknown Hydrocarbon | 31.58 | 700. | J | NJ | |
| 17. | | | | | | |
| 18. | | | | | | |
| 19. | | | | | | |
| 20. | | | | | | |
| 21. | | | | | | |
| 22. | | | | | | |
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OGDEN VALIDATED

LEVEL D

Rev 1
DL 10/3/96
27

FORM I SV-TIC  3/90

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC103

Lab Name:CEIMIC CORPORATION, SD  Contract:CTO 136

Lab Code:CCSD  Case No.:  SAS No.:  SDG No.:5812M

Matrix: (soil/water) SOIL  Lab Sample ID:5814-04

Sample wt/vol: 30.0 (g/ml) G  Lab File ID: 01204

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: 9 decanted: (Y/N) N  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 8.3

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 370. | U | UJ | C |
| 111-44-4 | bis(2-Chloroethyl)ether | 370. | U | U | |
| 95-57-8 | 2-Chlorophenol | 370. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 370. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 370. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 370. | U | | |
| 95-48-7 | 2-Methylphenol | 370. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 370. | U | | |
| 106-44-5 | 4-Methylphenol | 370. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 370. | U | | |
| 67-72-1 | Hexachloroethane | 370. | U | | |
| 98-95-3 | Nitrobenzene | 370. | U | | |
| 78-59-1 | Isophorone | 370. | U | | |
| 88-75-5 | 2-Nitrophenol | 370. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 370. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 370. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 370. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 370. | U | | |
| 91-20-3 | Naphthalene | 370. | U | | |
| 106-47-8 | 4-Chloroaniline | 370. | U | | |
| 87-68-3 | Hexachlorobutadiene | 370. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 370. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 370. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 370. | U | UJ | C |
| 88-06-2 | 2,4,6-Trichlorophenol | 370. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 920. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 370. | U | U | |
| 88-74-4 | 2-Nitroaniline | 920. | U | UJ | C |
| 131-11-3 | Dimethylphthalate | 370. | U | U | |
| 208-96-8 | Acenaphthylene | 370. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 370. | U | | |
| 99-09-2 | 3-Nitroaniline | 920. | U | | |
| 83-32-9 | Acenaphthene | 370. | U | U | |

OGDEN VALIDATED
LEVEL D

Rev'd DL 10/3/96

DL 9/26/96

23

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC103

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) SOIL Lab Sample ID:5814-04

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 01204

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: 9 decanted: (Y/N) N Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 920. | U | UJ | C |
| 100-02-7 | 4-Nitrophenol | 920. | U | U | |
| 132-64-9 | Dibenzofuran | 370. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 370. | U | | |
| 84-66-2 | Diethylphthalate | 370. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 370. | U | U | |
| 86-73-7 | Fluorene | 370. | U | UJ | C |
| 100-01-6 | 4-Nitroaniline | 920. | U | U | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 920. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 370. | U | UR | B*5 |
| 101-55-3 | 4-Bromophenyl-phenylether | 370. | U | | |
| 118-74-1 | Hexachlorobenzene | 370. | U | | |
| 87-86-5 | Pentachlorophenol | 920. | U | U | |
| 85-01-8 | Phenanthrene | 180. | J | J | |
| 120-12-7 | Anthracene | 370. | U | U | |
| 86-74-8 | Carbazole | 370. | U | UJ | C |
| 84-74-2 | Di-n-butylphthalate | 370. | U | U | |
| 206-44-0 | Fluoranthene | 470. | | | |
| 129-00-0 | Pyrene | 520. | | | |
| 85-68-7 | Butylbenzylphthalate | 370. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 370. | U | U | |
| 56-55-3 | Benzo(a)anthracene | 290. | J | J | |
| 218-01-9 | Chrysene | 350. | J | J | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 890. | B | UJ | B |
| 117-84-0 | Di-n-octylphthalate | 370. | U | UJ | C |
| 205-99-2 | Benzo(b)fluoranthene | 250. | J | J | C |
| 207-08-9 | Benzo(k)fluoranthene | 330. | J | J | |
| 50-32-8 | Benzo(a)pyrene | 370. | U | U | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 370. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 370. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 370. | U | U | |

(1) - Cannot be separated from Diphenylamine

9/23/96 9/26/96

OGDEN VALIDATED

LEVEL D

Rev1 12/3/96

FORM I SV-2 3/90

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC103

Lab Name:CEIMIC CORPORATION, SD  Contract:CTO 136

Lab Code:CCSD  Case No.:  SAS No.:  SDG No.:5812M

Matrix: (soil/water) SOIL  Lab Sample ID:5814-04

Sample wt/vol: 30.0 (g/ml) G  Lab File ID: 01204

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: 9 decanted: (Y/N) N  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 8.3

Number TICs Found: 32

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Unknown Hydrocarbon | 2.57 | 300. | J | NJ | |
| 2. | Unknown Hydrocarbon | 2.70 | 2000. | J | | |
| 3. | Unknown Hydrocarbon | 2.84 | 700. | J | | |
| 4. | Unknown Hydrocarbon | 4.04 | 400. | J | | |
| 5. | Unknown Hydrocarbon | 5.05 | 400. | J | NJ | |
| 6. | Aldol Condensation Product | 6.07 | 500. | JB | R | B |
| 7. | Unknown Hydrocarbon | 8.06 | 400. | J | NJ | |
| 8. | Unknown Hydrocarbon | 8.41 | 1000. | J | | |
| 9. | Unknown Hydrocarbon | 22.24 | 700. | J | | |
| 10. | Unknown Hydrocarbon | 22.55 | 2000. | J | | |
| 11. | Unknown Phthalate | 23.82 | 400. | J | | |
| 12. | Unknown Hydrocarbon | 24.14 | 400. | J | | |
| 13. | Unknown Hydrocarbon | 24.32 | 2000. | J | | |
| 14. | Unknown Hydrocarbon | 24.69 | 3000. | J | | |
| 15. | Unknown Hydrocarbon | 26.16 | 1000. | J | | |
| 16. | Unknown Hydrocarbon | 31.60 | 1000. | J | | |
| 17. | Unknown Hydrocarbon | 33.01 | 400. | J | NJ | |
| 18. | | | | | | |
| 19. | | | | | | |
| 20. | | | | | | |
| 21. | | | | | | |
| 22. | | | | | | |
| 23. | | | | | | |
| 24. | | | | | | |
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| 29. | | | | | | |
| 30. | | | | | | |

OGDEN VALIDATED

LEVEL D

Rev 1 DL 10/3/96

FORM I SV-TIC

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC104

Lab Name:CEIMIC CORPORATION, SD  Contract:CTO 136

Lab Code:CCSD  Case No.:  SAS No.:  SDG No.:5812M

Matrix: (soil/water) SOIL  Lab Sample ID:5812-05

Sample wt/vol: 30.1 (g/ml) G  Lab File ID: A1205

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: 8 decanted: (Y/N) N  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL)  Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y  pH: 8.4

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 720. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 720. | U | | |
| 95-57-8 | 2-Chlorophenol | 720. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 720. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 720. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 720. | U | | |
| 95-48-7 | 2-Methylphenol | 720. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 720. | U | | |
| 106-44-5 | 4-Methylphenol | 720. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 720. | U | | |
| 67-72-1 | Hexachloroethane | 720. | U | | |
| 98-95-3 | Nitrobenzene | 720. | U | | |
| 78-59-1 | Isophorone | 720. | U | | |
| 88-75-5 | 2-Nitrophenol | 720. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 720. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 720. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 720. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 720. | U | | |
| 91-20-3 | Naphthalene | 720. | U | | |
| 106-47-8 | 4-Chloroaniline | 720. | U | | |
| 87-68-3 | Hexachlorobutadiene | 720. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 720. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 720. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 720. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 720. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 1800. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 720. | U | | |
| 88-74-4 | 2-Nitroaniline | 1800. | U | | |
| 131-11-3 | Dimethylphthalate | 720. | U | U | |
| 208-96-8 | Acenaphthylene | 310. | J | J | |
| 606-20-2 | 2,6-Dinitrotoluene | 720. | U | U | |
| 99-09-2 | 3-Nitroaniline | 1800. | U | UJ | C |
| 83-32-9 | Acenaphthene | 2100. | | | |

OGDEN VALIDATED
LEVEL D

FORM I SV-1  3/90

Rev1 [illegible] 12/3/96

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC104

Lab Name:CEIMIC CORPORATION, SD  Contract:CTO 136

Lab Code:CCSD  Case No.:  SAS No.:  SDG No.:5812M

Matrix: (soil/water) SOIL  Lab Sample ID:5812-05

Sample wt/vol: 30.1 (g/ml) G  Lab File ID: A1205

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: 8 decanted: (Y/N) N  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL)  Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y  pH: 8.4

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 1800. | U | UJ | C |
| 100-02-7 | 4-Nitrophenol | 1800. | U | U | |
| 132-64-9 | Dibenzofuran | 420. | J | J | |
| 121-14-2 | 2,4-Dinitrotoluene | 720. | U | U | |
| 84-66-2 | Diethylphthalate | 720. | U | U | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 720. | U | U | |
| 86-73-7 | Fluorene | 1400. | | J | C |
| 100-01-6 | 4-Nitroaniline | 1800. | U | U | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 1800. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 720. | U | UR | ~~D~~ *3 |
| 101-55-3 | 4-Bromophenyl-phenylether | 720. | U | | |
| 118-74-1 | Hexachlorobenzene | 720. | U | | |
| 87-86-5 | Pentachlorophenol | 1800. | U | U | |
| 85-01-8 | Phenanthrene | 13000. | | | |
| 120-12-7 | Anthracene | 4000. | | | |
| 86-74-8 | Carbazole | 2300. | | | |
| 84-74-2 | Di-n-butylphthalate | 720. | U | U | |
| 206-44-0 | Fluoranthene | 19000. | | | |
| 129-00-0 | Pyrene | 19000. | | | |
| 85-68-7 | Butylbenzylphthalate | 4500. | | | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 720. | U | UJ | C |
| 56-55-3 | Benzo(a)anthracene | 11000. | | | |
| 218-01-9 | Chrysene | 10000. | | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 1300. | B | UJ | B |
| 117-84-0 | Di-n-octylphthalate | 720. | U | U | |
| 205-99-2 | Benzo(b)fluoranthene | 8500. | | | |
| 207-08-9 | Benzo(k)fluoranthene | 6500. | | | |
| 50-32-8 | Benzo(a)pyrene | 8600. | | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 2300. | | | |
| 53-70-3 | Dibenz(a,h)anthracene | 1300. | | | |
| 191-24-2 | Benzo(g,h,i)perylene | 720. | U | U | |

(1) - Cannot be separated from Diphenylamine

OGDEN VALIDATED

LEVEL D 9/26/96

Rev 10/3/96

FORM I SV-2

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC104

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) SOIL Lab Sample ID:5812-05

Sample wt/vol: 30.1 (g/ml) G Lab File ID: A1205

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: 8 decanted: (Y/N) N Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 8.4

Number TICs Found: 21

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|---|
| 1. | | Unknown Hydrocarbon | 2.70 | 600. | J | NJ | |
| 2. | | Aldol Condensation Product | 6.03 | 3000. | JB | R | B |
| 3. | | Unknown Polyaromatic Hydroca | 20.60 | 900. | J | NJ | |
| 4. | | Unknown Polyaromatic Hydroca | 20.65 | 1000. | J | | |
| 5. | | Unknown Polyaromatic Hydroca | 20.84 | 2000. | J | | |
| 6. | | Unknown Polyaromatic Hydroca | 21.26 | 700. | J | | |
| 7. | | Unknown Polyaromatic Hydroca | 23.15 | 1000. | J | | |
| 8. | | Unknown Polyaromatic Hydroca | 23.39 | 3000. | J | | |
| 9. | | Unknown Polyaromatic Hydroca | 23.53 | 2000. | J | | |
| 10. | | Unknown Polyaromatic Hydroca | 23.61 | 1000. | J | | |
| 11. | | Unknown Polyaromatic Hydroca | 23.80 | 1000. | J | | |
| 12. | | Unknown Polyaromatic Hydroca | 23.87 | 1000. | J | | |
| 13. | | Unknown Polyaromatic Hydroca | 24.33 | 2000. | J | | |
| 14. | | Unknown Polyaromatic Hydroca | 24.51 | 1000. | J | | |
| 15. | | Unknown Hydrocarbon | 24.69 | 2000. | J | | |
| 16. | | Unknown Polyaromatic Hydroca | 24.80 | 2000. | J | | |
| 17. | | Unknown Hydrocarbon | 25.95 | 1000. | J | | |
| 18. | | Unknown Polyaromatic Hydroca | 26.16 | 1000. | J | | |
| 19. | | Unknown Polyaromatic Hydroca | 26.49 | 1000. | J | | |
| 20. | | Unknown Polyaromatic Hydroca | 27.97 | 3000. | J | | |
| 21. | | Unknown Polyaromatic Hydroca | 28.43 | 4000. | J | NJ | |
| 22. | | | | | | | |
| 23. | | | | | | | |
| 24. | | | | | | | |
| 25. | | | | | | | |
| 26. | | | | | | | |
| 27. | | | | | | | |
| 28. | | | | | | | |
| 29. | | | | | | | |
| 30. | | | | | | | |

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FORM I SV-TIC 3/90

Rev DQ 12/3/96 LEVEL D

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC105

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No.:  SAS No.:  SDG No.: 5812M

Matrix: (soil/water) SOIL  Lab Sample ID: 5812-06

Sample wt/vol: 30.2 (g/ml) G  Lab File ID: A1206

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: 7 decanted: (Y/N) N  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL)  Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y  pH: 8.2

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 710. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 710. | U | | |
| 95-57-8 | 2-Chlorophenol | 710. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 710. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 710. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 710. | U | | |
| 95-48-7 | 2-Methylphenol | 710. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 710. | U | | |
| 106-44-5 | 4-Methylphenol | 710. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 710. | U | | |
| 67-72-1 | Hexachloroethane | 710. | U | | |
| 98-95-3 | Nitrobenzene | 710. | U | | |
| 78-59-1 | Isophorone | 710. | U | | |
| 88-75-5 | 2-Nitrophenol | 710. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 710. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 710. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 710. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 710. | U | | |
| 91-20-3 | Naphthalene | 710. | U | | |
| 106-47-8 | 4-Chloroaniline | 710. | U | | |
| 87-68-3 | Hexachlorobutadiene | 710. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 710. | U | U | |
| 91-57-6 | 2-Methylnaphthalene | 190. | J | J | |
| 77-47-4 | Hexachlorocyclopentadiene | 710. | U | U | |
| 88-06-2 | 2,4,6-Trichlorophenol | 710. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 1800. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 710. | U | | |
| 88-74-4 | 2-Nitroaniline | 1800. | U | | |
| 131-11-3 | Dimethylphthalate | 710. | U | | |
| 208-96-8 | Acenaphthylene | 710. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 710. | U | U | |
| 99-09-2 | 3-Nitroaniline | 1800. | U | UJ | C |
| 83-32-9 | Acenaphthene | 2600. | | | |

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FORM I SV-1  3/90

Rev1 DE 12/3/96

LEVEL

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC105

Lab Name:CEIMIC CORPORATION, SD  Contract:CTO 136

Lab Code:CCSD  Case No.:  SAS No.:  SDG No.:5812M

Matrix: (soil/water) SOIL  Lab Sample ID:5812-06

Sample wt/vol: 30.2 (g/ml) G  Lab File ID: A1206

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: 7 decanted: (Y/N) N  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL)  Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y  pH: 8.2

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 1800. | U | UJ | C |
| 100-02-7 | 4-Nitrophenol | 1800. | U | U | |
| 132-64-9 | Dibenzofuran | 890. | | | |
| 121-14-2 | 2,4-Dinitrotoluene | 710. | U | U | |
| 84-66-2 | Diethylphthalate | 710. | U | U | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 710. | U | U | |
| 86-73-7 | Fluorene | 1900. | | J | C |
| 100-01-6 | 4-Nitroaniline | 1800. | U | U | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 1800. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 710. | U | UR | Ø *3 |
| 101-55-3 | 4-Bromophenyl-phenylether | 710. | U | | |
| 118-74-1 | Hexachlorobenzene | 710. | U | | |
| 87-86-5 | Pentachlorophenol | 1800. | U | U | |
| 85-01-8 | Phenanthrene | 15000. | | | |
| 120-12-7 | Anthracene | 4100. | | | |
| 86-74-8 | Carbazole | 2500. | | | |
| 84-74-2 | Di-n-butylphthalate | 710. | U | U | |
| 206-44-0 | Fluoranthene | 16000. | | | |
| 129-00-0 | Pyrene | 15000. | | | |
| 85-68-7 | Butylbenzylphthalate | 710. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 710. | U | UJ | C |
| 56-55-3 | Benzo(a)anthracene | 8000. | | | |
| 218-01-9 | Chrysene | 7700. | | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000. | B | UJ | B |
| 117-84-0 | Di-n-octylphthalate | 710. | U | U | |
| 205-99-2 | Benzo(b)fluoranthene | 6100. | | | |
| 207-08-9 | Benzo(k)fluoranthene | 3900. | | | |
| 50-32-8 | Benzo(a)pyrene | 5900. | | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 1800. | | | |
| 53-70-3 | Dibenz(a,h)anthracene | 990. | | | |
| 191-24-2 | Benzo(g,h,i)perylene | 710. | U | U | |

(1) - Cannot be separated from Diphenylamine

OGDEN VALIDATED

LEVEL D

Rev 1 DQ 1/3/96

DQ 9/26/96 35

FORM I SV-2  3/90

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC105

Lab Name:CEIMIC CORPORATION, SD  Contract:CTO 136

Lab Code:CCSD  Case No.:  SAS No.:  SDG No.:5812M

Matrix: (soil/water) SOIL  Lab Sample ID:5812-06

Sample wt/vol: 30.2 (g/ml) G  Lab File ID: A1206

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: 7 decanted: (Y/N) N  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL)  Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y  pH: 8.2

Number TICs Found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Unknown Polyaromatic Hydroca | 20.59 | 700. | J | NJ | |
| 2. | Unknown Polyaromatic Hydroca | 20.66 | 900. | J | | |
| 3. | Unknown Polyaromatic Hydroca | 20.84 | 2000. | J | | |
| 4. | Unknown Polyaromatic Hydroca | 21.26 | 700. | J | | |
| 5. | Unknown Polyaromatic Hydroca | 22.90 | 900. | J | | |
| 6. | Unknown Polyaromatic Hydroca | 23.15 | 900. | J | | |
| 7. | Unknown Polyaromatic Hydroca | 23.38 | 2000. | J | | |
| 8. | Unknown Polyaromatic Hydroca | 23.52 | 1000. | J | | |
| 9. | Unknown Polyaromatic Hydroca | 23.60 | 700. | J | | |
| 10. | Unknown Polyaromatic Hydroca | 23.86 | 700. | J | | |
| 11. | Unknown Polyaromatic Hydroca | 24.32 | 1000. | J | | |
| 12. | Unknown Polyaromatic Hydroca | 24.49 | 1000. | J | | |
| 13. | Unknown Hydrocarbon | 24.68 | 2000. | J | | |
| 14. | Unknown Polyaromatic Hydroca | 24.79 | 2000. | J | | |
| 15. | Unknown Polyaromatic Hydroca | 24.95 | 700. | J | | |
| 16. | Unknown Hydrocarbon | 25.66 | 600. | J | | |
| 17. | Unknown Polyaromatic Hydroca | 26.05 | 900. | J | | |
| 18. | Unknown Polyaromatic Hydroca | 26.15 | 1000. | J | | |
| 19. | Unknown Hydrocarbon | 26.48 | 1000. | J | | |
| 20. | Unknown Polyaromatic Hydroca | 28.39 | 3000. | J | NJ | |
| 21. | | | | | | |
| 22. | | | | | | |
| 23. | | | | | | |
| 24. | | | | | | |
| 25. | | | | | | |
| 26. | | | | | | |
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| 30. | | | | | | |

FORM I SV-TIC

OGDEN VALIDATED
3/90
LEVEL

Rev1
DL 12/3/96

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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC106

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) SOIL Lab Sample ID:5812-10

Sample wt/vol: 30.3 (g/ml) G Lab File ID: AA172

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: 9 decanted: (Y/N) N Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.4

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 360. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 360. | U | | |
| 95-57-8 | 2-Chlorophenol | 360. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 360. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 360. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 360. | U | | |
| 95-48-7 | 2-Methylphenol | 360. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 360. | U | | |
| 106-44-5 | 4-Methylphenol | 360. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 360. | U | | |
| 67-72-1 | Hexachloroethane | 360. | U | | |
| 98-95-3 | Nitrobenzene | 360. | U | | |
| 78-59-1 | Isophorone | 360. | U | | |
| 88-75-5 | 2-Nitrophenol | 360. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 360. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 360. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 360. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 360. | U | | |
| 91-20-3 | Naphthalene | 360. | U | U | |
| 106-47-8 | 4-Chloroaniline | 360. | U | UJ | C |
| 87-68-3 | Hexachlorobutadiene | 360. | U | U | |
| 59-50-7 | 4-Chloro-3-methylphenol | 360. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 360. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 360. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 360. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 910. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 360. | U | | |
| 88-74-4 | 2-Nitroaniline | 910. | U | | |
| 131-11-3 | Dimethylphthalate | 360. | U | | |
| 208-96-8 | Acenaphthylene | 360. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 360. | U | | |
| 99-09-2 | 3-Nitroaniline | 910. | U | | |
| 83-32-9 | Acenaphthene | 360. | U | U | |

FORM I SV-1

OGDEN VALIDATED LEVEL D

Rev PQ 12/3/96

37

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC106

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) SOIL Lab Sample ID:5812-10

Sample wt/vol: 30.3 (g/ml) G Lab File ID: AA172

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: 9 decanted: (Y/N) N Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.4

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 910. | U | | U | |
| 100-02-7 | 4-Nitrophenol | 910. | U | | | |
| 132-64-9 | Dibenzofuran | 360. | U | | | |
| 121-14-2 | 2,4-Dinitrotoluene | 360. | U | | | |
| 84-66-2 | Diethylphthalate | 360. | U | | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 360. | U | | | |
| 86-73-7 | Fluorene | 360. | U | | | |
| 100-01-6 | 4-Nitroaniline | 910. | U | | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 910. | U | | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 360. | U | U | R | ~~D~~ ~~*3~~ |
| 101-55-3 | 4-Bromophenyl-phenylether | 360. | U | | | |
| 118-74-1 | Hexachlorobenzene | 360. | U | | | |
| 87-86-5 | Pentachlorophenol | 910. | U | | | |
| 85-01-8 | Phenanthrene | 360. | U | | | |
| 120-12-7 | Anthracene | 360. | U | | | |
| 86-74-8 | Carbazole | 360. | U | | | |
| 84-74-2 | Di-n-butylphthalate | 360. | U | | | |
| 206-44-0 | Fluoranthene | 360. | U | | | |
| 129-00-0 | Pyrene | 360. | U | | | |
| 85-68-7 | Butylbenzylphthalate | 360. | U | | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 360. | U | | UJ | C |
| 56-55-3 | Benzo(a)anthracene | 360. | U | | U | |
| 218-01-9 | Chrysene | 360. | U | | U | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 390. | B | | UJ | B |
| 117-84-0 | Di-n-octylphthalate | 360. | U | | U | |
| 205-99-2 | Benzo(b)fluoranthene | 360. | U | | | |
| 207-08-9 | Benzo(k)fluoranthene | 360. | U | | | |
| 50-32-8 | Benzo(a)pyrene | 360. | U | | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 360. | U | | | |
| 53-70-3 | Dibenz(a,h)anthracene | 360. | U | | | |
| 191-24-2 | Benzo(g,h,i)perylene | 360. | U | | U | |

(1) - Cannot be separated from Diphenylamine

9/26/96

OGDEN VALIDATED LEVEL

Rev 12/3/96

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC106

Lab Name:CEIMIC CORPORATION, SD  Contract:CTO 136

Lab Code:CCSD  Case No.:  SAS No.:  SDG No.:5812M

Matrix: (soil/water) SOIL  Lab Sample ID:5812-10

Sample wt/vol: 30.3 (g/ml) G  Lab File ID: AA172

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: 9 decanted: (Y/N) N  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 8.4

Number TICs Found: 17

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Unknown Hydrocarbon | 3.53 | 500. | J | NJ | |
| 2. | Unknown Hydrocarbon | 4.08 | 300. | JB | R | B |
| 3. | Aldol Condensation Product | 4.68 | 400. | JB | R | B |
| 4. | Unknown Hydrocarbon | 5.01 | 300. | J | NJ | |
| 5. | Unknown Hydrocarbon | 5.11 | 300. | J | | |
| 6. | Unknown Hydrocarbon | 5.95 | 500. | J | | |
| 7. | Unknown Hydrocarbon | 10.41 | 300. | J | | |
| 8. | Unknown Hydrocarbon | 11.40 | 400. | J | | |
| 9. | Unknown Hydrocarbon | 13.29 | 700. | J | | |
| 10. | Unknown Hydrocarbon | 14.27 | 700. | J | | |
| 11. | Unknown Hydrocarbon | 14.35 | 400. | J | | |
| 12. | Unknown Hydrocarbon | 16.45 | 400. | J | | |
| 13. | Unknown Hydrocarbon | 17.64 | 300. | J | | |
| 14. | Unknown Hydrocarbon | 19.76 | 400. | J | | |
| 15. | Unknown Hydrocarbon | 22.54 | 800. | J | | |
| 16. | Unknown Hydrocarbon | 23.25 | 500. | J | | |
| 17. | Unknown Hydrocarbon | 26.01 | 500. | J | NJ | |
| 18. | | | | | | |
| 19. | | | | | | |
| 20. | | | | | | |
| 21. | | | | | | |
| 22. | | | | | | |
| 23. | | | | | | |
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| 30. | | | | | | |

OGDEN VALIDATED

FORM I SV-TIC  3/90

Rev 1 DJ 12/3/96 LEVEL D

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC107

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) SOIL Lab Sample ID:5812-11

Sample wt/vol: 30.7 (g/ml) G Lab File ID: AA175

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: 5 decanted: (Y/N) N Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.4

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 340. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 340. | U | | |
| 95-57-8 | 2-Chlorophenol | 340. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 340. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 340. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 340. | U | | |
| 95-48-7 | 2-Methylphenol | 340. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 340. | U | | |
| 106-44-5 | 4-Methylphenol | 340. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 340. | U | | |
| 67-72-1 | Hexachloroethane | 340. | U | | |
| 98-95-3 | Nitrobenzene | 340. | U | | |
| 78-59-1 | Isophorone | 340. | U | | |
| 88-75-5 | 2-Nitrophenol | 340. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 340. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 340. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 340. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 340. | U | | |
| 91-20-3 | Naphthalene | 340. | U | U | |
| 106-47-8 | 4-Chloroaniline | 340. | U | UJ | C |
| 87-68-3 | Hexachlorobutadiene | 340. | U | U | |
| 59-50-7 | 4-Chloro-3-methylphenol | 340. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 340. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 340. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 340. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 860. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 340. | U | | |
| 88-74-4 | 2-Nitroaniline | 860. | U | | |
| 131-11-3 | Dimethylphthalate | 340. | U | | |
| 208-96-8 | Acenaphthylene | 340. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 340. | U | | |
| 99-09-2 | 3-Nitroaniline | 860. | U | | |
| 83-32-9 | Acenaphthene | 340. | U | U | |

FORM I SV-1 3/90

Rev 1 DQ 12/3/96

OGDEN VALIDATED LEVEL D

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC107

Lab Name:CEIMIC CORPORATION, SD  Contract:CTO 136

Lab Code:CCSD  Case No.:  SAS No.:  SDG No.:5812M

Matrix: (soil/water) SOIL  Lab Sample ID:5812-11

Sample wt/vol: 30.7 (g/ml) G  Lab File ID: AA175

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: 5 decanted: (Y/N) N  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 8.4

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 860. | U | U | |
| 100-02-7 | 4-Nitrophenol | 860. | U | | |
| 132-64-9 | Dibenzofuran | 340. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 340. | U | | |
| 84-66-2 | Diethylphthalate | 340. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 340. | U | | |
| 86-73-7 | Fluorene | 340. | U | | |
| 100-01-6 | 4-Nitroaniline | 860. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 860. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 340. | U U | R | ~~Q~~ ~~x3~~ |
| 101-55-3 | 4-Bromophenyl-phenylether | 340. | U | | |
| 118-74-1 | Hexachlorobenzene | 340. | U | | |
| 87-86-5 | Pentachlorophenol | 860. | U | | |
| 85-01-8 | Phenanthrene | 340. | U | | |
| 120-12-7 | Anthracene | 340. | U | | |
| 86-74-8 | Carbazole | 340. | U | | |
| 84-74-2 | Di-n-butylphthalate | 340. | U | | |
| 206-44-0 | Fluoranthene | 340. | U | | |
| 129-00-0 | Pyrene | 340. | U | | |
| 85-68-7 | Butylbenzylphthalate | 340. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 340. | U | UJ | C |
| 56-55-3 | Benzo(a)anthracene | 340. | U | U | |
| 218-01-9 | Chrysene | 340. | U | U | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 340. | B | UJ | B |
| 117-84-0 | Di-n-octylphthalate | 340. | U | U | |
| 205-99-2 | Benzo(b)fluoranthene | 340. | U | | |
| 207-08-9 | Benzo(k)fluoranthene | 340. | U | | |
| 50-32-8 | Benzo(a)pyrene | 340. | U | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 340. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 340. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 340. | U | U | |

(1) - Cannot be separated from Diphenylamine

OGDEN VALIDATED

LEVEL

Rev 12/3/96 9/26/96

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC107

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) SOIL Lab Sample ID:5812-11

Sample wt/vol: 30.7 (g/ml) G Lab File ID: AA175

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: 5 decanted: (Y/N) N Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.4

Number TICs Found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|---|
| 1. | | Unknown Hydrocarbon | 3.53 | 800. | J | NJ | |
| 2. | | Unknown Hydrocarbon | 3.89 | 400. | J | NJ | |
| 3. | | Unknown Hydrocarbon | 4.08 | 300. | JB | R | B |
| 4. | | Aldol Condensation Product | 4.67 | 400. | JB | R | B |
| 5. | | Unknown Hydrocarbon | 5.95 | 600. | J | NJ | |
| 6. | | Unknown Hydrocarbon | 19.76 | 300. | J | | |
| 7. | | Unknown Hydrocarbon | 22.53 | 500. | J | | |
| 8. | | Unknown Hydrocarbon | 22.65 | 600. | J | | |
| 9. | | Unknown Hydrocarbon | 23.24 | 400. | J | | |
| 10. | | Unknown Hydrocarbon | 25.98 | 400. | J | NJ | |
| 11. | | | | | | | |
| 12. | | | | | | | |
| 13. | | | | | | | |
| 14. | | | | | | | |
| 15. | | | | | | | |
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| 29. | | | | | | | |
| 30. | | | | | | | |

OGDEN VALIDATED



Rev 1 12/13/96

LEVEL D

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC108

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) SOIL Lab Sample ID:5812-12

Sample wt/vol: 30.5 (g/ml) G Lab File ID: AA179

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: 5 decanted: (Y/N) N Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.4

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 340. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 340. | U | | |
| 95-57-8 | 2-Chlorophenol | 340. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 340. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 340. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 340. | U | | |
| 95-48-7 | 2-Methylphenol | 340. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 340. | U | | |
| 106-44-5 | 4-Methylphenol | 340. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 340. | U | | |
| 67-72-1 | Hexachloroethane | 340. | U | | |
| 98-95-3 | Nitrobenzene | 340. | U | | |
| 78-59-1 | Isophorone | 340. | U | | |
| 88-75-5 | 2-Nitrophenol | 340. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 340. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 340. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 340. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 340. | U | | |
| 91-20-3 | Naphthalene | 340. | U | U | |
| 106-47-8 | 4-Chloroaniline | 340. | U | UJ | C |
| 87-68-3 | Hexachlorobutadiene | 340. | U | U | |
| 59-50-7 | 4-Chloro-3-methylphenol | 340. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 340. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 340. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 340. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 860. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 340. | U | | |
| 88-74-4 | 2-Nitroaniline | 860. | U | | |
| 131-11-3 | Dimethylphthalate | 340. | U | | |
| 208-96-8 | Acenaphthylene | 340. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 340. | U | | |
| 99-09-2 | 3-Nitroaniline | 860. | U | | |
| 83-32-9 | Acenaphthene | 340. | U | U | |

OGDEN VALIDATED

FORM I SV-1 3/90

Rev DQ 12/3/96 LEVEL

43

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC108

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) SOIL Lab Sample ID:5812-12

Sample wt/vol: 30.5 (g/ml) G Lab File ID: AA179

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: 5 decanted: (Y/N) N Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.4

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 860. | U | U | |
| 100-02-7 | 4-Nitrophenol | 860. | U | | |
| 132-64-9 | Dibenzofuran | 340. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 340. | U | | |
| 84-66-2 | Diethylphthalate | 340. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 340. | U | | |
| 86-73-7 | Fluorene | 340. | U | | |
| 100-01-6 | 4-Nitroaniline | 860. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 860. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 340. | U | RU | ~~Ø~~ #3 |
| 101-55-3 | 4-Bromophenyl-phenylether | 340. | U | | |
| 118-74-1 | Hexachlorobenzene | 340. | U | | |
| 87-86-5 | Pentachlorophenol | 860. | U | | |
| 85-01-8 | Phenanthrene | 340. | U | | |
| 120-12-7 | Anthracene | 340. | U | | |
| 86-74-8 | Carbazole | 340. | U | | |
| 84-74-2 | Di-n-butylphthalate | 340. | U | | |
| 206-44-0 | Fluoranthene | 340. | U | | |
| 129-00-0 | Pyrene | 340. | U | | |
| 85-68-7 | Butylbenzylphthalate | 340. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 340. | U | UJ | C |
| 56-55-3 | Benzo(a)anthracene | 340. | U | U | |
| 218-01-9 | Chrysene | 340. | U | U | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 340 ~~330.~~ | JB | U | B |
| 117-84-0 | Di-n-octylphthalate | 340. | U | U | |
| 205-99-2 | Benzo(b)fluoranthene | 340. | U | | |
| 207-08-9 | Benzo(k)fluoranthene | 340. | U | | |
| 50-32-8 | Benzo(a)pyrene | 340. | U | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 340. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 340. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 340. | U | U | |

(1) - Cannot be separated from Diphenylamine

OGDEN VALIDATED

Rev 12/3/96

FORM I SV-2 3/90

9/26/96

LEVEL

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC108

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) SOIL Lab Sample ID:5812-12

Sample wt/vol: 30.5 (g/ml) G Lab File ID: AA179

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: 5 decanted: (Y/N) N Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.4

Number TICs Found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|---|
| 1. | | Unknown Hydrocarbon | 3.35 | 300. | J | NJ | |
| 2. | | Unknown Hydrocarbon | 4.09 | 400. | JB | R | B |
| 3. | | Aldol Condensation Product | 4.68 | 600. | JB | R | B |
| 4. | | Unknown Hydrocarbon | 5.01 | 300. | JB | R | B |
| 5. | | Unknown Hydrocarbon | 5.12 | 300. | J | NJ | |
| 6. | | Unknown Hydrocarbon | 6.18 | 600. | J | | |
| 7. | | Unknown Polychlorinated Biph | 19.96 | 400. | J | | |
| 8. | | Unknown Polychlorinated Biph | 19.55 | 400. | J | | |
| 9. | | Unknown Polychlorinated Biph | 19.72 | 400. | J | | |
| 10. | | Unknown Polychlorinated Biph | 21.28 | 400. | J | NJ | |
| 11. | | | | | | | |
| 12. | | | | | | | |
| 13. | | | | | | | |
| 14. | | | | | | | |
| 15. | | | | | | | |
| 16. | | | | | | | |
| 17. | | | | | | | |
| 18. | | | | | | | |
| 19. | | | | | | | |
| 20. | | | | | | | |
| 21. | | | | | | | |
| 22. | | | | | | | |
| 23. | | | | | | | |
| 24. | | | | | | | |
| 25. | | | | | | | |
| 26. | | | | | | | |
| 27. | | | | | | | |
| 28. | | | | | | | |
| 29. | | | | | | | |
| 30. | | | | | | | |

OGDEN VALIDATED



Rev1 DL 11/19/96

LEVEL D

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC109

Lab Name:CEIMIC CORPORATION, SD  Contract:CTO 136

Lab Code:CCSD  Case No.:  SAS No.:  SDG No.:5812M

Matrix: (soil/water) SOIL  Lab Sample ID:5812-13

Sample wt/vol: 30.2 (g/ml) G  Lab File ID: AA176

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: 12 decanted: (Y/N) N  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 8.4

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 380. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 380. | U | | |
| 95-57-8 | 2-Chlorophenol | 380. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 380. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 380. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 380. | U | | |
| 95-48-7 | 2-Methylphenol | 380. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 380. | U | | |
| 106-44-5 | 4-Methylphenol | 380. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 380. | U | | |
| 67-72-1 | Hexachloroethane | 380. | U | | |
| 98-95-3 | Nitrobenzene | 380. | U | | |
| 78-59-1 | Isophorone | 380. | U | | |
| 88-75-5 | 2-Nitrophenol | 380. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 380. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 380. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 380. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 380. | U | | |
| 91-20-3 | Naphthalene | 380. | U | U | |
| 106-47-8 | 4-Chloroaniline | 380. | U | UJ | C |
| 87-68-3 | Hexachlorobutadiene | 380. | U | U | |
| 59-50-7 | 4-Chloro-3-methylphenol | 380. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 380. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 380. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 380. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 940. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 380. | U | | |
| 88-74-4 | 2-Nitroaniline | 940. | U | | |
| 131-11-3 | Dimethylphthalate | 380. | U | | |
| 208-96-8 | Acenaphthylene | 380. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 380. | U | | |
| 99-09-2 | 3-Nitroaniline | 940. | U | | |
| 83-32-9 | Acenaphthene | 380. | U | U | |

OGDEN VALIDATED
LEVEL D

Rev 1
DQ 10/3/96

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC109

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) SOIL Lab Sample ID:5812-13

Sample wt/vol: 30.2 (g/ml) G Lab File ID: AA176

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: 12 decanted: (Y/N) N Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.4

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 940. | U | U | |
| 100-02-7 | 4-Nitrophenol | 940. | U | | |
| 132-64-9 | Dibenzofuran | 380. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 380. | U | | |
| 84-66-2 | Diethylphthalate | 380. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 380. | U | | |
| 86-73-7 | Fluorene | 380. | U | | |
| 100-01-6 | 4-Nitroaniline | 940. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 940. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 380. | U | RU | ~~0~~ *3 |
| 101-55-3 | 4-Bromophenyl-phenylether | 380. | U | | |
| 118-74-1 | Hexachlorobenzene | 380. | U | | |
| 87-86-5 | Pentachlorophenol | 940. | U | | |
| 85-01-8 | Phenanthrene | 380. | U | | |
| 120-12-7 | Anthracene | 380. | U | | |
| 86-74-8 | Carbazole | 380. | U | | |
| 84-74-2 | Di-n-butylphthalate | 380. | U | | |
| 206-44-0 | Fluoranthene | 380. | U | | |
| 129-00-0 | Pyrene | 380. | U | | |
| 85-68-7 | Butylbenzylphthalate | 380. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 380. | U | UJ | C |
| 56-55-3 | Benzo(a)anthracene | 380. | U | U | |
| 218-01-9 | Chrysene | 380. | U | U | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 380 ~~340.~~ | JB | U | B |
| 117-84-0 | Di-n-octylphthalate | 380. | U | U | |
| 205-99-2 | Benzo(b)fluoranthene | 380. | U | | |
| 207-08-9 | Benzo(k)fluoranthene | 380. | U | | |
| 50-32-8 | Benzo(a)pyrene | 380. | U | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 380. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 380. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 380. | U | U | |

(1) - Cannot be separated from Diphenylamine

DQ 9/26/96

OGDEN VALIDATE

LEVEL

Rev 1 DQ 10/3/96

FORM I SV-2

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC109

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) SOIL Lab Sample ID:5812-13

Sample wt/vol: 30.2 (g/ml) G Lab File ID: AA176

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: 12 decanted: (Y/N) N Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.4

Number TICs Found: 14

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Unknown Hydrocarbon | 3.35 | 200. | J | NJ | |
| 2. | Unknown Hydrocarbon | 3.89 | 400. | J | NJ | |
| 3. | Unknown Hydrocarbon | 4.09 | 400. | JB | R | B |
| 4. | Aldol Condensation Product | 4.68 | 500. | JB | R | B |
| 5. | Unknown Hydrocarbon | 5.01 | 300. | JB | R | B |
| 6. | Unknown Hydrocarbon | 5.12 | 300. | J | NJ | |
| 7. | Unknown Hydrocarbon | 5.95 | 300. | J | | |
| 8. | Unknown Polychlorinated Biph | 18.95 | 400. | J | | |
| 9. | Unknown Hydrocarbon | 19.13 | 300. | J | | |
| 10. | Unknown Polychlorinated Biph | 19.54 | 400. | J | | |
| 11. | Unknown Hydrocarbon | 20.57 | 400. | J | | |
| 12. | Unknown Polychlorinated Biph | 21.25 | 400. | J | | |
| 13. | Unknown Hydrocarbon | 22.54 | 500. | J | | |
| 14. | Unknown Polychlorinated Biph | 22.67 | 600. | J | NJ | |
| 15. | | | | | | |
| 16. | | | | | | |
| 17. | | | | | | |
| 18. | | | | | | |
| 19. | | | | | | |
| 20. | | | | | | |
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| 27. | | | | | | |
| 28. | | | | | | |
| 29. | | | | | | |
| 30. | | | | | | |

OGDEN VALIDATED

Rev 12/3/96

FORM I SV-TIC 3/90

LEVEL

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC110

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) SOIL Lab Sample ID:5812-14

Sample wt/vol: 30.3 (g/ml) G Lab File ID: 04603

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: 11 decanted: (Y/N) N Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.4

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 370. | U | UJ | C |
| 111-44-4 | bis(2-Chloroethyl)ether | 370. | U | U | |
| 95-57-8 | 2-Chlorophenol | 370. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 370. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 370. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 370. | U | | |
| 95-48-7 | 2-Methylphenol | 370. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 370. | U | | |
| 106-44-5 | 4-Methylphenol | 370. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 370. | U | | |
| 67-72-1 | Hexachloroethane | 370. | U | | |
| 98-95-3 | Nitrobenzene | 370. | U | | |
| 78-59-1 | Isophorone | 370. | U | | |
| 88-75-5 | 2-Nitrophenol | 370. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 370. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 370. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 370. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 370. | U | | |
| 91-20-3 | Naphthalene | 370. | U | | |
| 106-47-8 | 4-Chloroaniline | 370. | U | | |
| 87-68-3 | Hexachlorobutadiene | 370. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 370. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 370. | U | U | |
| 77-47-4 | Hexachlorocyclopentadiene | 370. | U | UJ | C |
| 88-06-2 | 2,4,6-Trichlorophenol | 370. | U | U | |
| 95-95-4 | 2,4,5-Trichlorophenol | 930. | U | U | |
| 91-58-7 | 2-Chloronaphthalene | 370. | U | U | |
| 88-74-4 | 2-Nitroaniline | 930. | U | UJ | C |
| 131-11-3 | Dimethylphthalate | 370. | U | U | |
| 208-96-8 | Acenaphthylene | 370. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 370. | U | | |
| 99-09-2 | 3-Nitroaniline | 930. | U | | |
| 83-32-9 | Acenaphthene | 370. | U | U | |

OGDEN VALIDATED LEVEL D

FORM I SV-1 3/90

Rev 1 12/3/96

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC110

Lab Name:CEIMIC CORPORATION, SD  Contract:CTO 136

Lab Code:CCSD  Case No.:  SAS No.:  SDG No.:5812M

Matrix: (soil/water) SOIL  Lab Sample ID:5812-14

Sample wt/vol: 30.3 (g/ml) G  Lab File ID: 04603

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: 11 decanted: (Y/N) N  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 8.4

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 930. | U | UJ | C |
| 100-02-7 | 4-Nitrophenol | 930. | U | U | |
| 132-64-9 | Dibenzofuran | 370. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 370. | U | | |
| 84-66-2 | Diethylphthalate | 370. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 370. | U | U | |
| 86-73-7 | Fluorene | 370. | U | UJ | C |
| 100-01-6 | 4-Nitroaniline | 930. | U | U | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 930. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 370. | U U | ~~R~~ | ~~Ø~~ ~~*5~~ |
| 101-55-3 | 4-Bromophenyl-phenylether | 370. | U | | |
| 118-74-1 | Hexachlorobenzene | 370. | U | | |
| 87-86-5 | Pentachlorophenol | 930. | U | | |
| 85-01-8 | Phenanthrene | 370. | U | | |
| 120-12-7 | Anthracene | 370. | U | U | |
| 86-74-8 | Carbazole | 370. | U | UJ | C |
| 84-74-2 | Di-n-butylphthalate | 370. | U | U | |
| 206-44-0 | Fluoranthene | 170. | J | J | |
| 129-00-0 | Pyrene | 190. | J | J | |
| 85-68-7 | Butylbenzylphthalate | 370. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 370. | U | | |
| 56-55-3 | Benzo(a)anthracene | 370. | U | | |
| 218-01-9 | Chrysene | 370. | U | U | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 1000. | B | UJ | B |
| 117-84-0 | Di-n-octylphthalate | 370. | U | UJ | C |
| 205-99-2 | Benzo(b)fluoranthene | 370. | U | UJ | C |
| 207-08-9 | Benzo(k)fluoranthene | 370. | U | U | |
| 50-32-8 | Benzo(a)pyrene | 370. | U | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 370. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 370. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 370. | U | U | |

(1) - Cannot be separated from Diphenylamine

DJ 9/26/96

OGDEN VALIDATED

Rev 1 DJ 10/9/96

LEVEL D

FORM I SV-2  3/90

50

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC110

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) SOIL Lab Sample ID:5812-14

Sample wt/vol: 30.3 (g/ml) G Lab File ID: 04603

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: 11 decanted: (Y/N) N Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.4

Number TICs Found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Aldol Condensation Product | 6.09 | 700. | JB | R | B |
| 2. | Unknown Hydrocarbon | 24.32 | 300. | J | NJ | |
| 3. | Unknown Hydrocarbon | 25.13 | 200. | J | NJ | |
| 4. | Unknown Hydrocarbon | 26.09 | 200. | J | NJ | |
| 5. | Unknown Hydrocarbon | 26.52 | 300. | J | NJ | |
| 6. | | | | | | |
| 7. | | | | | | |
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OGDEN VALIDATED

FORM I SV-TIC 3/90

Rev DB 12/3/96

LEVEL D

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC130

Lab Name:CEIMIC CORPORATION, SD  Contract:CTO 136

Lab Code:CCSD  Case No.:  SAS No.:  SDG No.:5812M

Matrix: (soil/water) SOIL  Lab Sample ID:5812-16

Sample wt/vol: 30.2 (g/ml) G  Lab File ID: A1216

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: 10 decanted: (Y/N) N  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL)  Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y  pH: 8.2

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 740. | U | UJ | C |
| 111-44-4 | bis(2-Chloroethyl)ether | 740. | U | U | |
| 95-57-8 | 2-Chlorophenol | 740. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 740. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 740. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 740. | U | | |
| 95-48-7 | 2-Methylphenol | 740. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 740. | U | | |
| 106-44-5 | 4-Methylphenol | 740. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 740. | U | | |
| 67-72-1 | Hexachloroethane | 740. | U | | |
| 98-95-3 | Nitrobenzene | 740. | U | | |
| 78-59-1 | Isophorone | 740. | U | | |
| 88-75-5 | 2-Nitrophenol | 740. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 740. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 740. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 740. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 740. | U | | |
| 91-20-3 | Naphthalene | 740. | U | | |
| 106-47-8 | 4-Chloroaniline | 740. | U | | |
| 87-68-3 | Hexachlorobutadiene | 740. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 740. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 740. | U | U | |
| 77-47-4 | Hexachlorocyclopentadiene | 740. | U | UJ | C |
| 88-06-2 | 2,4,6-Trichlorophenol | 740. | U | U | |
| 95-95-4 | 2,4,5-Trichlorophenol | 1800. | U | U | |
| 91-58-7 | 2-Chloronaphthalene | 740. | U | U | |
| 88-74-4 | 2-Nitroaniline | 1800. | U | UJ | C |
| 131-11-3 | Dimethylphthalate | 740. | U | U | |
| 208-96-8 | Acenaphthylene | 740. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 740. | U | | |
| 99-09-2 | 3-Nitroaniline | 1800. | U | | |
| 83-32-9 | Acenaphthene | 740. | U | U | |

OGDEN VALIDATED

FORM I SV-1  3/90

Rev 1 PQ 12/3/96

LEVEL

53

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC130

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No.:  SAS No.:  SDG No.: 5812M

Matrix: (soil/water) SOIL  Lab Sample ID: 5812-16

Sample wt/vol: 30.2 (g/ml) G  Lab File ID: A1216

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: 10 decanted: (Y/N) N  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL)  Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y  pH: 8.2

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 1800. | U | UJ | C |
| 100-02-7 | 4-Nitrophenol | 1800. | U | U | |
| 132-64-9 | Dibenzofuran | 740. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 740. | U | | |
| 84-66-2 | Diethylphthalate | 740. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 740. | U | U | |
| 86-73-7 | Fluorene | 740. | U | UJ | C |
| 100-01-6 | 4-Nitroaniline | 1800. | U | U | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 1800. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 740. | U U | R | ~~Ø~~ *3 |
| 101-55-3 | 4-Bromophenyl-phenylether | 740. | U | | |
| 118-74-1 | Hexachlorobenzene | 740. | U | | |
| 87-86-5 | Pentachlorophenol | 1800. | U | U | |
| 85-01-8 | Phenanthrene | 180. | J | J | |
| 120-12-7 | Anthracene | 740. | U | U | |
| 86-74-8 | Carbazole | 740. | U | UJ | C |
| 84-74-2 | Di-n-butylphthalate | 740. | U | U | |
| 206-44-0 | Fluoranthene | 510. | J | J | |
| 129-00-0 | Pyrene | 430. | J | J | |
| 85-68-7 | Butylbenzylphthalate | 740. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 740. | U | U | |
| 56-55-3 | Benzo(a)anthracene | 250. | J | J | |
| 218-01-9 | Chrysene | 330. | J | J | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 740 ~~430~~. | JB | U | B |
| 117-84-0 | Di-n-octylphthalate | 740. | U | UJ | C |
| 205-99-2 | Benzo(b)fluoranthene | 260. | J | J | C |
| 207-08-9 | Benzo(k)fluoranthene | 360. | J | J | |
| 50-32-8 | Benzo(a)pyrene | 250. | J | J | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 740. | U | U | |
| 53-70-3 | Dibenz(a,h)anthracene | 740. | U | U | |
| 191-24-2 | Benzo(g,h,i)perylene | 740. | U | U | |

(1) - Cannot be separated from Diphenylamine

OGDEN VALIDATED

Rev 1 DQ 10/3/96

LEVEL D DQ 9/26/96

FORM I SV-2  3/90

53

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC130

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) SOIL Lab Sample ID:5812-16

Sample wt/vol: 30.2 (g/ml) G Lab File ID: A1216

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: 10 decanted: (Y/N) N Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 8.2

Number TICs Found: 21

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Aldol Condensation Product | 6.05 | 3000. | JB | R | B |
| 2. | Unknown Hydrocarbon | 8.37 | 900. | J | NJ | |
| 3. | Unknown Hydrocarbon | 20.32 | 600. | J | | |
| 4. | Unknown Hydrocarbon | 21.21 | 600. | J | | |
| 5. | Unknown Hydrocarbon | 22.06 | 700. | J | | |
| 6. | Unknown Hydrocarbon | 22.86 | 700. | J | | |
| 7. | Unknown Hydrocarbon | 23.63 | 700. | J | | |
| 8. | Unknown Hydrocarbon | 24.38 | 900. | J | | |
| 9. | Unknown Hydrocarbon | 25.11 | 900. | J | | |
| 10. | Unknown Hydrocarbon | 25.79 | 900. | J | | |
| 11. | Unknown Hydrocarbon | 26.50 | 900. | J | | |
| 12. | Unknown Hydrocarbon | 30.51 | 6000. | J | | |
| 13. | Unknown Hydrocarbon | 31.58 | 4000. | J | | |
| 14. | Unknown Hydrocarbon | 33.01 | 2000. | J | | |
| 15. | Unknown Hydrocarbon | 33.20 | 1000. | J | | |
| 16. | Unknown Hydrocarbon | 34.29 | 700. | J | NJ | |
| 17. | | | | | | |
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| 19. | | | | | | |
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Rev 1 DL 12/3/96

OGDEN VALIDATED LEVEL D

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC131

Lab Name:CEIMIC CORPORATION, SD  Contract:CTO 136

Lab Code:CCSD  Case No.:  SAS No.:  SDG No.:5812M

Matrix: (soil/water) SOIL  Lab Sample ID:5812-17

Sample wt/vol: 30.0 (g/ml) G  Lab File ID: 01217

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: 10 decanted: (Y/N) N  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 8.3

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 370. | U | UJ | C |
| 111-44-4 | bis(2-Chloroethyl)ether | 370. | U | U | |
| 95-57-8 | 2-Chlorophenol | 370. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 370. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 370. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 370. | U | | |
| 95-48-7 | 2-Methylphenol | 370. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 370. | U | | |
| 106-44-5 | 4-Methylphenol | 370. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 370. | U | | |
| 67-72-1 | Hexachloroethane | 370. | U | | |
| 98-95-3 | Nitrobenzene | 370. | U | | |
| 78-59-1 | Isophorone | 370. | U | | |
| 88-75-5 | 2-Nitrophenol | 370. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 370. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 370. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 370. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 370. | U | | |
| 91-20-3 | Naphthalene | 370. | U | | |
| 106-47-8 | 4-Chloroaniline | 370. | U | | |
| 87-68-3 | Hexachlorobutadiene | 370. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 370. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 370. | U | U | |
| 77-47-4 | Hexachlorocyclopentadiene | 370. | U | UJ | C |
| 88-06-2 | 2,4,6-Trichlorophenol | 370. | U | U | |
| 95-95-4 | 2,4,5-Trichlorophenol | 920. | U | U | |
| 91-58-7 | 2-Chloronaphthalene | 370. | U | U | |
| 88-74-4 | 2-Nitroaniline | 920. | U | UJ | C |
| 131-11-3 | Dimethylphthalate | 370. | U | U | |
| 208-96-8 | Acenaphthylene | 370. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 370. | U | | |
| 99-09-2 | 3-Nitroaniline | 920. | U | | |
| 83-32-9 | Acenaphthene | 370. | U | U | |

OGDEN VALIDATED

LEVEL

Rev 1 DE 10/3/96

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC131

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No.:  SAS No.:  SDG No.: 5812M

Matrix: (soil/water) SOIL  Lab Sample ID: 5812-17

Sample wt/vol: 30.0 (g/ml) G  Lab File ID: O1217

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: 10 decanted: (Y/N) N  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 8.3

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 920. | U | UJ | C |
| 100-02-7 | 4-Nitrophenol | 920. | U | U | |
| 132-64-9 | Dibenzofuran | 370. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 370. | U | | |
| 84-66-2 | Diethylphthalate | 370. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 370. | U | U | |
| 86-73-7 | Fluorene | 370. | U | UJ | C |
| 100-01-6 | 4-Nitroaniline | 920. | U | U | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 920. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 370. | U | R | ~~0~~ ~~*3~~ |
| 101-55-3 | 4-Bromophenyl-phenylether | 370. | U | | |
| 118-74-1 | Hexachlorobenzene | 370. | U | | |
| 87-86-5 | Pentachlorophenol | 920. | U | | |
| 85-01-8 | Phenanthrene | 370. | U | | |
| 120-12-7 | Anthracene | 370. | U | U | |
| 86-74-8 | Carbazole | 370. | U | UJ | C |
| 84-74-2 | Di-n-butylphthalate | 370. | U | U | |
| 206-44-0 | Fluoranthene | 340. | J | J | |
| 129-00-0 | Pyrene | 420. | | | |
| 85-68-7 | Butylbenzylphthalate | 370. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 370. | U | U | |
| 56-55-3 | Benzo(a)anthracene | 210. | J | J | |
| 218-01-9 | Chrysene | 270. | J | J | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 710. | B | UJ | B |
| 117-84-0 | Di-n-octylphthalate | 370. | U | UJ | C |
| 205-99-2 | Benzo(b)fluoranthene | 210. | J | J | C |
| 207-08-9 | Benzo(k)fluoranthene | 230. | J | J | |
| 50-32-8 | Benzo(a)pyrene | 370. | U | U | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 370. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 370. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 370. | U | U | |

(1) - Cannot be separated from Diphenylamine

Rev1 DQ 12/6/96

OGDEN VALIDATED

LEVEL D

DQ 9/26/96

53

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC131

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No.:  SAS No.:  SDG No.: 5812M

Matrix: (soil/water) SOIL  Lab Sample ID: 5812-17

Sample wt/vol: 30.0 (g/ml) G  Lab File ID: O1217

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: 10 decanted: (Y/N) N  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 8.3

Number TICs Found: 29

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Unknown Hydrocarbon | 2.56 | 300. | J | NJ | |
| 2. | Unknown Hydrocarbon | 2.71 | 1000. | J | ↓ | |
| 3. | Unknown Hydrocarbon | 2.83 | 500. | J | | |
| 4. | Unknown Hydrocarbon | 5.05 | 300. | J | NJ | |
| 5. | Aldol Condensation Product | 6.09 | 800. | JB | ~~J~~ R | B |
| 6. | Unknown Hydrocarbon | 22.70 | 200. | J | NJ | |
| 7. | Unknown Hydrocarbon | 24.33 | 600. | J | | |
| 8. | Unknown Hydrocarbon | 24.71 | 600. | J | | |
| 9. | Unknown Hydrocarbon | 25.13 | 300. | J | | |
| 10. | Unknown Hydrocarbon | 26.53 | 300. | J | | |
| 11. | Unknown Hydrocarbon | 28.26 | 1000. | J | | |
| 12. | Unknown Hydrocarbon | 29.31 | 1000. | J | | |
| 13. | Unknown Hydrocarbon | 29.78 | 1000. | J | | |
| 14. | Unknown Hydrocarbon | 30.54 | 1000. | J | ↓ | |
| 15. | Unknown Hydrocarbon | 31.62 | 1000. | J | NJ | |
| 16. | | | | | | |
| 17. | | | | | | |
| 18. | | | | | | |
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Rev1

OGDEN VALIDATED

9/23/96 12/3/96

FORM I SV-TIC  3/90

LEVEL D

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC132

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) SOIL Lab Sample ID:5812-18

Sample wt/vol: 30.1 (g/ml) G Lab File ID: AA181

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: 9 decanted: (Y/N) N Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 360. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 360. | U | | |
| 95-57-8 | 2-Chlorophenol | 360. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 360. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 360. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 360. | U | | |
| 95-48-7 | 2-Methylphenol | 360. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 360. | U | | |
| 106-44-5 | 4-Methylphenol | 360. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 360. | U | | |
| 67-72-1 | Hexachloroethane | 360. | U | | |
| 98-95-3 | Nitrobenzene | 360. | U | | |
| 78-59-1 | Isophorone | 360. | U | | |
| 88-75-5 | 2-Nitrophenol | 360. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 360. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 360. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 360. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 360. | U | | |
| 91-20-3 | Naphthalene | 360. | U | U | |
| 106-47-8 | 4-Chloroaniline | 360. | U | UJ | C |
| 87-68-3 | Hexachlorobutadiene | 360. | U | U | |
| 59-50-7 | 4-Chloro-3-methylphenol | 360. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 360. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 360. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 360. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 910. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 360. | U | | |
| 88-74-4 | 2-Nitroaniline | 910. | U | | |
| 131-11-3 | Dimethylphthalate | 360. | U | | |
| 208-96-8 | Acenaphthylene | 360. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 360. | U | | |
| 99-09-2 | 3-Nitroaniline | 910. | U | | |
| 83-32-9 | Acenaphthene | 360. | U | U | |

OGDEN VALIDATED

FORM I SV-1

Rev 10/3/96 LEVEL D

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC132

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) SOIL Lab Sample ID:5812-18

Sample wt/vol: 30.1 (g/ml) G Lab File ID: AA181

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: 9 decanted: (Y/N) N Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 910. | U | | U | |
| 100-02-7 | 4-Nitrophenol | 910. | U | | | |
| 132-64-9 | Dibenzofuran | 360. | U | | | |
| 121-14-2 | 2,4-Dinitrotoluene | 360. | U | | | |
| 84-66-2 | Diethylphthalate | 360. | U | | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 360. | U | | | |
| 86-73-7 | Fluorene | 360. | U | | | |
| 100-01-6 | 4-Nitroaniline | 910. | U | | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 910. | U | | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 360. | U | U | R | ~~D~~ *3 |
| 101-55-3 | 4-Bromophenyl-phenylether | 360. | U | | | |
| 118-74-1 | Hexachlorobenzene | 360. | U | | | |
| 87-86-5 | Pentachlorophenol | 910. | U | | | |
| 85-01-8 | Phenanthrene | 360. | U | | | |
| 120-12-7 | Anthracene | 360. | U | | | |
| 86-74-8 | Carbazole | 360. | U | | | |
| 84-74-2 | Di-n-butylphthalate | 360. | U | | | |
| 206-44-0 | Fluoranthene | 360. | U | | | |
| 129-00-0 | Pyrene | 360. | U | | | |
| 85-68-7 | Butylbenzylphthalate | 360. | U | | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 360. | U | | UJ | C |
| 56-55-3 | Benzo(a)anthracene | 360. | U | | U | |
| 218-01-9 | Chrysene | 360. | U | | U | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 360 ~~250.~~ | JB | | U | B |
| 117-84-0 | Di-n-octylphthalate | 360. | U | | U | |
| 205-99-2 | Benzo(b)fluoranthene | 79. | J | | J | |
| 207-08-9 | Benzo(k)fluoranthene | 360. | U | | U | |
| 50-32-8 | Benzo(a)pyrene | 360. | U | | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 360. | U | | | |
| 53-70-3 | Dibenz(a,h)anthracene | 360. | U | | | |
| 191-24-2 | Benzo(g,h,i)perylene | 360. | U | | U | |

(1) - Cannot be separated from Diphenylamine

OGDEN VALIDATION

Rev DQ 10/31/96

LEVEL D

9/26/96

FORM I SV-2 3/90

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC132

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) SOIL Lab Sample ID:5812-18

Sample wt/vol: 30.1 (g/ml) G Lab File ID: AA181

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: 9 decanted: (Y/N) N Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8

Number TICs Found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Unknown Hydrocarbon | 3.35 | 300. | J | NJ | |
| 2. | Unknown Hydrocarbon | 4.09 | 600. | JB | R | B |
| 3. | Aldol Condensation Product | 4.69 | 1000. | JB | R | B |
| 4. | Unknown Hydrocarbon | 5.01 | 400. | J | NJ | |
| 5. | Unknown Hydrocarbon | 5.12 | 400. | J | NJ | |
| 6. | Unknown Hydrocarbon | 5.95 | 700. | J | NJ | |
| 7. | Unknown Hydrocarbon | 6.18 | 400. | JB | R | B |
| 8. | Unknown Hydrocarbon | 22.67 | 300. | J | NJ | |
| 9. | Unknown Hydrocarbon | 22.64 | 400. | J | NJ | |
| 10. | Unknown Hydrocarbon | 28.30 | 700. | J | NJ | |
| 11. | | | | | | |
| 12. | | | | | | |
| 13. | | | | | | |
| 14. | | | | | | |
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OGDEN VALIDATED

FORM I SV-TIC 3/90

Rev1 DQ 12/3/96

LEVEL

60

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC144

Lab Name:CEIMIC CORPORATION, SD  Contract:CTO 136

Lab Code:CCSD  Case No.:  SAS No.:  SDG No.:5812M

Matrix: (soil/water) SOIL  Lab Sample ID:5812-07

Sample wt/vol: 30.0 (g/ml) G  Lab File ID: AA174

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: 0 decanted: (Y/N) N  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 0.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 330. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 330. | U | | |
| 95-57-8 | 2-Chlorophenol | 330. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 330. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 330. | U | U | |
| 95-50-1 | 1,2-Dichlorobenzene | 520. | | | |
| 95-48-7 | 2-Methylphenol | 710. | | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 330. | U | U | |
| 106-44-5 | 4-Methylphenol | 330. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 330. | U | | |
| 67-72-1 | Hexachloroethane | 330. | U | | |
| 98-95-3 | Nitrobenzene | 330. | U | | |
| 78-59-1 | Isophorone | 330. | U | | |
| 88-75-5 | 2-Nitrophenol | 330. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 330. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 330. | U | U | |
| 120-83-2 | 2,4-Dichlorophenol | 4000. | | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1400. | | | |
| 91-20-3 | Naphthalene | 1500. | | | |
| 106-47-8 | 4-Chloroaniline | 330. | U | UJ | C |
| 87-68-3 | Hexachlorobutadiene | 330. | U | U | |
| 59-50-7 | 4-Chloro-3-methylphenol | 330. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 330. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 330. | U | U | |
| 88-06-2 | 2,4,6-Trichlorophenol | 2900. | | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 3500. | | | |
| 91-58-7 | 2-Chloronaphthalene | 330. | U | U | |
| 88-74-4 | 2-Nitroaniline | 830. | U | | |
| 131-11-3 | Dimethylphthalate | 330. | U | | |
| 208-96-8 | Acenaphthylene | 330. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 330. | U | | |
| 99-09-2 | 3-Nitroaniline | 830. | U | | |
| 83-32-9 | Acenaphthene | 330. | U | U | |

OGDEN VALIDATED
3/98

FORM I SV-1

Rev 1 PQ 10/3/96

LEVEL

01

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC144

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) SOIL Lab Sample ID:5812-07

Sample wt/vol: 30.0 (g/ml) G Lab File ID: AA174

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: 0 decanted: (Y/N) N Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 0.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 830. | U | U | |
| 100-02-7 | 4-Nitrophenol | 830. | U | U | |
| 132-64-9 | Dibenzofuran | 6000. | | | |
| 121-14-2 | 2,4-Dinitrotoluene | 4300. | | | |
| 84-66-2 | Diethylphthalate | 330. | U | U | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 4000. | | | |
| 86-73-7 | Fluorene | 1800. | | | |
| 100-01-6 | 4-Nitroaniline | 830. | U | U | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 830. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 330. | U | RU | |
| 101-55-3 | 4-Bromophenyl-phenylether | 330. | U | | |
| 118-74-1 | Hexachlorobenzene | 330. | U | U | |
| 87-86-5 | Pentachlorophenol | 4600. | | | |
| 85-01-8 | Phenanthrene | 4400. | | | |
| 120-12-7 | Anthracene | 4000. | | | |
| 86-74-8 | Carbazole | 330. | U | U | |
| 84-74-2 | Di-n-butylphthalate | 86. | J | J | |
| 206-44-0 | Fluoranthene | 330. | U | U | |
| 129-00-0 | Pyrene | 1800. | | | |
| 85-68-7 | Butylbenzylphthalate | 2700. | | | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 330. | U | UJ | C |
| 56-55-3 | Benzo(a)anthracene | 330. | U | U | |
| 218-01-9 | Chrysene | 4800. | | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 2800. | B | UJ | B |
| 117-84-0 | Di-n-octylphthalate | 330. | U | U | |
| 205-99-2 | Benzo(b)fluoranthene | 4000. | | | |
| 207-08-9 | Benzo(k)fluoranthene | 330. | U | U | |
| 50-32-8 | Benzo(a)pyrene | 1600. | | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 330. | U | U | |
| 53-70-3 | Dibenz(a,h)anthracene | 330. | U | U | |
| 191-24-2 | Benzo(g,h,i)perylene | 330. | U | U | |

(1) - Cannot be separated from Diphenylamine

Rev 1/23/96 DQ

OGDEN VALIDATED LEVEL D

DQ 9/26/96 03

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC144

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No.:  SAS No.:  SDG No.: 5812M

Matrix: (soil/water) SOIL  Lab Sample ID: 5812-07

Sample wt/vol: 30.0 (g/ml) G  Lab File ID: AA174

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: 0 decanted: (Y/N) N  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 0.0

Number TICs Found: 12

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Unknown Hydrocarbon | 3.54 | 300. | J | NJ | |
| 2. | Unknown Hydrocarbon | 4.09 | 400. | JB | R | B |
| 3. | Aldol Condensation Product | 4.69 | 3000. | JB | R | B |
| 4. | Unknown Hydrocarbon | 5.02 | 300. | J | NJ | |
| 5. | Unknown Hydrocarbon | 6.18 | 700. | J | | |
| 6. | Unknown Hydrocarbon | 11.42 | 400. | J | | |
| 7. | Unknown Hydrocarbon | 13.31 | 200. | J | | |
| 8. | Anthracenedione Isomer | 17.79 | 500. | J | NJ | |
| 9. | Unknown Hydrocarbon | 22.69 | 400. | JB | R | B |
| 10. | Unknown Hydrocarbon | 26.03 | 300. | J | NJ | |
| 11. | Unknown Hydrocarbon | 29.01 | 500. | J | NJ | |
| 12. | Unknown Hydrocarbon | 31.68 | 300. | J | NJ | |
| 13. | | | | | | |
| 14. | | | | | | |
| 15. | | | | | | |
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OGDEN VALIDATED

Rev 1
DJ 10/3/96

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC144A

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) SOIL Lab Sample ID:5812-09

Sample wt/vol: 20.0 (g/ml) G Lab File ID: AA173

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: 0 decanted: (Y/N) N Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 0.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 500. | U | R | D |
| 111-44-4 | bis(2-Chloroethyl)ether | 500. | U | | |
| 95-57-8 | 2-Chlorophenol | 500. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 500. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 500. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 500. | U | | |
| 95-48-7 | 2-Methylphenol | 500. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 500. | U | | |
| 106-44-5 | 4-Methylphenol | 500. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 500. | U | | |
| 67-72-1 | Hexachloroethane | 500. | U | | |
| 98-95-3 | Nitrobenzene | 500. | U | | |
| 78-59-1 | Isophorone | 500. | U | | |
| 88-75-5 | 2-Nitrophenol | 500. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 500. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 500. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 500. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 500. | U | | |
| 91-20-3 | Naphthalene | 500. | U | | |
| 106-47-8 | 4-Chloroaniline | 500. | U | | |
| 87-68-3 | Hexachlorobutadiene | 500. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 500. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 500. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 500. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 500. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 1200. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 500. | U | | |
| 88-74-4 | 2-Nitroaniline | 1200. | U | | |
| 131-11-3 | Dimethylphthalate | 500. | U | | |
| 208-96-8 | Acenaphthylene | 500. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 500. | U | | |
| 99-09-2 | 3-Nitroaniline | 1200. | U | | |
| 83-32-9 | Acenaphthene | 500. | U | R | D |

OGDEN VALIDATED

FORM I SV-1 3/90

Rev1 12/3/96

LEVEL D

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC144A

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) SOIL Lab Sample ID:5812-09

Sample wt/vol: 20.0 (g/ml) G Lab File ID: AA173

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: 0 decanted: (Y/N) N Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 0.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 1200. | U | R | D |
| 100-02-7 | 4-Nitrophenol | 1200. | U | | |
| 132-64-9 | Dibenzofuran | 500. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 500. | U | | |
| 84-66-2 | Diethylphthalate | 500. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 500. | U | | |
| 86-73-7 | Fluorene | 500. | U | | |
| 100-01-6 | 4-Nitroaniline | 1200. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 1200. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 500. | U | | |
| 101-55-3 | 4-Bromophenyl-phenylether | 500. | U | | |
| 118-74-1 | Hexachlorobenzene | 500. | U | | |
| 87-86-5 | Pentachlorophenol | 1200. | U | | |
| 85-01-8 | Phenanthrene | 500. | U | | |
| 120-12-7 | Anthracene | 500. | U | | |
| 86-74-8 | Carbazole | 500. | U | | |
| 84-74-2 | Di-n-butylphthalate | 500. | U | | |
| 206-44-0 | Fluoranthene | 500. | U | | |
| 129-00-0 | Pyrene | 500. | U | | |
| 85-68-7 | Butylbenzylphthalate | 500. | U | | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 500. | U | | |
| 56-55-3 | Benzo(a)anthracene | 500. | U | | |
| 218-01-9 | Chrysene | 500. | U | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 540. | B | | |
| 117-84-0 | Di-n-octylphthalate | 500. | U | | |
| 205-99-2 | Benzo(b)fluoranthene | 500. | U | | |
| 207-08-9 | Benzo(k)fluoranthene | 500. | U | | |
| 50-32-8 | Benzo(a)pyrene | 500. | U | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 500. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 500. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 500. | U | R | D |

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

OGDEN VALIDATED 3/90

Rev 1 12/3/96

LEVEL D

65

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC144A

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) SOIL Lab Sample ID:5812-09

Sample wt/vol: 20.0 (g/ml) G Lab File ID: AA173

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: 0 decanted: (Y/N) N Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/14/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 0.0

Number TICs Found: 18

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Unknown Hydrocarbon | 4.09 | 0. | JB | R | D |
| 2. | Aldol Condensation Product | 4.69 | 6000. | JB | | |
| 3. | Unknown Hydrocarbon | 5.12 | 500. | J | | |
| 4. | Unknown Hydrocarbon | 6.17 | 1000. | J | | |
| 5. | Unknown Hydrocarbon | 18.95 | 600. | J | | |
| 6. | Unknown Hydrocarbon | 19.11 | 400. | J | | |
| 7. | Unknown Polychlorinated Biph | 20.89 | 700. | J | | |
| 8. | Unknown Polychlorinated Biph | 21.21 | 2000. | J | | |
| 9. | Unknown Polychlorinated Biph | 21.89 | 2000. | J | | |
| 10. | Unknown Polychlorinated Biph | 21.99 | 600. | J | | |
| 11. | Unknown Polychlorinated Biph | 22.25 | 600. | J | | |
| 12. | Unknown Polychlorinated Biph | 22.53 | 600. | J | | |
| 13. | Unknown Polychlorinated Biph | 22.69 | 2000. | J | | |
| 14. | Unknown Polychlorinated Biph | 23.16 | 1000. | J | | |
| 15. | Unknown Polychlorinated Biph | 23.85 | 800. | J | | |
| 16. | Unknown Polychlorinated Biph | 24.63 | 2000. | J | | |
| 17. | Unknown Polychlorinated Biph | 25.49 | 700. | J | | |
| 18. | Unknown Polychlorinated Biph | 25.89 | 600. | J | R | D |
| 19. | | | | | | |
| 20. | | | | | | |
| 21. | | | | | | |
| 22. | | | | | | |
| 23. | | | | | | |
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OGDEN VALIDATED



Rev 12/3/96

LEVEL D

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC145

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) WATER Lab Sample ID:5812-08

Sample wt/vol: 1000.0 (g/ml) ML Lab File ID: D1208

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: decanted: (Y/N) Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/13/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 10. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 10. | U | | |
| 95-57-8 | 2-Chlorophenol | 10. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 10. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 10. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 10. | U | | |
| 95-48-7 | 2-Methylphenol | 10. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10. | U | | |
| 106-44-5 | 4-Methylphenol | 10. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 10. | U | | |
| 67-72-1 | Hexachloroethane | 10. | U | | |
| 98-95-3 | Nitrobenzene | 10. | U | | |
| 78-59-1 | Isophorone | 10. | U | | |
| 88-75-5 | 2-Nitrophenol | 10. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 10. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 10. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 10. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10. | U | | |
| 91-20-3 | Naphthalene | 10. | U | | |
| 106-47-8 | 4-Chloroaniline | 10. | U | | |
| 87-68-3 | Hexachlorobutadiene | 10. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 10. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 10. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 10. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 10. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 25. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 10. | U | | |
| 88-74-4 | 2-Nitroaniline | 25. | U | | |
| 131-11-3 | Dimethylphthalate | 10. | U | | |
| 208-96-8 | Acenaphthylene | 10. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 10. | U | | |
| 99-09-2 | 3-Nitroaniline | 25. | U | | |
| 83-32-9 | Acenaphthene | 10. | U | U | |

ORDER VALIDATED



Rev 12/13/96

LEVEL

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC145

Lab Name:CEIMIC CORPORATION, SD  Contract:CTO 136

Lab Code:CCSD  Case No.:  SAS No.:  SDG No.:5812M

Matrix: (soil/water) WATER  Lab Sample ID:5812-08

Sample wt/vol: 1000.0 (g/ml) ML  Lab File ID: D1208

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: decanted: (Y/N)  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/13/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) N  pH: 7.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q | | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 25. | U | | U | |
| 100-02-7 | 4-Nitrophenol | 25. | U | | | |
| 132-64-9 | Dibenzofuran | 10. | U | | | |
| 121-14-2 | 2,4-Dinitrotoluene | 10. | U | | | |
| 84-66-2 | Diethylphthalate | 10. | U | | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10. | U | | | |
| 86-73-7 | Fluorene | 10. | U | | | |
| 100-01-6 | 4-Nitroaniline | 25. | U | | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25. | U | | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10. | U | U | R | ~~D~~ *13 *3 |
| 101-55-3 | 4-Bromophenyl-phenylether | 10. | U | | | |
| 118-74-1 | Hexachlorobenzene | 10. | U | | | |
| 87-86-5 | Pentachlorophenol | 25. | U | | | |
| 85-01-8 | Phenanthrene | 10. | U | | | |
| 120-12-7 | Anthracene | 10. | U | | | |
| 86-74-8 | Carbazole | 10. | U | | | |
| 84-74-2 | Di-n-butylphthalate | 10. | U | | | |
| 206-44-0 | Fluoranthene | 10. | U | | | |
| 129-00-0 | Pyrene | 10. | U | | | |
| 85-68-7 | Butylbenzylphthalate | 10. | U | | | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10. | U | | | |
| 56-55-3 | Benzo(a)anthracene | 10. | U | | | |
| 218-01-9 | Chrysene | 10. | U | | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 10. | U | | | |
| 117-84-0 | Di-n-octylphthalate | 10. | U | | | |
| 205-99-2 | Benzo(b)fluoranthene | 10. | U | | | |
| 207-08-9 | Benzo(k)fluoranthene | 10. | U | | | |
| 50-32-8 | Benzo(a)pyrene | 10. | U | | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 10. | U | | | |
| 53-70-3 | Dibenz(a,h)anthracene | 10. | U | | | |
| 191-24-2 | Benzo(g,h,i)perylene | 10. | U | | U | |

(1) - Cannot be separated from Diphenylamine

Rev 1 DL 12/3/96

OGDEN VALIDATED LEVEL 3

DL 9/26/96

FORM I SV-2  3/90

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1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC145

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) WATER Lab Sample ID:5812-08

Sample wt/vol: 1000.0 (g/ml) ML Lab File ID: D1208

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: decanted: (Y/N) Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/13/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs Found: 11

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|---|
| 1. | | Unknown Hydrocarbon | 4.93 | 70. | J | NJ | |
| 2. | | Unknown Hydrocarbon | 5.40 | 4. | J | | |
| 3. | | Unknown Hydrocarbon | 5.54 | 4. | J | | |
| 4. | | Unknown Hydrocarbon | 8.80 | 10. | J | | |
| 5. | 00076-0-1- | Ethane, Pentachloro- | 8.85 | 9. | J | | |
| 6. | | Unknown Hydrocarbon | 9.15 | 6. | J | | |
| 7. | | Unknown Hydrocarbon | 9.76 | 10. | J | | |
| 8. | | Unknown Hydrocarbon | 12.09 | 30. | J | | |
| 9. | | Unknown Hydrocarbon | 12.59 | 7. | J | | |
| 10. | | Unknown Hydrocarbon | 14.62 | 20. | J | | |
| 11. | | Unknown Hydrocarbon | 17.08 | 4. | J | NJ | |
| 12. | | | | | | | |
| 13. | | | | | | | |
| 14. | | | | | | | |
| 15. | | | | | | | |
| 16. | | | | | | | |
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| 30. | | | | | | | |

CLOSED VALIDATED

FORM I SV-TIC 3/90

Rev DQ 12/3/96

LEVEL 03

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC145RX

Lab Name:CEIMIC CORPORATION, SD  Contract:CTO 136

Lab Code:CCSD  Case No.:  SAS No.:  SDG No.:5812M

Matrix: (soil/water) WATER  Lab Sample ID:5812-08RX

Sample wt/vol: 1000.0 (g/ml) ML  Lab File ID: XX208

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: decanted: (Y/N)  Date Extracted: 7/16/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/19/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) N  pH: 7.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 10. | U | R | D |
| 111-44-4 | bis(2-Chloroethyl)ether | 10. | U | | |
| 95-57-8 | 2-Chlorophenol | 10. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 10. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 10. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 10. | U | | |
| 95-48-7 | 2-Methylphenol | 10. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10. | U | | |
| 106-44-5 | 4-Methylphenol | 10. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 10. | U | | |
| 67-72-1 | Hexachloroethane | 10. | U | | |
| 98-95-3 | Nitrobenzene | 10. | U | | |
| 78-59-1 | Isophorone | 10. | U | | |
| 88-75-5 | 2-Nitrophenol | 10. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 10. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 10. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 10. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10. | U | | |
| 91-20-3 | Naphthalene | 10. | U | | |
| 106-47-8 | 4-Chloroaniline | 10. | U | | |
| 87-68-3 | Hexachlorobutadiene | 10. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 10. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 10. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 10. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 10. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 25. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 10. | U | | |
| 88-74-4 | 2-Nitroaniline | 25. | U | | |
| 131-11-3 | Dimethylphthalate | 10. | U | | |
| 208-96-8 | Acenaphthylene | 10. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 10. | U | | |
| 99-09-2 | 3-Nitroaniline | 25. | U | | |
| 83-32-9 | Acenaphthene | 10. | U | R | D |

OGDEN VALIDATED



Rev 1 DQ 12/3/96

LEVEL D

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1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC145RX

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) WATER Lab Sample ID:5812-08RX

Sample wt/vol: 1000.0 (g/ml) ML Lab File ID: XX208

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: decanted: (Y/N) Date Extracted: 7/16/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/19/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 25. | U | R | D |
| 100-02-7 | 4-Nitrophenol | 25. | U | | |
| 132-64-9 | Dibenzofuran | 10. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 10. | U | | |
| 84-66-2 | Diethylphthalate | 10. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10. | U | | |
| 86-73-7 | Fluorene | 10. | U | | |
| 100-01-6 | 4-Nitroaniline | 25. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10. | U | | |
| 101-55-3 | 4-Bromophenyl-phenylether | 10. | U | | |
| 118-74-1 | Hexachlorobenzene | 10. | U | | |
| 87-86-5 | Pentachlorophenol | 25. | U | | |
| 85-01-8 | Phenanthrene | 10. | U | | |
| 120-12-7 | Anthracene | 10. | U | | |
| 86-74-8 | Carbazole | 10. | U | | |
| 84-74-2 | Di-n-butylphthalate | 10. | U | | |
| 206-44-0 | Fluoranthene | 10. | U | | |
| 129-00-0 | Pyrene | 10. | U | | |
| 85-68-7 | Butylbenzylphthalate | 10. | U | | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10. | U | | |
| 56-55-3 | Benzo(a)anthracene | 10. | U | | |
| 218-01-9 | Chrysene | 10. | U | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 10. | U | | |
| 117-84-0 | Di-n-octylphthalate | 10. | U | | |
| 205-99-2 | Benzo(b)fluoranthene | 10. | U | | |
| 207-08-9 | Benzo(k)fluoranthene | 10. | U | | |
| 50-32-8 | Benzo(a)pyrene | 10. | U | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 10. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 10. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 10. | U | R | D |

(1) - Cannot be separated from Diphenylamine

OGDEN VALIDATED

FORM I SV-2 3/90

Rev 12/3/96

LEVEL

71

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC145RX

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) WATER Lab Sample ID:5812-08RX

Sample wt/vol: 1000.0 (g/ml) ML Lab File ID: XX208

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: decanted: (Y/N) Date Extracted: 7/16/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/19/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |
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| 30. | | | | | |

OGDEN VALIDATED LEVEL

FORM I SV-TIC 3/90

Rev 1 DQ 12/3/96

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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC146

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5812M

Matrix: (soil/water) WATER Lab Sample ID:5812-15

Sample wt/vol: 1000.0 (g/ml) ML Lab File ID: D1215

Level: (low/med) LOW Date Received: 6/28/96

% Moisture: decanted: (Y/N) Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/13/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 10. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 10. | U | | |
| 95-57-8 | 2-Chlorophenol | 10. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 10. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 10. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 10. | U | | |
| 95-48-7 | 2-Methylphenol | 10. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10. | U | | |
| 106-44-5 | 4-Methylphenol | 10. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 10. | U | | |
| 67-72-1 | Hexachloroethane | 10. | U | | |
| 98-95-3 | Nitrobenzene | 10. | U | | |
| 78-59-1 | Isophorone | 10. | U | | |
| 88-75-5 | 2-Nitrophenol | 10. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 10. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 10. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 10. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10. | U | | |
| 91-20-3 | Naphthalene | 10. | U | | |
| 106-47-8 | 4-Chloroaniline | 10. | U | | |
| 87-68-3 | Hexachlorobutadiene | 10. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 10. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 10. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 10. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 10. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 25. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 10. | U | | |
| 88-74-4 | 2-Nitroaniline | 25. | U | | |
| 131-11-3 | Dimethylphthalate | 10. | U | | |
| 208-96-8 | Acenaphthylene | 10. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 10. | U | | |
| 99-09-2 | 3-Nitroaniline | 25. | U | | |
| 83-32-9 | Acenaphthene | 10. | U | U | |

OGDEN VALIDATED LEVEL

FORM I SV-1 3/90

Rev 12/3/96

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC146

Lab Name:CEIMIC CORPORATION, SD  Contract:CTO 136

Lab Code:CCSD  Case No.:  SAS No.:  SDG No.:5812M

Matrix: (soil/water) WATER  Lab Sample ID:5812-15

Sample wt/vol: 1000.0 (g/ml) ML  Lab File ID: D1215

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: decanted: (Y/N)  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/13/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) N  pH: 7.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 25. | U | U | |
| 100-02-7 | 4-Nitrophenol | 25. | U | | |
| 132-64-9 | Dibenzofuran | 10. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 10. | U | | |
| 84-66-2 | Diethylphthalate | 10. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10. | U | | |
| 86-73-7 | Fluorene | 10. | U | | |
| 100-01-6 | 4-Nitroaniline | 25. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10. | U | UR | ~~*3~~ |
| 101-55-3 | 4-Bromophenyl-phenylether | 10. | U | | |
| 118-74-1 | Hexachlorobenzene | 10. | U | | |
| 87-86-5 | Pentachlorophenol | 25. | U | | |
| 85-01-8 | Phenanthrene | 10. | U | | |
| 120-12-7 | Anthracene | 10. | U | | |
| 86-74-8 | Carbazole | 10. | U | | |
| 84-74-2 | Di-n-butylphthalate | 10. | U | | |
| 206-44-0 | Fluoranthene | 10. | U | | |
| 129-00-0 | Pyrene | 10. | U | | |
| 85-68-7 | Butylbenzylphthalate | 10. | U | | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10. | U | | |
| 56-55-3 | Benzo(a)anthracene | 10. | U | | |
| 218-01-9 | Chrysene | 10. | U | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 10. | U | | |
| 117-84-0 | Di-n-octylphthalate | 10. | U | | |
| 205-99-2 | Benzo(b)fluoranthene | 10. | U | | |
| 207-08-9 | Benzo(k)fluoranthene | 10. | U | | |
| 50-32-8 | Benzo(a)pyrene | 10. | U | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 10. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 10. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 10. | U | U | |

(1) - Cannot be separated from Diphenylamine

OGDEN VALIDATED

Rev 1 DE 12/3/96

DE 9/26/96

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC146

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No.:  SAS No.:  SDG No.: 5812M

Matrix: (soil/water) WATER  Lab Sample ID: 5812-15

Sample wt/vol: 1000.0 (g/ml) ML  Lab File ID: D1215

Level: (low/med) LOW  Date Received: 6/28/96

% Moisture: decanted: (Y/N)  Date Extracted: 7/05/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/13/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) N  pH: 7.0

Number TICs Found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Unknown Hydrocarbon | 22.76 | 2. | J | NJ | |
| 2. | | | | | | |
| 3. | | | | | | |
| 4. | | | | | | |
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OGDEN VALIDATED

FORM I SV-TIC  3/90

Rev 10/3/96

LEVEL 0

75

OGDEN

# DATA VALIDATION REPORT

CLEAN CONTRACT TASK ORDER #0136
NAF Midway Site Investigations

ANALYSIS: PESTICIDES/PCBs

SAMPLE DELIVERY GROUP: 5812M

Prepared by

Ogden—Denver Operations
550 South Wadsworth Boulevard, Suite 500
Lakewood, Colorado 80226

# CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

Ogden Environmental and Energy Services Co., Inc.
550 South Wadsworth Boulevard
Suite 500
Lakewood, CO 80226

Package ID: C136PP58
Task Order: 136
SDG No.: 5812M
No. of Analyses: 18

Laboratory: CEIMIC, SD
Reviewer: H. Chang
Analysis/Method: Pesticides/PCBs

Date: ~~[illegible]~~ 10/15/96
Reviewer's Signature: H. Chang

| ACTION ITEMS[a] | |
|---|---|
| 1. **Case Narrative Deficiencies** | |
| 2. **Out of Scope Analyses** | |
| 3. **Analyses Not Conducted** | |
| 4. **Missing Hardcopy Deliverables** | |
| 5. **Incorrect Hardcopy Deliverables** | · Form 6H, 6I, 6J filled out incorrectly.<br>· Wrong version of CLP forms are used. |
| 6. **Deviations from Analysis Protocol, e.g.,** | %RSD out for one compound - Not out of compliance<br>Resolution %R out for α-chlordane/γ-chlordane<br>Overall system performance poor.<br>Many samples are over diluted. |
| Holding Times | |
| GC/MS Tune/Inst. Perform | |
| Calibrations | |
| Blanks | |
| Surrogates | |
| Matrix Spike/Dup LCS | |
| Field QC | |
| Internal Standard Performance | |
| Compound Identification and Quantitation | |
| System Performance | |

| COMMENTS[b] | |
|---|---|
| | |

[a] Subcontracted analytical laboratory is not meeting contract and/or method requirements.
[b] Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.

# 1. INTRODUCTION

| | |
|---|---|
| Task Order Title: | NAF Midway Site Investigations |
| CLEAN Contract Task Order #: | 0136 |
| SDG#: | 5812M |
| CTO Manager: | J. Cotter |
| Project Contact: | M. Medeiros |
| Matrix: | Soil/Water |
| Analysis: | Pesticides/PCBs |
| NEESA QC Level: | D |
| No. of Samples: | 18 |
| No. of Reanalyses/Dilutions: | 0 |
| Reviewer: | H. Chang |
| Date of Review: | October 13, 1996 |

The samples listed in Table 1 were validated based on the guidelines outlined in the Ogden *Project Procedures Manual, Comprehensive Long-Term Environmental Action Navy (CLEAN) Program* data validation procedure for Level C and D pesticides/PCBs (DVP-4, Rev. 2) and the *National Functional Guidelines For Organic Data Review* (2/94). Any deviations from these procedures are documented herein. These procedures are designed to meet the data quality objectives required by the Naval Energy and Environmental Support Activity for all analyses at the requested QC level. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

## Table 1. Sample identification

| Client ID | EPA ID | Laboratory ID | Matrix | COC Method |
|---|---|---|---|---|
| M01TS01S01 | MC100 | 5812-01DL | soil | OLM03.1 |
| M01TS01S02 | MC101 | 5812-02DL | soil | OLM03.1 |
| M01TS02S01 | MC102 | 5812-03DL1 | soil | OLM03.1 |
| M01TS02S02 | MC103 | 5812-04DL | soil | OLM03.1 |
| M01TS03S01 | MC104 | 5812-05DL | soil | OLM03.1 |
| M01TS03S02 | MC105 | 5812-06DL | soil | OLM03.1 |
| M01PS01S01 | MC144 | 5812-07DL | soil | OLM03.1 |
| M01PS01S01A | MC144A | 5812-09DL | soil | OLM03.1 |
| M01QW02E02 | MC145 | 5812-08 | water | OLM03.1 |
| M01TS04S01 | MC106 | 5812-10DL1 | soil | OLM03.1 |
| M01TS04S02 | MC107 | 5812-11DL | soil | OLM03.1 |
| M01TS05S01 | MC108 | 5812-12DL | soil | OLM03.1 |
| M01TS05D01 | MC109 | 5812-13DL | soil | OLM03.1 |
| M01TS05S02 | MC110 | 5812-14DL1 | soil | OLM03.1 |
| M01QW14E02 | MC146 | 5812-15 | water | OLM03.1 |
| M01TS14S02 | MC130 | 5812-16DL1 | soil | OLM03.1 |
| M01TS15S01 | MC131 | 5812-17DL1 | soil | OLM03.1 |
| M01TS15S02 | MC132 | 5812-18 | soil | OLM03.1 |

# 2. DATA VALIDATION FINDINGS

## 2.1 SAMPLE MANAGEMENT

The following are findings associated with sample management:

### 2.1.1 Sample Preservation, Handling, and Transport

No preservations were required for pesticide/PCB analysis. There were no information regarding sample handling ad transport. No cooler temperatures were recorded on the COC. No qualifications were required.

### 2.1.2 Chain of Custody

All COCs were legible but were incomplete. All COCs were signed by field personnel. The laboratory did not complete the COCs. No signature of the person receiving the samples was on the COC and the questions regarding sample conditions were not answered on the COC. Per B. Wessel, Ogden-Honolulu, the Client ID for sample MC144A was amended to M01PS01S01A. No qualifications were required based on sample receipt information.

### 2.1.3 Holding Times

All samples in this SDG were extracted and analyzed within the allowed holding times. No qualifications were assigned.

## 2.2 PESTICIDES INSTRUMENT PERFORMANCE

According to the summary forms and review of the raw data, the endrin/4,4´-DDT degradations were within QC limits. All surrogate retention times for the samples were within the allowed retention time windows as established by the initial calibrations. All calibration standard peaks were within established retention time windows. No qualifications were required.

All reported %resolutions in the initial resolution check were above 60% and were considered acceptable. However, several compounds in the continuing calibration check standards had %resolution below the 90% QC criteria for gamma chlordane/alpha chlordane on DB-1701 column. In addition, alpha chlordane/endosulfan I, dieldrin/4,4'-DDE, and endosulfan II/4,4'-DDD were noted to have overlapping retention time windows on the DB608 column, while endosulfan II/4,4'-DDD and alpha chlordane/gamma chlordane had overlapping retention time windows on the DB-1701. Poor resolution and overlapping retention time windows were a result of insufficient run times. The run time of 15 minutes was too short to provide adequate resolution and chromatography. The recommended instrument setup requires 30 to 35 minute run time. Customarily, the 15 minute run time is used for screening purposes to determine the initial dilution factors and is not adequate for an analytical run. Qualifications assigned due to possible coelution are noted in Section 2.10 and 2.11.

The Form 6H, Form 6I, and Form 6J for Individual Mixes and PEM resolution summary were filled out incorrectly. Percent resolution between two analytes should be recorded next to the analyte eluting earlier, and the last analyte on the Form should not have any %resolution recorded. The laboratory personnel were inconsistent in recording the resolution. Additionally, the actual resolution could not be accurately verified due to the poor presentation of the chromatograms.

## 2.3 CALIBRATION

The following are findings associated with calibration:

### 2.3.1 Analytical Sequence

The analytical sequence met the requirements set in the CLP SOW OLM03.1 and was therefore acceptable.

### 2.3.2 Initial Calibration

The %RSDs were within the QC limit of 20% for all target compounds with the exception of beta-BHC on column DB-1701. Beta-BHC was qualified "UJ" in all soil samples. No qualifications were assigned to water samples as they are field QC samples.

### 2.3.3 Continuing Calibration

The %Ds were within the QC limit of 25% for all target compounds. No transcription or calculation errors were noted; therefore, no qualifications were assigned to the data. The Form VII was reported using RPD notation which was used in the CLP SOW OLM01.8 or earlier version. The laboratory is using incorrect version of the SOW for the summary forms.

## 2.4 BLANKS

Following are the findings associated with the blanks:

### 2.4.1 Instrument Blanks

No summary forms were supplied for the instrument blanks. Chromatograms and quantitation reports were reviewed for all instrument blanks and found no pesticide/PCB contamination above 1/2 the CRQLs; therefore, no qualifications were required.

### 2.4.2 Method Blanks

Two soil and one water method blank were extracted and analyzed with this SDG. No target compounds were detected in the method blanks, however, the soil method blanks had low level non-target compound contamination. No qualifications were assigned to the data.

## 2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

One water and two soil blank spike were extracted and analyzed with the samples in this SDG. The percent recoveries of all spiked compounds were within QC limits for both blank spikes; therefore, no qualifications were required. The reviewer noted that blank spike QC limits were the same as CLP MS/MSD limits.

## 2.6 SURROGATE RECOVERY

All samples, blanks, and spikes were noted to contain surrogate compounds. Review of the raw data indicated that a ten-fold dilution or greater resulted in non-quantifiable surrogate recoveries; therefore, samples analyzed at a 10× dilution or greater were not evaluated for surrogate performance. One out of four surrogate recoveries was above the QC limits in sample MC106. No qualification was required for one surrogate being high. One out of four surrogate recoveries was below the QC limits in samples MC146; however, no qualifier was assigned to this sample since this is a field QC sample.

The reviewer noted that incorrect surrogate limits of 60 to 150 percent were used by the laboratory. The correct limits in CLP SOW OLM03.1, 30 to 150 percent, were used to evaluate the data. The lab is using earlier version of CLP SOW for the summary forms as noted in Section 2.3.3 which resulted in use of incorrect surrogate limits.

## 2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

MS/MSD analyses were performed on sample MC109. The sample and the MS/MSD analyses were done at 20× dilution resulting in many of the spiked analytes being diluted out; therefore, no evaluation could be made based on this MS/MSD pair. No qualifications were applied based on MS/MSD results.

## 2.8 SAMPLE CLEANUP PERFORMANCE

Florisil cleanup was performed on all samples as required with acceptable recoveries for the florisil check sample. GPC cleanup was performed for all soil samples as required with acceptable recoveries for the GPC check samples. No qualification was necessary.

## 2.9 FIELD QC SAMPLES

Field QC samples are evaluated, and if necessary, qualified based only on method blanks. Any remaining detects are used to evaluate the associated samples. The following are findings associated with field QC samples:

### 2.9.1 Field Blanks and Equipment Rinsates

Sample MC155 was identified as the field blank and MC145 and MC146 were identified as the equipment rinsates associated with the samples in this SDG. There were no detects for target compounds in any of the field QC samples; therefore, no qualifications were necessary.

### 2.9.2 Field Duplicates

Qualifications are not assigned to the data based on field duplicate results. Samples MC108 and MC109 were identified as the field duplicate samples. Both MC108 and MC109 had detects for 4,4´-DDE and Aroclor 1254 with RPDs below 100%. There were reported detects for aldrin, heptachlor epoxide, dieldrin, and alpha-chlordane in sample MC109. These are possible false postitives discussed in section 10. The discrepancy between two samples are due to the fact that sample MC108 was analyzed at 50× dilution and sample MC109 was analyzed at 20× dilution. From the evaluation of the raw data, sample MC108 should have been analyzed at 20× dilution which would have produced a better comparison of the two samples.

## 2.10 COMPOUND IDENTIFICATION

Compound identification was performed by the reviewer. Several potential false positives were identified by the reviewer. Raw data was reviewed to determine pattern matching for multicomponent compounds. Based on calculations of the Aroclors' peak ratio to the calibration standard and pattern matching, the reviewer determined that the single peak pesticides were identified as detects using the same peaks used for Aroclor identification. Many of the Aroclor peaks fell within the retention time windows of the single peak pesticides on both columns. These detects for single peak pesticides in the presence of the Aroclor is highly suspect and should not be considered a valid identification. The following table summarizes the qualifications:

| Findings | Associated Samples | Qualification of Data |
|---|---|---|
| Aroclor-1260 peaks were used for the identification of endosulfan II. | MC100<br>MC144A | Endosulfan II was qualified as tentatively identified, "N" in the samples. |
| Aroclor-1260 peaks were used for the identification of endrin. | MC110<br>MC132 | Endrin was qualified as tentatively identified, "N" in the samples. |

| Findings | Associated Samples | Qualification of Data |
|---|---|---|
| Aroclor-1260 peaks were used for the identification of endrin aldehyde. | MC100<br>MC132<br>MC144A | Endrin aldehyde was qualified as tentatively identified, "N" in the samples. |
| Aroclor-1254 peaks were used for the identification of aldrin | MC109 | Aldrin was qualified as tentatively identified, "N" in the sample. |
| Aroclor-1254 peaks were used for the identification of heptachlor epoxide. | MC109 | Heptachlor epoxide was qualified as tentatively identified, "N" in the sample. |
| Aroclor-1254 peaks were used for the identification of dieldrin. | MC109 | Dieldrin was qualified as tentatively identified, "N" in the sample. |
| Aroclor-1254 peaks were used for the identification of alpha-chlordane. | MC107<br>MC109 | Alpha-chlordane was qualified as tentatively identified, "N" in the samples. |

The %Ds between the two column results exceeded 100% for several compounds and samples. The samples were qualified as follows:

| Findings | Associated Samples | Qualification of Data |
|---|---|---|
| The %D for 4,4´-DDD exceeded 100%. | MC100<br>MC104<br>MC106<br>MC110 | The samples were qualified as tentatively identified, "N." |
| The %D for 4,4´-DDT exceeded 100%. | MC100<br>MC104<br>MC105<br>MC130<br>MC131<br>MC132 | The samples were qualified as tentatively identified, "N." |
| The %D for gamma-chlordane exceeded 100%. | MC110 | The samples were qualified as tentatively identified, "N." |

It should be noted that 4,4-´-DDD, 4,4´-DDT, dieldrin, and gamma-chlordane coelute with Aroclor 1260 on one of the columns; therefore, the two column confirmation of the detects for any of these compounds are not adequate. Although no additional qualification of the data was assigned, the data should be used with caution.

There were several samples with detects at a concentration above the level required for GC/MS confirmation; however, there were no evidence of confirmation analysis in the data package. This is noncompliant with the CLP SOW OLM03.1.

## 2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantification was verified in the samples in this SDG. Samples MC135, MC138, MC141, MC142, and MC143 were analyzed at a 10× dilution. Sample MC137 was analyzed at a 2× dilution, sample MC136 was analyzed at 5× dilution, sample MC148 was analyzed at 20× and 200× dilution, and sample MC141 at a 100× dilution. Dilutions were performed due to high concentrations of Aroclors, 4,4′-DDE, and 4,4′-DDT. All reporting limits were consistent with the CRQLs listed in the CLP SOW OLM03.1 after adjustments for percent moisture, sample volume, and dilution factors.

The reported detects which were identified using Aroclor peaks which fell within the retention time windows of the single peak pesticides were qualified as list in the below since the quantitation of the pesticides are also not valid.

| Findings | Associated Samples | Qualification of Data |
|---|---|---|
| Aroclor-1260 peaks were used for the identification of endosulfan II. | MC100<br>MC144A | Endosulfan II was qualified as estimated, "J" in the samples. |
| Aroclor-1260 peaks were used for the identification of endrin. | MC110<br>MC132 | Endrin was qualified as estimated, "J" in the samples. |
| Aroclor-1260 peaks were used for the identification of endrin aldehyde. | MC100<br>MC132<br>MC144A | Endrin aldehyde was qualified as estimated, "J" in the samples. |
| Aroclor-1254 peaks were used for the identification of aldrin | MC109 | Aldrin was qualified as estimated, "J" in the sample. |
| Aroclor-1254 peaks were used for the identification of heptachlor epoxide. | MC109 | Heptachlor epoxide was qualified as estimated, "J" in the sample. |
| Aroclor-1254 peaks were used for the identification of dieldrin. | MC109 | Dieldrin was qualified as estimated, "J" in the sample. |
| Aroclor-1254 peaks were used for the identification of alpha-chlordane. | MC107<br>MC109 | Alpha-chlordane was qualified as estimated, "J" in the samples. |

The %Ds between two column quantitations for several compounds exceeded 25% and were qualified as follows:

| Findings | Associated Samples | Qualification of Data |
|---|---|---|
| The %D for beta-BHC exceeded 25%. | MC144 | The sample was qualified as estimated, "J." |
| The %D for 4,4′-DDE exceeded 25%. | MC101, MC108<br>MC132 | The samples were qualified as estimated, "J." |

| Findings | Associated Samples | Qualification of Data |
|---|---|---|
| The %D for 4,4´-DDD exceeded 25%. | MC100, MC102<br>MC104, MC106<br>MC110, MC131<br>MC132 | The samples were qualified as estimated, "J." |
| The %D for 4,4´-DDT exceeded 25%. | MC100, MC102<br>MC104, MC105<br>MC107, MC110<br>MC130, MC131<br>MC132 | The samples were qualified as estimated, "J." |
| The %D for dieldrin exceeded 25%. | MC132 | The samples were qualified as estimated, "J." |
| The %D for alpha-chlordane exceeded 25%. | MC132, MC144 | The samples were qualified as estimated, "J." |
| The %D for gamma-chlordane exceeded 25%. | MC110 | The samples were qualified as estimated, "J." |
| The %D for Aroclor-1254 exceeded 25%. | MC109, MC107 | The samples were qualified as estimated, "J." |
| The %D for Aroclor-1260 exceeded 25%. | MC101, MC102<br>MC107, MC110<br>MC130, MC144A | The samples were qualified as estimated, "J." |

Samples MC101, MC102, MC103, MC104, MC105, MC107, MC108, MC130, and MC131 were noted to have been analyzed at a dilution higher than appropriate.

Samples MC144 and MC144A were identified as performance evaluation samples. The results are summarized in the following tables:

MC144

| Analyte | Certified Value (μg/Kg) | Advisory Range (μg/Kg) | Laboratory Result (μg/Kg) |
|---|---|---|---|
| Aldrin | 210 | 119-233 | 120 |
| beta-BHC | 376 | 188-414 | 130 * |
| delta-BHC | 398 | 126-505 | 210 |
| gamma-BHC (Lindane) | 253 | 118-293 | 110 * |
| alpha-chlordane | 291 | 117-335 | 110 * |
| 4,4'-DDD | 245 | 120-292 | 110 * |
| 4,4'-DDE | 198 | 117-228 | 96 * |

| Analyte | Certified Value (µg/Kg) | Advisory Range (µg/Kg) | Laboratory Result (µg/Kg) |
|---|---|---|---|
| 4,4'-DDT | 198 | 78.6-214 | 75 * |
| Dieldrin | 304 | 159-344 | 140 * |
| Endrin | 397 | 220-472 | 220 |
| Heptachlor | 250 | 148-278 | 120 * |
| Heptachlor epoxide | 187 | 65.5-234 | 94 * |

MC144A

| Analyte | Certified Value (mg/Kg) | Advisory Range (mg/Kg) | Laboratory Result (mg/Kg) |
|---|---|---|---|
| Aroclor-1260 | 35.0 | 16.1-36.8 | 13 * |

In addition to the Aroclor-1260 detect, endosulfan II and endrin aldehyde were reported as detects in sample MC144A; therefore, further emphasizing the highly suspect nature of these single component pesticides.

* OUTSIDE ADVISORY RANGE

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC100

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5812M

Matrix: (soil/water) SOIL  Lab Sample ID: 5812-01DL

Sample wt/vol: 30.2 (g/ml) G  Lab File ID:

% Moisture: 11 decanted: (Y/N) N  Date Received: 6/28/96

Extraction: (SepF/Cont/Sonc) SONC  Date Extracted: 7/02/96

Concentrated Extract Volume: 5000 (uL)  Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL)  Dilution Factor: 50.0

GPC Cleanup: (Y/N) Y  pH: 8.2  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 95. | U | U | |
| 319-85-7 | beta-BHC | 95. | U | UJ | C |
| 319-86-8 | delta-BHC | 95. | U | U | |
| 58-89-9 | gamma-BHC (Lindane) | 95. | U | | |
| 76-44-8 | Heptachlor | 95. | U | | |
| 309-00-2 | Aldrin | 95. | U | | |
| 1024-57-3 | Heptachlor epoxide | 95. | U | | |
| 959-98-8 | Endosulfan I | 95. | U | | |
| 60-57-1 | Dieldrin | 180. | U | | |
| 72-55-9 | 4,4'-DDE | 340. | P | | |
| 72-20-8 | Endrin | 180. | U | U | |
| 33213-65-9 | Endosulfan II | 230. | P | NJ | *10 *11 |
| 72-54-8 | 4,4'-DDD | 380. | P | NJ | *10 *11 |
| 1031-07-8 | Endosulfan sulfate | 180. | U | U | |
| 50-29-3 | 4,4'-DDT | 280. | P | NJ | *10 *11 |
| 72-43-5 | Methoxychlor | 950. | U | U | |
| 53494-70-5 | Endrin ketone | 180. | U | U | |
| 7421-36-3 | Endrin aldehyde | 340. | | NJ | *10 *11 |
| 5103-71-9 | alpha-Chlordane | 95. | U | U | |
| 5103-74-2 | gamma-Chlordane | 95. | U | | |
| 8001-35-2 | Toxaphene | 9500. | U | | |
| 12674-11-2 | Aroclor-1016 | 1800. | U | | |
| 11104-28-2 | Aroclor-1221 | 3700. | U | | |
| 11141-16-5 | Aroclor-1232 | 1800. | U | | |
| 53469-21-9 | Aroclor-1242 | 1800. | U | | |
| 12672-29-6 | Aroclor-1248 | 1800. | U | | |
| 11097-69-1 | Aroclor-1254 | 1800. | U | | |
| 11096-82-5 | Aroclor-1260 | 6900. | P | | |

LEVEL D



OGDEN VALIDATED

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC101

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5812M

Matrix: (soil/water) SOIL  Lab Sample ID: 5812-02DL

Sample wt/vol: 30.2 (g/ml) G  Lab File ID:

% Moisture: 7 decanted: (Y/N) N  Date Received: 6/28/96

Extraction: (SepF/Cont/Sonc) SONC  Date Extracted: 7/02/96

Concentrated Extract Volume: 5000 (uL)  Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL)  Dilution Factor: 100.0

GPC Cleanup: (Y/N) Y  pH: 8.3  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 180. | U | U | |
| 319-85-7 | beta-BHC | 180. | U | UJ | C |
| 319-86-8 | delta-BHC | 180. | U | U | |
| 58-89-9 | gamma-BHC (Lindane) | 180. | U | | |
| 76-44-8 | Heptachlor | 180. | U | | |
| 309-00-2 | Aldrin | 180. | U | | |
| 1024-57-3 | Heptachlor epoxide | 180. | U | | |
| 959-98-8 | Endosulfan I | 180. | U | | |
| 60-57-1 | Dieldrin | 350. | U | | |
| 72-55-9 | 4,4'-DDE | 480. | P | J | *11 |
| 72-20-8 | Endrin | 350. | U | U | |
| 33213-65-9 | Endosulfan II | 350. | U | | |
| 72-54-8 | 4,4'-DDD | 350. | U | | |
| 1031-07-8 | Endosulfan sulfate | 350. | U | | |
| 50-29-3 | 4,4'-DDT | 350. | U | | |
| 72-43-5 | Methoxychlor | 1800. | U | | |
| 53494-70-5 | Endrin ketone | 350. | U | | |
| 7421-36-3 | Endrin aldehyde | 350. | U | | |
| 5103-71-9 | alpha-Chlordane | 180. | U | | |
| 5103-74-2 | gamma-Chlordane | 180. | U | | |
| 8001-35-2 | Toxaphene | 18000. | U | | |
| 12674-11-2 | Aroclor-1016 | 3500. | U | | |
| 11104-28-2 | Aroclor-1221 | 7200. | U | | |
| 11141-16-5 | Aroclor-1232 | 3500. | U | | |
| 53469-21-9 | Aroclor-1242 | 3500. | U | | |
| 12672-29-6 | Aroclor-1248 | 3500. | U | | |
| 11097-69-1 | Aroclor-1254 | 3500. | U | | |
| 11096-82-5 | Aroclor-1260 | 4700. | JP | J | *11 |

LEVEL D

FORM I PEST  3/90

OGDEN VALIDATED

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC102

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5812M

Matrix: (soil/water) SOIL  Lab Sample ID: 5812-03DL1

Sample wt/vol: 30.3 (g/ml) G  Lab File ID:

% Moisture: 6 decanted: (Y/N) N  Date Received: 6/28/96

Extraction: (SepF/Cont/Sonc) SONC  Date Extracted: 7/02/96

Concentrated Extract Volume: 5000 (uL)  Date Analyzed: 7/17/96

Injection Volume: 1.0 (uL)  Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y  pH: 8.3  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 9.0 | U | U | |
| 319-85-7 | beta-BHC | 9.0 | U | UJ | C |
| 319-86-8 | delta-BHC | 9.0 | U | U | |
| 58-89-9 | gamma-BHC (Lindane) | 9.0 | U | | |
| 76-44-8 | Heptachlor | 9.0 | U | | |
| 309-00-2 | Aldrin | 9.0 | U | | |
| 1024-57-3 | Heptachlor epoxide | 9.0 | U | | |
| 959-98-8 | Endosulfan I | 9.0 | U | | |
| 60-57-1 | Dieldrin | 17. | U | | |
| 72-55-9 | 4,4'-DDE | 48. | C | | |
| 72-20-8 | Endrin | 17. | U | U | |
| 33213-65-9 | Endosulfan II | 17. | U | U | |
| 72-54-8 | 4,4'-DDD | 34. | PC | J | *11 |
| 1031-07-8 | Endosulfan sulfate | 17. | U | U | |
| 50-29-3 | 4,4'-DDT | 43. | PC | J | *11 |
| 72-43-5 | Methoxychlor | 90. | U | U | |
| 53494-70-5 | Endrin ketone | 17. | U | | |
| 7421-36-3 | Endrin aldehyde | 17. | U | | |
| 5103-71-9 | alpha-Chlordane | 9.0 | U | | |
| 5103-74-2 | gamma-Chlordane | 9.0 | U | | |
| 8001-35-2 | Toxaphene | 900. | U | | |
| 12674-11-2 | Aroclor-1016 | 170. | U | | |
| 11104-28-2 | Aroclor-1221 | 350. | U | | |
| 11141-16-5 | Aroclor-1232 | 170. | U | | |
| 53469-21-9 | Aroclor-1242 | 170. | U | | |
| 12672-29-6 | Aroclor-1248 | 170. | U | | |
| 11097-69-1 | Aroclor-1254 | 170. | U | | |
| 11096-82-5 | Aroclor-1260 | 270. | P | J | *11 |

LEVEL D

FORM I PEST  3/90

OGDEN VALIDATED

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC103

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5812M

Matrix: (soil/water) SOIL  Lab Sample ID: 5812-04DL

Sample wt/vol: 30.2 (g/ml) G  Lab File ID:

% Moisture: 9 decanted: (Y/N) N  Date Received: 6/28/96

Extraction: (SepF/Cont/Sonc) SONC  Date Extracted: 7/02/96

Concentrated Extract Volume: 5000 (uL)  Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL)  Dilution Factor: 50.0

GPC Cleanup: (Y/N) Y  pH: 8.3  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 93. | U | U | |
| 319-85-7 | beta-BHC | 93. | U | UJ | C |
| 319-86-8 | delta-BHC | 93. | U | U | |
| 58-89-9 | gamma-BHC (Lindane) | 93. | U | | |
| 76-44-8 | Heptachlor | 93. | U | | |
| 309-00-2 | Aldrin | 93. | U | | |
| 1024-57-3 | Heptachlor epoxide | 93. | U | | |
| 959-98-8 | Endosulfan I | 93. | U | | |
| 60-57-1 | Dieldrin | 180. | U | | |
| 72-55-9 | 4,4'-DDE | 180. | U | | |
| 72-20-8 | Endrin | 180. | U | | |
| 33213-65-9 | Endosulfan II | 180. | U | | |
| 72-54-8 | 4,4'-DDD | 180. | U | | |
| 1031-07-8 | Endosulfan sulfate | 180. | U | | |
| 50-29-3 | 4,4'-DDT | 180. | U | | |
| 72-43-5 | Methoxychlor | 930. | U | | |
| 53494-70-5 | Endrin ketone | 180. | U | | |
| 7421-36-3 | Endrin aldehyde | 180. | U | | |
| 5103-71-9 | alpha-Chlordane | 93. | U | | |
| 5103-74-2 | gamma-Chlordane | 93. | U | | |
| 8001-35-2 | Toxaphene | 9300. | U | | |
| 12674-11-2 | Aroclor-1016 | 1800. | U | | |
| 11104-28-2 | Aroclor-1221 | 3700. | U | | |
| 11141-16-5 | Aroclor-1232 | 1800. | U | | |
| 53469-21-9 | Aroclor-1242 | 1800. | U | | |
| 12672-29-6 | Aroclor-1248 | 1800. | U | | |
| 11097-69-1 | Aroclor-1254 | 1800. | U | | |
| 11096-82-5 | Aroclor-1260 | 2100. | U | | |

LEVEL D

FORM I PEST  3/90

10/16/96

OGDEN VALIDATED

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC104

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5812M

Matrix: (soil/water) SOIL  Lab Sample ID: 5812-05DL

Sample wt/vol: 30.0 (g/ml) G  Lab File ID:

% Moisture: 8 decanted: (Y/N) N  Date Received: 6/28/96

Extraction: (SepF/Cont/Sonc) SONC  Date Extracted: 7/02/96

Concentrated Extract Volume: 5000 (uL)  Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL)  Dilution Factor: 100.0

GPC Cleanup: (Y/N) Y  pH: 8.4  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 180. | U | U | |
| 319-85-7 | beta-BHC | 180. | U | UJ | C |
| 319-86-8 | delta-BHC | 180. | U | U | |
| 58-89-9 | gamma-BHC (Lindane) | 180. | U | | |
| 76-44-8 | Heptachlor | 180. | U | | |
| 309-00-2 | Aldrin | 180. | U | | |
| 1024-57-3 | Heptachlor epoxide | 180. | U | | |
| 959-98-8 | Endosulfan I | 180. | U | | |
| 60-57-1 | Dieldrin | 360. | U | | |
| 72-55-9 | 4,4'-DDE | 460. | | | |
| 72-20-8 | Endrin | 360. | U | U | |
| 33213-65-9 | Endosulfan II | 360. | U | U | |
| 72-54-8 | 4,4'-DDD | 400. | P | NJ | *10 *11 |
| 1031-07-8 | Endosulfan sulfate | 360. | U | U | |
| 50-29-3 | 4,4'-DDT | 890. | P | NJ | *10 *11 |
| 72-43-5 | Methoxychlor | 1800. | U | U | |
| 53494-70-5 | Endrin ketone | 360. | U | | |
| 7421-36-3 | Endrin aldehyde | 360. | U | | |
| 5103-71-9 | alpha-Chlordane | 180. | U | | |
| 5103-74-2 | gamma-Chlordane | 180. | U | | |
| 8001-35-2 | Toxaphene | 18000. | U | | |
| 12674-11-2 | Aroclor-1016 | 3600. | U | | |
| 11104-28-2 | Aroclor-1221 | 7300. | U | | |
| 11141-16-5 | Aroclor-1232 | 3600. | U | | |
| 53469-21-9 | Aroclor-1242 | 3600. | U | | |
| 12672-29-6 | Aroclor-1248 | 3600. | U | | |
| 11097-69-1 | Aroclor-1254 | 3600. | U | | |
| 11096-82-5 | Aroclor-1260 | 9500. | | | |

LEVEL D



OGDEN VALIDATED

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC105

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5812M

Matrix: (soil/water)SOIL Lab Sample ID: 5812-06DL

Sample wt/vol: 30.4 (g/ml)G Lab File ID:

% Moisture: 7 decanted: (Y/N) N Date Received: 6/28/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/02/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL) Dilution Factor: 100.0

GPC Cleanup: (Y/N)Y pH: 8.2 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg)UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 180. | U | U | |
| 319-85-7 | beta-BHC | 180. | U | UJ | C |
| 319-86-8 | delta-BHC | 180. | U | U | |
| 58-89-9 | gamma-BHC(Lindane) | 180. | U | | |
| 76-44-8 | Heptachlor | 180. | U | | |
| 309-00-2 | Aldrin | 180. | U | | |
| 1024-57-3 | Heptachlor epoxide | 180. | U | | |
| 959-98-8 | Endosulfan I | 180. | U | | |
| 60-57-1 | Dieldrin | 350. | U | | |
| 72-55-9 | 4,4'-DDE | 350. | U | | |
| 72-20-8 | Endrin | 350. | U | | |
| 33213-65-9 | Endosulfan II | 350. | U | | |
| 72-54-8 | 4,4'-DDD | 350. | U | | |
| 1031-07-8 | Endosulfan sulfate | 350. | U | | |
| 50-29-3 | 4,4'-DDT | 370. | P | NJ | *10 *11 |
| 72-43-5 | Methoxychlor | 1800. | U | U | |
| 53494-70-5 | Endrin ketone | 350. | U | | |
| 7421-36-3 | Endrin aldehyde | 350. | U | | |
| 5103-71-9 | alpha-Chlordane | 180. | U | | |
| 5103-74-2 | gamma-Chlordane | 180. | U | | |
| 8001-35-2 | Toxaphene | 18000. | U | | |
| 12674-11-2 | Aroclor-1016 | 3500. | U | | |
| 11104-28-2 | Aroclor-1221 | 7100. | U | | |
| 11141-16-5 | Aroclor-1232 | 3500. | U | | |
| 53469-21-9 | Aroclor-1242 | 3500. | U | | |
| 12672-29-6 | Aroclor-1248 | 3500. | U | | |
| 11097-69-1 | Aroclor-1254 | 3500. | U | | |
| 11096-82-5 | Aroclor-1260 | 4000. | | | |



LEVEL D

OGDEN VALIDATED

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC106

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5812M

Matrix: (soil/water) SOIL  Lab Sample ID: 5812-10DL1

Sample wt/vol: 30.4 (g/ml) G  Lab File ID:

% Moisture: 9 decanted: (Y/N) N  Date Received: 6/28/96

Extraction: (SepF/Cont/Sonc) SONC  Date Extracted: 7/02/96

Concentrated Extract Volume: 5000 (uL)  Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL)  Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y  pH: 8.4  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 9.2 | U | U | |
| 319-85-7 | beta-BHC | 9.2 | U | UJ | C |
| 319-86-8 | delta-BHC | 9.2 | U | U | |
| 58-89-9 | gamma-BHC(Lindane) | 9.2 | U | | |
| 76-44-8 | Heptachlor | 9.2 | U | | |
| 309-00-2 | Aldrin | 9.2 | U | | |
| 1024-57-3 | Heptachlor epoxide | 9.2 | U | | |
| 959-98-8 | Endosulfan I | 9.2 | U | | |
| 60-57-1 | Dieldrin | 18. | U | | |
| 72-55-9 | 4,4'-DDE | 280. | C | | |
| 72-20-8 | Endrin | 18. | U | U | |
| 33213-65-9 | Endosulfan II | 18. | U | U | |
| 72-54-8 | 4,4'-DDD | 19. | P | NJ | *10 *11 |
| 1031-07-8 | Endosulfan sulfate | 18. | U | U | |
| 50-29-3 | 4,4'-DDT | 260. | C | | |
| 72-43-5 | Methoxychlor | 92. | U | U | |
| 53494-70-5 | Endrin ketone | 18. | U | | |
| 7421-36-3 | Endrin aldehyde | 18. | U | | |
| 5103-71-9 | alpha-Chlordane | 9.2 | U | | |
| 5103-74-2 | gamma-Chlordane | 9.2 | U | | |
| 8001-35-2 | Toxaphene | 920. | U | | |
| 12674-11-2 | Aroclor-1016 | 180. | U | | |
| 11104-28-2 | Aroclor-1221 | 360. | U | | |
| 11141-16-5 | Aroclor-1232 | 180. | U | | |
| 53469-21-9 | Aroclor-1242 | 180. | U | | |
| 12672-29-6 | Aroclor-1248 | 180. | U | | |
| 11097-69-1 | Aroclor-1254 | 180. | U | | |
| 11096-82-5 | Aroclor-1260 | 180. | U | | |

LEVEL D



OGDEN VALIDATED

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC107

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5812M

Matrix: (soil/water) SOIL  Lab Sample ID: 5812-11DL

Sample wt/vol: 30.4 (g/ml) G  Lab File ID:

% Moisture: 5 decanted: (Y/N) N  Date Received: 6/28/96

Extraction: (SepF/Cont/Sonc) SONC  Date Extracted: 7/02/96

Concentrated Extract Volume: 5000 (uL)  Date Analyzed: 7/13/96

Injection Volume: 1.0 (uL)  Dilution Factor: 20.0

GPC Cleanup: (Y/N) Y  pH: 8.4  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 35. | U | u | |
| 319-85-7 | beta-BHC | 35. | U | UJ | C |
| 319-86-8 | delta-BHC | 35. | U | u | |
| 58-89-9 | gamma-BHC (Lindane) | 35. | U | | |
| 76-44-8 | Heptachlor | 35. | U | | |
| 309-00-2 | Aldrin | 35. | U | | |
| 1024-57-3 | Heptachlor epoxide | 35. | U | | |
| 959-98-8 | Endosulfan I | 35. | U | | |
| 60-57-1 | Dieldrin | 69. | U | | |
| 72-55-9 | 4,4'-DDE | 160. | C | | |
| 72-20-8 | Endrin | 69. | U | u | |
| 33213-65-9 | Endosulfan II | 69. | U | | |
| 72-54-8 | 4,4'-DDD | 69. | U | | |
| 1031-07-8 | Endosulfan sulfate | 69. | U | | |
| 50-29-3 | 4,4'-DDT | 98. | PC | J | *11 |
| 72-43-5 | Methoxychlor | 350. | U | u | |
| 53494-70-5 | Endrin ketone | 69. | U | | |
| 7421-36-3 | Endrin aldehyde | 69. | U | | |
| 5103-71-9 | alpha-Chlordane | 45. | | NJ | *10 *11 |
| 5103-74-2 | gamma-Chlordane | 35. | U | u | |
| 8001-35-2 | Toxaphene | 3500. | U | | |
| 12674-11-2 | Aroclor-1016 | 690. | U | | |
| 11104-28-2 | Aroclor-1221 | 1400. | U | | |
| 11141-16-5 | Aroclor-1232 | 690. | U | | |
| 53469-21-9 | Aroclor-1242 | 690. | U | | |
| 12672-29-6 | Aroclor-1248 | 690. | U | | |
| 11097-69-1 | Aroclor-1254 | 1200. | P | J | *11 |
| 11096-82-5 | Aroclor-1260 | 690. | U | u | |

LEVEL D



OGDEN VALIDATED 96

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC108

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5812M

Matrix: (soil/water) SOIL Lab Sample ID: 5812-12DL

Sample wt/vol: 30.2 (g/ml) G Lab File ID:

% Moisture: 5 decanted: (Y/N) N Date Received: 6/28/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 7/02/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 7/13/96

Injection Volume: 1.0 (uL) Dilution Factor: 50.0

GPC Cleanup: (Y/N) Y pH: 8.4 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 89. | U | J | |
| 319-85-7 | beta-BHC | 89. | U | UJ | C |
| 319-86-8 | delta-BHC | 89. | U | U | |
| 58-89-9 | gamma-BHC(Lindane) | 89. | U | | |
| 76-44-8 | Heptachlor | 89. | U | | |
| 309-00-2 | Aldrin | 89. | U | | |
| 1024-57-3 | Heptachlor epoxide | 89. | U | | |
| 959-98-8 | Endosulfan I | 89. | U | | |
| 60-57-1 | Dieldrin | 170. | U | | |
| 72-55-9 | 4,4'-DDE | 260. | P | UJ | *11 |
| 72-20-8 | Endrin | 170. | U | U | |
| 33213-65-9 | Endosulfan II | 170. | U | | |
| 72-54-8 | 4,4'-DDD | 170. | U | | |
| 1031-07-8 | Endosulfan sulfate | 170. | U | | |
| 50-29-3 | 4,4'-DDT | 170. | U | | |
| 72-43-5 | Methoxychlor | 890. | U | | |
| 53494-70-5 | Endrin ketone | 170. | U | | |
| 7421-36-3 | Endrin aldehyde | 170. | U | | |
| 5103-71-9 | alpha-Chlordane | 89. | U | | |
| 5103-74-2 | gamma-Chlordane | 89. | U | | |
| 8001-35-2 | Toxaphene | 8900. | U | | |
| 12674-11-2 | Aroclor-1016 | 1700. | U | | |
| 11104-28-2 | Aroclor-1221 | 3500. | U | | |
| 11141-16-5 | Aroclor-1232 | 1700. | U | | |
| 53469-21-9 | Aroclor-1242 | 1700. | U | | |
| 12672-29-6 | Aroclor-1248 | 1700. | U | | |
| 11097-69-1 | Aroclor-1254 | 3200. | | | |
| 11096-82-5 | Aroclor-1260 | 1700. | U | U | |

FORM I PEST 3/90

LEVEL D

OGDEN VALIDATED

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC109

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5812M

Matrix: (soil/water) SOIL  Lab Sample ID: 5812-13DL

Sample wt/vol: 30.0 (g/ml) G  Lab File ID:

% Moisture: 12 decanted: (Y/N) N  Date Received: 6/28/96

Extraction: (SepF/Cont/Sonc) SONC  Date Extracted: 7/02/96

Concentrated Extract Volume: 5000 (uL)  Date Analyzed: 7/13/96

Injection Volume: 1.0 (uL)  Dilution Factor: 20.0

GPC Cleanup: (Y/N) Y  pH: 8.4  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 39. | U | U | |
| 319-85-7 | beta-BHC | 39. | U | UJ | C |
| 319-86-8 | delta-BHC | 39. | U | U | |
| 58-89-9 | gamma-BHC (Lindane) | 39. | U | | |
| 76-44-8 | Heptachlor | 39. | U | | |
| 309-00-2 | Aldrin | 60. | | NJ | *10 *11 |
| 1024-57-3 | Heptachlor epoxide | 47. | P | NJ | *10 *11 |
| 959-98-8 | Endosulfan I | 39. | U | U | |
| 60-57-1 | Dieldrin | 130. | P | NJ | *10 *11 |
| 72-55-9 | 4,4'-DDE | 350. | | | |
| 72-20-8 | Endrin | 75. | U | U | |
| 33213-65-9 | Endosulfan II | 75. | U | | |
| 72-54-8 | 4,4'-DDD | 75. | U | | |
| 1031-07-8 | Endosulfan sulfate | 75. | U | | |
| 50-29-3 | 4,4'-DDT | 75. | U | | |
| 72-43-5 | Methoxychlor | 390. | U | | |
| 53494-70-5 | Endrin ketone | 75. | U | | |
| 7421-36-3 | Endrin aldehyde | 75. | U | | |
| 5103-71-9 | alpha-Chlordane | 94. | | NJ | *10 *11 |
| 5103-74-2 | gamma-Chlordane | 39. | U | U | |
| 8001-35-2 | Toxaphene | 3900. | U | | |
| 12674-11-2 | Aroclor-1016 | 750. | U | | |
| 11104-28-2 | Aroclor-1221 | 1500. | U | | |
| 11141-16-5 | Aroclor-1232 | 750. | U | | |
| 53469-21-9 | Aroclor-1242 | 750. | U | | |
| 12672-29-6 | Aroclor-1248 | 750. | U | | |
| 11097-69-1 | Aroclor-1254 | 3500. | P | J | *11 |
| 11096-82-5 | Aroclor-1260 | 750. | U | U | |

LEVEL D

FORM I PEST  3/90

OGDEN VALIDATED

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC110

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5812M

Matrix: (soil/water)SOIL Lab Sample ID: 5812-14DL1

Sample wt/vol: 30.1 (g/ml)G Lab File ID:

% Moisture: 11 decanted: (Y/N) N Date Received: 6/28/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/02/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 7/17/96

Injection Volume: 1.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N)Y pH: 8.4 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg)UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 9.5 | U | U | |
| 319-85-7 | beta-BHC | 9.5 | U | UJ | C |
| 319-86-8 | delta-BHC | 9.5 | U | U | |
| 58-89-9 | gamma-BHC(Lindane) | 9.5 | U | | |
| 76-44-8 | Heptachlor | 9.5 | U | | |
| 309-00-2 | Aldrin | 9.5 | U | | |
| 1024-57-3 | Heptachlor epoxide | 9.5 | U | | |
| 959-98-8 | Endosulfan I | 9.5 | U | | |
| 60-57-1 | Dieldrin | 18. | U | | |
| 72-55-9 | 4,4'-DDE | 160. | | | |
| 72-20-8 | Endrin | 45. | P | NJ | *10 *11 |
| 33213-65-9 | Endosulfan II | 18. | U | U | |
| 72-54-8 | 4,4'-DDD | 48. | P | NJ | *10 *11 |
| 1031-07-8 | Endosulfan sulfate | 18. | U | U | |
| 50-29-3 | 4,4'-DDT | 120. | P | J | *11 |
| 72-43-5 | Methoxychlor | 95. | U | U | |
| 53494-70-5 | Endrin ketone | 18. | U | | |
| 7421-36-3 | Endrin aldehyde | 18. | U | | |
| 5103-71-9 | alpha-Chlordane | 50. | | | |
| 5103-74-2 | gamma-Chlordane | 47. | P | NJ | *10 *11 |
| 8001-35-2 | Toxaphene | 950. | U | U | |
| 12674-11-2 | Aroclor-1016 | 180. | U | | |
| 11104-28-2 | Aroclor-1221 | 380. | U | | |
| 11141-16-5 | Aroclor-1232 | 180. | U | | |
| 53469-21-9 | Aroclor-1242 | 180. | U | | |
| 12672-29-6 | Aroclor-1248 | 180. | U | | |
| 11097-69-1 | Aroclor-1254 | 180. | U | | |
| 11096-82-5 | Aroclor-1260 | 570. | P | J | *11 |



LEVEL D

OGDEN VALIDATED

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC130

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5812M

Matrix: (soil/water)SOIL Lab Sample ID: 5812-16DL1

Sample wt/vol: 30.4 (g/ml)G Lab File ID:

% Moisture: 10 decanted: (Y/N) N Date Received: 6/28/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/02/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N)Y pH: 8.2 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg)UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 19. | U | U | |
| 319-85-7 | beta-BHC | 19. | U | UJ | C |
| 319-86-8 | delta-BHC | 19. | U | U | |
| 58-89-9 | gamma-BHC(Lindane) | 19. | U | | |
| 76-44-8 | Heptachlor | 19. | U | | |
| 309-00-2 | Aldrin | 19. | U | | |
| 1024-57-3 | Heptachlor epoxide | 19. | U | | |
| 959-98-8 | Endosulfan I | 19. | U | | |
| 60-57-1 | Dieldrin | 36. | U | | |
| 72-55-9 | 4,4'-DDE | 100. | | | |
| 72-20-8 | Endrin | 36. | U | U | |
| 33213-65-9 | Endosulfan II | 36. | U | | |
| 72-54-8 | 4,4'-DDD | 36. | U | | |
| 1031-07-8 | Endosulfan sulfate | 36. | U | | |
| 50-29-3 | 4,4'-DDT | 63. | P | NJ | *10 *11 |
| 72-43-5 | Methoxychlor | 190. | U | U | |
| 53494-70-5 | Endrin ketone | 36. | U | | |
| 7421-36-3 | Endrin aldehyde | 36. | U | | |
| 5103-71-9 | alpha-Chlordane | 19. | U | | |
| 5103-74-2 | gamma-Chlordane | 19. | U | | |
| 8001-35-2 | Toxaphene | 1900. | U | | |
| 12674-11-2 | Aroclor-1016 | 360. | U | | |
| 11104-28-2 | Aroclor-1221 | 730. | U | | |
| 11141-16-5 | Aroclor-1232 | 360. | U | | |
| 53469-21-9 | Aroclor-1242 | 360. | U | | |
| 12672-29-6 | Aroclor-1248 | 360. | U | | |
| 11097-69-1 | Aroclor-1254 | 360. | U | | |
| 11096-82-5 | Aroclor-1260 | 570. | P | J | *11 |



LEVEL D

OGDEN VALIDATED

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC131

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5812M

Matrix: (soil/water) SOIL  Lab Sample ID: 5812-17DL1

Sample wt/vol: 30.4 (g/ml) G  Lab File ID:

% Moisture: 10 decanted: (Y/N) N  Date Received: 6/28/96

Extraction: (SepF/Cont/Sonc) SONC  Date Extracted: 7/02/96

Concentrated Extract Volume: 5000 (uL)  Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL)  Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y  pH: 8.5  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 19. | U | U | |
| 319-85-7 | beta-BHC | 19. | U | UJ | C |
| 319-86-8 | delta-BHC | 19. | U | U | |
| 58-89-9 | gamma-BHC (Lindane) | 19. | U | | |
| 76-44-8 | Heptachlor | 19. | U | | |
| 309-00-2 | Aldrin | 19. | U | | |
| 1024-57-3 | Heptachlor epoxide | 19. | U | | |
| 959-98-8 | Endosulfan I | 19. | U | | |
| 60-57-1 | Dieldrin | 36. | U | | |
| 72-55-9 | 4,4'-DDE | 66. | | | |
| 72-20-8 | Endrin | 36. | U | U | |
| 33213-65-9 | Endosulfan II | 36. | U | U | |
| 72-54-8 | 4,4'-DDD | 46. | P | J | *11 |
| 1031-07-8 | Endosulfan sulfate | 36. | U | U | |
| 50-29-3 | 4,4'-DDT | 61. | P | NJ | *10 *11 |
| 72-43-5 | Methoxychlor | 190. | U | U | |
| 53494-70-5 | Endrin ketone | 36. | U | | |
| 7421-36-3 | Endrin aldehyde | 36. | U | | |
| 5103-71-9 | alpha-Chlordane | 19. | U | | |
| 5103-74-2 | gamma-Chlordane | 19. | U | | |
| 8001-35-2 | Toxaphene | 1900. | U | | |
| 12674-11-2 | Aroclor-1016 | 360. | U | | |
| 11104-28-2 | Aroclor-1221 | 730. | U | | |
| 11141-16-5 | Aroclor-1232 | 360. | U | | |
| 53469-21-9 | Aroclor-1242 | 360. | U | | |
| 12672-29-6 | Aroclor-1248 | 360. | U | | |
| 11097-69-1 | Aroclor-1254 | 360. | U | | |
| 11096-82-5 | Aroclor-1260 | 420. | | | |

LEVEL D



OGDEN VALIDATED

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC132

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5812M

Matrix: (soil/water) SOIL  Lab Sample ID: 5812-18

Sample wt/vol: 30.0 (g/ml) G  Lab File ID:

% Moisture: 9 decanted: (Y/N) N  Date Received: 6/28/96

Extraction: (SepF/Cont/Sonc) SONC  Date Extracted: 7/02/96

Concentrated Extract Volume: 5000 (uL)  Date Analyzed: 7/17/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 7.8  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 1.9 | U | U | |
| 319-85-7 | beta-BHC | 1.9 | U | UJ | C |
| 319-86-8 | delta-BHC | 1.9 | U | U | |
| 58-89-9 | gamma-BHC (Lindane) | 1.9 | U | | |
| 76-44-8 | Heptachlor | 1.9 | U | | |
| 309-00-2 | Aldrin | 1.9 | U | | |
| 1024-57-3 | Heptachlor epoxide | 1.9 | U | | |
| 959-98-8 | Endosulfan I | 1.9 | U | | |
| 60-57-1 | Dieldrin | 7.3 | P | J | *11 |
| 72-55-9 | 4,4'-DDE | 48. | P | J | *11 |
| 72-20-8 | Endrin | 6.0 | P | NJ | *10 *11 |
| 33213-65-9 | Endosulfan II | 3.6 | U | U | |
| 72-54-8 | 4,4'-DDD | 19. | P | J | *11 |
| 1031-07-8 | Endosulfan sulfate | 3.6 | U | U | |
| 50-29-3 | 4,4'-DDT | 26. | P | NJ | *10 *11 |
| 72-43-5 | Methoxychlor | 19. | U | U | |
| 53494-70-5 | Endrin ketone | 3.6 | U | U | |
| 7421-36-3 | Endrin aldehyde | 5.5 | | NJ | *10 *11 |
| 5103-71-9 | alpha-Chlordane | 2.2 | P | J | *11 |
| 5103-74-2 | gamma-Chlordane | 1.9 | U | U | |
| 8001-35-2 | Toxaphene | 190. | U | | |
| 12674-11-2 | Aroclor-1016 | 36. | U | | |
| 11104-28-2 | Aroclor-1221 | 74. | U | | |
| 11141-16-5 | Aroclor-1232 | 36. | U | | |
| 53469-21-9 | Aroclor-1242 | 36. | U | | |
| 12672-29-6 | Aroclor-1248 | 36. | U | | |
| 11097-69-1 | Aroclor-1254 | 36. | U | | |
| 11096-82-5 | Aroclor-1260 | 170. | | | |

LEVEL D



OGDEN VALIDATED

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC144

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5812M

Matrix: (soil/water)SOIL Lab Sample ID: 5812-07DL1

Sample wt/vol: 30.0 (g/ml)G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 6/28/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/02/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N)Y pH: 0.0 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg)UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 17. | U | U | |
| 319-85-7 | beta-BHC | 130. | P | J | C, *11 |
| 319-86-8 | delta-BHC | 210. | | | |
| 58-89-9 | gamma-BHC(Lindane) | 110. | | | |
| 76-44-8 | Heptachlor | 120. | | | |
| 309-00-2 | Aldrin | 120. | | | |
| 1024-57-3 | Heptachlor epoxide | 94. | | | |
| 959-98-8 | Endosulfan I | 17. | U | U | |
| 60-57-1 | Dieldrin | 140. | | | |
| 72-55-9 | 4,4'-DDE | 96. | | | |
| 72-20-8 | Endrin | 220. | | | |
| 33213-65-9 | Endosulfan II | 33. | U | U | |
| 72-54-8 | 4,4'-DDD | 110. | | | |
| 1031-07-8 | Endosulfan sulfate | 33. | U | U | |
| 50-29-3 | 4,4'-DDT | 75. | | | |
| 72-43-5 | Methoxychlor | 170. | U | U | |
| 53494-70-5 | Endrin ketone | 33. | U | | |
| 7421-36-3 | Endrin aldehyde | 33. | U | | |
| 5103-71-9 | alpha-Chlordane | 110. | P | J | *11 |
| 5103-74-2 | gamma-Chlordane | 17. | U | U | |
| 8001-35-2 | Toxaphene | 1700. | U | | |
| 12674-11-2 | Aroclor-1016 | 330. | U | | |
| 11104-28-2 | Aroclor-1221 | 670. | U | | |
| 11141-16-5 | Aroclor-1232 | 330. | U | | |
| 53469-21-9 | Aroclor-1242 | 330. | U | | |
| 12672-29-6 | Aroclor-1248 | 330. | U | | |
| 11097-69-1 | Aroclor-1254 | 330. | U | | |
| 11096-82-5 | Aroclor-1260 | 330. | U | | |



LEVEL D

OGDEN VALIDATED

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC144A

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5812M

Matrix: (soil/water) SOIL  Lab Sample ID: 5812-09DL

Sample wt/vol: 30.0 (g/ml) G  Lab File ID:

% Moisture: 0 decanted: (Y/N) N  Date Received: 6/28/96

Extraction: (SepF/Cont/Sonc) SONC  Date Extracted: 7/02/96

Concentrated Extract Volume: 5000 (uL)  Date Analyzed: 7/12/96

Injection Volume: 1.0 (uL)  Dilution Factor: 100.0

GPC Cleanup: (Y/N) Y  pH: 0.0  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 170. | U | U | |
| 319-85-7 | beta-BHC | 170. | U | UJ | C |
| 319-86-8 | delta-BHC | 170. | U | U | |
| 58-89-9 | gamma-BHC (Lindane) | 170. | U | | |
| 76-44-8 | Heptachlor | 170. | U | | |
| 309-00-2 | Aldrin | 170. | U | | |
| 1024-57-3 | Heptachlor epoxide | 170. | U | | |
| 959-98-8 | Endosulfan I | 170. | U | | |
| 60-57-1 | Dieldrin | 330. | U | | |
| 72-55-9 | 4,4'-DDE | 330. | U | | |
| 72-20-8 | Endrin | 330. | U | | |
| 33213-65-9 | Endosulfan II | 450. | P | NJ | *10 *11 |
| 72-54-8 | 4,4'-DDD | 330. | U | U | |
| 1031-07-8 | Endosulfan sulfate | 330. | U | | |
| 50-29-3 | 4,4'-DDT | 330. | U | | |
| 72-43-5 | Methoxychlor | 1700. | U | | |
| 53494-70-5 | Endrin ketone | 330. | U | | |
| 7421-36-3 | Endrin aldehyde | 720. | | NJ | *10 *11 |
| 5103-71-9 | alpha-Chlordane | 170. | U | U | |
| 5103-74-2 | gamma-Chlordane | 170. | U | | |
| 8001-35-2 | Toxaphene | 17000. | U | | |
| 12674-11-2 | Aroclor-1016 | 3300. | U | | |
| 11104-28-2 | Aroclor-1221 | 6700. | U | | |
| 11141-16-5 | Aroclor-1232 | 3300. | U | | |
| 53469-21-9 | Aroclor-1242 | 3300. | U | | |
| 12672-29-6 | Aroclor-1248 | 3300. | U | | |
| 11097-69-1 | Aroclor-1254 | 3300. | U | | |
| 11096-82-5 | Aroclor-1260 | 13000. | P | J | *11 |

LEVEL D



OGDEN VALIDATED

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC145 ER

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5812M

Matrix: (soil/water) WATER  Lab Sample ID: 5812-08

Sample wt/vol: 1000 (g/ml) ML  Lab File ID:

% Moisture: decanted: (Y/N)  Date Received: 6/28/96

Extraction: (SepF/Cont/Sonc) CONT  Date Extracted: 7/01/96

Concentrated Extract Volume: 10000 (uL)  Date Analyzed: 7/11/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) N  pH: 0.0  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.05 | U | U | |
| 319-85-7 | beta-BHC | 0.05 | U | U | |
| 319-86-8 | delta-BHC | 0.05 | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 0.05 | U | | |
| 76-44-8 | Heptachlor | 0.05 | U | | |
| 309-00-2 | Aldrin | 0.05 | U | | |
| 1024-57-3 | Heptachlor epoxide | 0.05 | U | | |
| 959-98-8 | Endosulfan I | 0.05 | U | | |
| 60-57-1 | Dieldrin | 0.10 | U | | |
| 72-55-9 | 4,4'-DDE | 0.10 | U | | |
| 72-20-8 | Endrin | 0.10 | U | | |
| 33213-65-9 | Endosulfan II | 0.10 | U | | |
| 72-54-8 | 4,4'-DDD | 0.10 | U | | |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U | | |
| 50-29-3 | 4,4'-DDT | 0.10 | U | | |
| 72-43-5 | Methoxychlor | 0.50 | U | | |
| 53494-70-5 | Endrin ketone | 0.10 | U | | |
| 7421-36-3 | Endrin aldehyde | 0.10 | U | | |
| 5103-71-9 | alpha-Chlordane | 0.05 | U | | |
| 5103-74-2 | gamma-Chlordane | 0.05 | U | | |
| 8001-35-2 | Toxaphene | 5.0 | U | | |
| 12674-11-2 | Aroclor-1016 | 1.0 | U | | |
| 11104-28-2 | Aroclor-1221 | 2.0 | U | | |
| 11141-16-5 | Aroclor-1232 | 1.0 | U | | |
| 53469-21-9 | Aroclor-1242 | 1.0 | U | | |
| 12672-29-6 | Aroclor-1248 | 1.0 | U | | |
| 11097-69-1 | Aroclor-1254 | 1.0 | U | | |
| 11096-82-5 | Aroclor-1260 | 1.0 | U | | |



LEVEL D

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC146 ER

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5812M

Matrix: (soil/water) WATER  Lab Sample ID: 5812-15

Sample wt/vol: 1000 (g/ml) ML  Lab File ID:

% Moisture: decanted: (Y/N)  Date Received: 6/28/96

Extraction: (SepF/Cont/Sonc) CONT  Date Extracted: 7/01/96

Concentrated Extract Volume: 10000 (uL)  Date Analyzed: 7/11/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) N  pH: 0.0  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.05 | U | U | |
| 319-85-7 | beta-BHC | 0.05 | U | U | Ø |
| 319-86-8 | delta-BHC | 0.05 | U | U | |
| 58-89-9 | gamma-BHC(Lindane) | 0.05 | U | | |
| 76-44-8 | Heptachlor | 0.05 | U | | |
| 309-00-2 | Aldrin | 0.05 | U | | |
| 1024-57-3 | Heptachlor epoxide | 0.05 | U | | |
| 959-98-8 | Endosulfan I | 0.05 | U | | |
| 60-57-1 | Dieldrin | 0.10 | U | | |
| 72-55-9 | 4,4'-DDE | 0.10 | U | | |
| 72-20-8 | Endrin | 0.10 | U | | |
| 33213-65-9 | Endosulfan II | 0.10 | U | | |
| 72-54-8 | 4,4'-DDD | 0.10 | U | | |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U | | |
| 50-29-3 | 4,4'-DDT | 0.10 | U | | |
| 72-43-5 | Methoxychlor | 0.50 | U | | |
| 53494-70-5 | Endrin ketone | 0.10 | U | | |
| 7421-36-3 | Endrin aldehyde | 0.10 | U | | |
| 5103-71-9 | alpha-Chlordane | 0.05 | U | | |
| 5103-74-2 | gamma-Chlordane | 0.05 | U | | |
| 8001-35-2 | Toxaphene | 5.0 | U | | |
| 12674-11-2 | Aroclor-1016 | 1.0 | U | | |
| 11104-28-2 | Aroclor-1221 | 2.0 | U | | |
| 11141-16-5 | Aroclor-1232 | 1.0 | U | | |
| 53469-21-9 | Aroclor-1242 | 1.0 | U | | |
| 12672-29-6 | Aroclor-1248 | 1.0 | U | | |
| 11097-69-1 | Aroclor-1254 | 1.0 | U | | |
| 11096-82-5 | Aroclor-1260 | 1.0 | U | | |

FORM I PEST  3/90 LEVEL D

10/16/96

OGDEN VALIDATED

OGDEN

# DATA VALIDATION REPORT

CLEAN CONTRACT TASK ORDER #136
NAF Midway Site Investigations

ANALYSIS: SEMIVOLATILES

SAMPLE DELIVERY GROUP: 5846M

Prepared by

Ogden—Denver Operations
550 South Wadsworth Boulevard Suite 500
Lakewood, Colorado 80226

# CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

Ogden Environmental and Energy Services Co., Inc.
550 South Wadsworth Boulevard
Suite 500
Lakewood, CO 80226

Package ID: C136SV32
Task Order: 110190136
SDG No.: 5846M
No. of Analyses: 13

Laboratory: Ceimic
Reviewer: D. Ilczyszyn
Analysis/Method: Semivolatiles

Date: 9/25/96
Reviewer's Signature: D. Ilczyszyn

| ACTION ITEMS[a] | |
|---|---|
| 1. **Case Narrative Deficiencies** | |
| 2. **Out of Scope Analyses** | |
| 3. **Analyses Not Conducted** | |
| 4. **Missing Hardcopy Deliverables** | |
| 5. **Incorrect Hardcopy Deliverables** | |
| 6. **Deviations from Analysis Protocol, e.g.,** | Qualifications were required due to: calibrations, blanks, & MS/MSD results |
| Holding Times | |
| GC/MS Tune/Inst. Perform | N-Nitrosodiphenylamine was not detected in any of the calibrations; therefore, this compound was rejected for all samples. |
| Calibrations | |
| Blanks | |
| Surrogates | |
| Matrix Spike/Dup LCS | |
| Field QC | |
| Internal Standard Performance | |
| Compound Identification and Quantitation | |
| System Performance | |

D.I. 9/27/96

| COMMENTS[b] | |
|---|---|
| | |

[a] Subcontracted analytical laboratory is not meeting contract and/or method requirements.
[b] Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.

# 1. INTRODUCTION

| | |
|---|---|
| Task Order Title: | NAF Midway SI/RI |
| CLEAN Contract Task Order #: | 0136 |
| SDG#: | 5846M |
| CTO Manager: | J. Cotter |
| Project Contact: | M. Medeiros |
| Matrix: | Water/Soil |
| Analysis: | Semivolatiles |
| NEESA QC Level: | D |
| No. of Samples: | 13 |
| No. of Reanalyses/Dilutions: | 0 |
| Reviewer: | D. Ilczyszyn |
| Date of Review: | 9/24/96 |

The samples listed in Table 1 were validated based on the guidelines outlined in the Ogden *Project Procedures Manual, Comprehensive Long-Term Environmental Action Navy (CLEAN) Program* data validation procedure for Levels C and D semivolatile organics (DVP-3, Rev. 2), and the *National Functional Guidelines For Organic Data Review* (2/94). Any deviations from these procedures and guidelines are documented herein. These procedures and guidelines are designed to meet the data quality objectives required by the Naval Energy and Environmental Support Activity for all analyses at the requested QC levels. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

**Table 1. Sample identification**

| Client ID | EPA ID | Lab ID | Matrix | COC Method |
|---|---|---|---|---|
| M01TS16S01 | MC133 | 5846-01 | soil | OLM01.8B |
| M01TS16S02 | MC134 | 5846-02 | soil | OLM01.8B |
| M01TS17S01 | MC135 | 5846-03 | soil | OLM01.8B |
| M01TS17S02 | MC136 | 5846-04 | soil | OLM01.8B |
| M01TS18S01 | MC137 | 5846-05 | soil | OLM01.8B |
| M01TS18S02 | MC138 | 5846-06 | soil | OLM01.8B |
| M01TS19S01 | MC139 | 5846-07 | soil | OLM01.8B |
| M01TS19S02 | MC140 | 5846-08 | soil | OLM01.8B |
| M01TS20S01 | MC141 | 5846-09DL | soil | OLM01.8B |
| M01TS20S02 | MC142 | 5846-10 | soil | OLM01.8B |
| M01TS20D02 | MC143 | 5846-11DL | soil | OLM01.8B |
| M01QW17S02 | MC147 | 5846-12 | water | OLM01.8B |
| M01TP11S02 | MC148 | 5846-13DL | soil | OLM01.8B |

# 2. DATA VALIDATION FINDINGS

## 2.1 SAMPLE MANAGEMENT

Following are findings associated with sample management:

### 2.1.1 Sample Preservation, Handling, and Transport

All of the samples in this SDG were within temperature limits specified in NEESA 20.2-047B upon arrival at the laboratory. No problems were noted during sample handling and transport. No qualifications were given to the data.

### 2.1.2 Chain of Custody

The COCs were all signed by laboratory personnel upon receipt. All COCs and sample receipt checklists were complete and legible. All custody seals were intact on the coolers upon arrival at the laboratory. No qualifications were required.

### 2.1.3 Holding Times

All samples were extracted and analyzed within required holding times. Qualifications were not required.

## 2.2 GC/MS TUNING

All tunes met the criteria specified in the organic CLP SOW (3/90) and were therefore acceptable. No qualifications were required. No transcription errors were found.

## 2.3 CALIBRATION

According to the CLP Forms VI and VII N-Nitrosodiphenylamine was not detected in any of the calibrations. A further examination of the raw data by the reviewer revealed that this compound was detected in all calibrations. The reviewer calculated all RRFs, %Ds, and %RSDs for this compound with no problems found. It was assumed by the reviewer that the method was being updated with the daily calibration and that N-Nitrosodiphenylamine was actually searched for in the samples requiring no qualifications. Calculations of RRFs, %Ds, and %RSDs were checked for some analytes from the raw data and no calculation errors were found. The initial calibrations from 7/9/96 and 7/7/96 had acceptable %RSD values for all compounds. The continuing calibrations had high %D values for several compounds. The affected samples and the qualifications given are listed in the following table

| Calibration Findings | Affected Samples | Qualifications Given |
|---|---|---|
| For the continuing calibration dated 7/14/96 the following compounds had high %D values: phenol, hexachlorocyclopentadiene, 2-nitroaniline, 2,4-dinitrophenol, fluorene, carbazole, di-n-octylphthalate, and benzo(b)fluoranthene. | MC136, MC137 MC138, MC142 | Nondetects qualified "UJ." |
| For the continuing calibration dated 7/15/96 the following compounds had high %D values: 3-nitroaniline, 2,4-dinitrophenol, fluorene, and 3,3´-dichlorobenzidine. | MC133, MC134 | Nondetects qualified "UJ." |
| For the continuing calibration dated 7/16/96 the following compounds had high %D values: 4-chlorophenyl-phenylether, fluorene, and 3,3´-dichlorobenzidine. | MC140, MC139 MC135, MC141 MC143, MC148 | Nondetects qualified "UJ." |

## 2.4 BLANKS

There was a water and a soil method blank analyzed with the samples in this SDG. The water method blank was free from target compound detects and TICs. The soil method blank was free from target compound detects; however, two TICs, one of which was an aldol condensation product, were detected. The TICs were rejected if found in the soil samples. No further qualifications were required.

## 2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

The laboratory failed to perform blank spike analysis due to an analyst oversight. Qualifications could not be assigned due to blank spikes.

## 2.6 SURROGATE RECOVERY

All samples had surrogate spike recoveries within control limits. No qualifications were needed based on the surrogate recoveries. Calculations were verified with no problems found.

## 2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A sample MS/MSD was not extracted and analyzed with this sample delivery group; however, three sets of MS/MSDs were extracted and analyzed for all 46 soil samples received from CTO 136 and reported in SDGs 5811M, 5812M, and 5846M. Two sets of MS/MSDs were reported in SDG 5811M. Sample MC127MS/MSD was associated with this SDG. The MS sample had low recovery of pentachlorophenol while the MSD sample had zero recovery of this compound. The RPD value was also high for pentachlorophenol. Due to the absence of a blank spike analysis with this SDG all soil samples were qualified "UJ" for nondetects and "J" for detects for pentachlorophenol. No other qualifications were required

## 2.8 FIELD QC SAMPLES

Field QC samples were evaluated and, if necessary, qualified based on method blanks only (see Section 2.4). Remaining detects were then used to qualify the samples. The following are findings associated with field QC samples:

### 2.8.1 Field Blanks and Equipment Rinsates

Sample MC147 was identified as the equipment rinsate and sample MC155 (SDG: 5811M) was identified as the equipment rinsate associated with this SDG. The field QC sample were free from target compound detects and TICs; therefore, no qualifications were required.

### 2.8.2 Duplicates

Samples MC142/MC143 were identified as field duplicates associated with this SDG. Sample NC143 had detects for chrysene, benzo(a)anthracene, benzo(b)fluoranthene, and benzo(k)fluoranthene not detected in sample MC142. Each of the samples had numerous TICs detected. The samples also had common detects with acceptable RPD values. Qualifications were not required.

## 2.9 INTERNAL STANDARDS PERFORMANCE

The retention times of all the internal standards for the samples were within $\pm 30$ seconds of the retention times for the associated calibration standards. The area counts were within +100% and -50% of the associated calibration standards. No qualifications were required.

## 2.10 TARGET COMPOUND LIST IDENTIFICATION

The laboratory analyzed for the CLP SOW (3/90) semivolatile target compounds. Chromatograms, retention times, and spectra were all examined and no problems were noted.

## 2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

The reporting limits were consistent with the latest version of the organic CLP SOW (3/90). The reporting limits were evaluated using the low level standard of the initial calibration and were found to be acceptable. Compound quantification and percent moisture adjustments were verified from the MS/MSD samples and the detects in the samples. Samples MC134, MC137, MC141, MC142, MC143, and MC148 had raised detection limits as they were analyzed at dilutions. The raised reporting limits were evaluated and found to be acceptable.

## 2.12 TENTATIVELY IDENTIFIED COMPOUNDS

All TICs were verified and qualified as "NJ." All TICs were properly identified from library spectra and quantitated from the nearest internal standard.

## 2.13 SYSTEM PERFORMANCE

A review of the chromatograms, spectral fits, and calibrations showed no identifiable problems with system performance.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC133

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5846M

Matrix: (soil/water) SOIL Lab Sample ID:5846-01

Sample wt/vol: 30.0 (g/ml) G Lab File ID: A4601

Level: (low/med) LOW Date Received: 7/06/96

% Moisture: 13 decanted: (Y/N) N Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/16/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.6

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 380. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 380. | U | | |
| 95-57-8 | 2-Chlorophenol | 380. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 380. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 380. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 380. | U | | |
| 95-48-7 | 2-Methylphenol | 380. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 380. | U | | |
| 106-44-5 | 4-Methylphenol | 380. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 380. | U | | |
| 67-72-1 | Hexachloroethane | 380. | U | | |
| 98-95-3 | Nitrobenzene | 380. | U | | |
| 78-59-1 | Isophorone | 380. | U | | |
| 88-75-5 | 2-Nitrophenol | 380. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 380. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 380. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 380. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 380. | U | | |
| 91-20-3 | Naphthalene | 380. | U | | |
| 106-47-8 | 4-Chloroaniline | 380. | U | | |
| 87-68-3 | Hexachlorobutadiene | 380. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 380. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 380. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 380. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 380. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 960. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 380. | U | | |
| 88-74-4 | 2-Nitroaniline | 960. | U | | |
| 131-11-3 | Dimethylphthalate | 380. | U | | |
| 208-96-8 | Acenaphthylene | 380. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 380. | U | U | |
| 99-09-2 | 3-Nitroaniline | 960. | U | UJ | c |
| 83-32-9 | Acenaphthene | 380. | U | U | |

FORM I SVOA

LEVEL D

OGDEN VALIDATED

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC133

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5846M

Matrix: (soil/water) SOIL Lab Sample ID:5846-01

Sample wt/vol: 30.0 (g/ml) G Lab File ID: A4601

Level: (low/med) LOW Date Received: 7/06/96

% Moisture: 13 decanted: (Y/N) N Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/16/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.6

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 960. | U | U | C |
| 100-02-7 | 4-Nitrophenol | 960. | U | U | |
| 132-64-9 | Dibenzofuran | 380. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 380. | U | | |
| 84-66-2 | Diethylphthalate | 380. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 380. | U | U | |
| 86-73-7 | Fluorene | 380. | U | U | C |
| 100-01-6 | 4-Nitroaniline | 960. | U | U | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 960. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 380. | U | | |
| 101-55-3 | 4-Bromophenyl-phenylether | 380. | U | | |
| 118-74-1 | Hexachlorobenzene | 380. | U | | |
| 87-86-5 | Pentachlorophenol | 960. | U | U | Q |
| 85-01-8 | Phenanthrene | 160. | J | J | |
| 120-12-7 | Anthracene | 380. | U | U | |
| 86-74-8 | Carbazole | 380. | U | U | |
| 84-74-2 | Di-n-butylphthalate | 380. | U | U | |
| 206-44-0 | Fluoranthene | 620. | | | |
| 129-00-0 | Pyrene | 670. | | | |
| 85-68-7 | Butylbenzylphthalate | 380. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 380. | U | U | C |
| 56-55-3 | Benzo(a)anthracene | 360. | J | J | |
| 218-01-9 | Chrysene | 430. | | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 380. | U | U | |
| 117-84-0 | Di-n-octylphthalate | 380. | U | U | |
| 205-99-2 | Benzo(b)fluoranthene | 350. | J | J | |
| 207-08-9 | Benzo(k)fluoranthene | 270. | J | J | |
| 50-32-8 | Benzo(a)pyrene | 270. | J | J | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 380. | U | U | |
| 53-70-3 | Dibenz(a,h)anthracene | 380. | U | U | |
| 191-24-2 | Benzo(g,h,i)perylene | 380. | U | U | |

(1) - Cannot be separated from Diphenylamine

9/26/96

OGDEN VALIDATED

FORM I SV-2 LEVEL D 3/90

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC133

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5846M

Matrix: (soil/water) SOIL Lab Sample ID:5846-01

Sample wt/vol: 30.0 (g/ml) G Lab File ID: A4601

Level: (low/med) LOW Date Received: 7/06/96

% Moisture: 13 decanted: (Y/N) N Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/16/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.6

Number TICs Found: 12

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|---|
| 1. | | Unknown Hydrocarbon | 5.02 | 400. | J | NJ | |
| 2. | | Aldol Condensation Product | 6.04 | 700. | JB | R | B |
| 3. | | Unknown Hydrocarbon | 8.03 | 500. | J | NJ | |
| 4. | | Unknown Hydrocarbon | 8.37 | 500. | J | | |
| 5. | | Unknown Hydrocarbon | 10.24 | 300. | J | | |
| 6. | | Unknown Hydrocarbon | 28.20 | 800. | J | | |
| 7. | | Unknown Hydrocarbon | 28.83 | 800. | J | | |
| 8. | | Unknown Hydrocarbon | 29.72 | 1000. | J | | |
| 9. | | Unknown Hydrocarbon | 29.98 | 800. | J | | |
| 10. | | Unknown Hydrocarbon | 30.48 | 900. | J | | |
| 11. | | Unknown Hydrocarbon | 31.56 | 1000. | J | | |
| 12. | | Unknown Hydrocarbon | 32.98 | 400. | J | NJ | |
| 13. | | | | | | | |
| 14. | | | | | | | |
| 15. | | | | | | | |
| 16. | | | | | | | |
| 17. | | | | | | | |
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| 28. | | | | | | | |
| 29. | | | | | | | |
| 30. | | | | | | | |

OGDEN VALIDATED

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC134

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5846M

Matrix: (soil/water) SOIL Lab Sample ID:5846-02

Sample wt/vol: 30.0 (g/ml) G Lab File ID: A4602

Level: (low/med) LOW Date Received: 7/06/96

% Moisture: 5 decanted: (Y/N) N Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/16/96

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 9.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 700. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 700. | U | | |
| 95-57-8 | 2-Chlorophenol | 700. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 700. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 700. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 700. | U | | |
| 95-48-7 | 2-Methylphenol | 700. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 700. | U | | |
| 106-44-5 | 4-Methylphenol | 700. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 700. | U | | |
| 67-72-1 | Hexachloroethane | 700. | U | | |
| 98-95-3 | Nitrobenzene | 700. | U | | |
| 78-59-1 | Isophorone | 700. | U | | |
| 88-75-5 | 2-Nitrophenol | 700. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 700. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 700. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 700. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 700. | U | | |
| 91-20-3 | Naphthalene | 700. | U | | |
| 106-47-8 | 4-Chloroaniline | 700. | U | | |
| 87-68-3 | Hexachlorobutadiene | 700. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 700. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 700. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 700. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 700. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 1800. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 700. | U | | |
| 88-74-4 | 2-Nitroaniline | 1800. | U | | |
| 131-11-3 | Dimethylphthalate | 700. | U | | |
| 208-96-8 | Acenaphthylene | 700. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 700. | U | U | |
| 99-09-2 | 3-Nitroaniline | 1800. | U | UJ | C |
| 83-32-9 | Acenaphthene | 700. | U | U | |

OGDEN VALIDATED

FORM I SV-1 3/90

LEVEL D

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC134

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5846M

Matrix: (soil/water) SOIL Lab Sample ID:5846-02

Sample wt/vol: 30.0 (g/ml) G Lab File ID: A4602

Level: (low/med) LOW Date Received: 7/06/96

% Moisture: 5 decanted: (Y/N) N Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/16/96

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 9.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 1800. | U | UJ | C |
| 100-02-7 | 4-Nitrophenol | 1800. | U | U | |
| 132-64-9 | Dibenzofuran | 700. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 700. | U | | |
| 84-66-2 | Diethylphthalate | 700. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 700. | U | U | |
| 86-73-7 | Fluorene | 700. | U | UJ | C |
| 100-01-6 | 4-Nitroaniline | 1800. | U | U | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 1800. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 700. | U | RU | 073 |
| 101-55-3 | 4-Bromophenyl-phenylether | 700. | U | | |
| 118-74-1 | Hexachlorobenzene | 700. | U | | |
| 87-86-5 | Pentachlorophenol | 1800. | U | UJ | Q |
| 85-01-8 | Phenanthrene | 700. | U | | |
| 120-12-7 | Anthracene | 700. | U | | |
| 86-74-8 | Carbazole | 700. | U | | |
| 84-74-2 | Di-n-butylphthalate | 700. | U | | |
| 206-44-0 | Fluoranthene | 700. | U | | |
| 129-00-0 | Pyrene | 700. | U | U | |
| 85-68-7 | Butylbenzylphthalate | 700. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 700. | U | UJ | C |
| 56-55-3 | Benzo(a)anthracene | 700. | U | U | |
| 218-01-9 | Chrysene | 700. | U | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 700. | U | | |
| 117-84-0 | Di-n-octylphthalate | 700. | U | | |
| 205-99-2 | Benzo(b)fluoranthene | 700. | U | | |
| 207-08-9 | Benzo(k)fluoranthene | 700. | U | | |
| 50-32-8 | Benzo(a)pyrene | 700. | U | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 700. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 700. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 700. | U | U | |

(1) - Cannot be separated from Diphenylamine

DQ 9/26/96

OGDEN VALIDATED

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC134

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5846M

Matrix: (soil/water) SOIL Lab Sample ID:5846-02

Sample wt/vol: 30.0 (g/ml) G Lab File ID: A4602

Level: (low/med) LOW Date Received: 7/06/96

% Moisture: 5 decanted: (Y/N) N Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/16/96

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 9.0

Number TICs Found: 11

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Aldol Condensation Product | 6.04 | 1000. | JB | R | B |
| 2. | Unknown Hydrocarbon | 8.02 | 600. | J | NJ | |
| 3. | Unknown Hydrocarbon | 26.79 | 800. | J | | |
| 4. | Unknown Hydrocarbon | 27.22 | 700. | J | | |
| 5. | Unknown Hydrocarbon | 28.22 | 1000. | J | | |
| 6. | Unknown Hydrocarbon | 28.84 | 1000. | J | | |
| 7. | Unknown Hydrocarbon | 29.72 | 1000. | J | | |
| 8. | Unknown Hydrocarbon | 29.97 | 2000. | J | | |
| 9. | Unknown Hydrocarbon | 30.50 | 2000. | J | | |
| 10. | Unknown Hydrocarbon | 31.56 | 2000. | J | | |
| 11. | Unknown Hydrocarbon | 34.09 | 700. | J | NJ | |
| 12. | | | | | | |
| 13. | | | | | | |
| 14. | | | | | | |
| 15. | | | | | | |
| 16. | | | | | | |
| 17. | | | | | | |
| 18. | | | | | | |
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OGDEN VALIDATED 93

FORM I SV-TIC

LEVEL D

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC135

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5846M

Matrix: (soil/water) SOIL Lab Sample ID:5846-03

Sample wt/vol: 30.0 (g/ml) G Lab File ID: A4603

Level: (low/med) LOW Date Received: 7/06/96

% Moisture: 24 decanted: (Y/N) N Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/17/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.4

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 440. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 440. | U | | |
| 95-57-8 | 2-Chlorophenol | 440. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 440. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 440. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 440. | U | | |
| 95-48-7 | 2-Methylphenol | 440. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 440. | U | | |
| 106-44-5 | 4-Methylphenol | 440. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 440. | U | | |
| 67-72-1 | Hexachloroethane | 440. | U | | |
| 98-95-3 | Nitrobenzene | 440. | U | | |
| 78-59-1 | Isophorone | 440. | U | | |
| 88-75-5 | 2-Nitrophenol | 440. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 440. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 440. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 440. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 440. | U | | |
| 91-20-3 | Naphthalene | 440. | U | | |
| 106-47-8 | 4-Chloroaniline | 440. | U | | |
| 87-68-3 | Hexachlorobutadiene | 440. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 440. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 440. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 440. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 440. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 1100. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 440. | U | | |
| 88-74-4 | 2-Nitroaniline | 1100. | U | | |
| 131-11-3 | Dimethylphthalate | 440. | U | | |
| 208-96-8 | Acenaphthylene | 440. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 440. | U | | |
| 99-09-2 | 3-Nitroaniline | 1100. | U | | |
| 83-32-9 | Acenaphthene | 440. | U | U | |

FORM I SV-1

LEVEL D

OGDEN VALIDATED

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC135

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No.:  SAS No.:  SDG No.: 5846M

Matrix: (soil/water) SOIL  Lab Sample ID: 5846-03

Sample wt/vol: 30.0 (g/ml) G  Lab File ID: A4603

Level: (low/med) LOW  Date Received: 7/06/96

% Moisture: 24 decanted: (Y/N) N  Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/17/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 8.4

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 1100. | U | U | |
| 100-02-7 | 4-Nitrophenol | 1100. | U | | |
| 132-64-9 | Dibenzofuran | 440. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 440. | U | | |
| 84-66-2 | Diethylphthalate | 440. | U | U | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 440. | U | UJ | C |
| 86-73-7 | Fluorene | 440. | U | UJ | C |
| 100-01-6 | 4-Nitroaniline | 1100. | U | U | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 1100. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 440. | U | RU | ~~Q~~ ~~*3~~ |
| 101-55-3 | 4-Bromophenyl-phenylether | 440. | U | | |
| 118-74-1 | Hexachlorobenzene | 440. | U | | |
| 87-86-5 | Pentachlorophenol | 1100. | U | UJ | Q |
| 85-01-8 | Phenanthrene | 440. | U | | |
| 120-12-7 | Anthracene | 440. | U | | |
| 86-74-8 | Carbazole | 440. | U | | |
| 84-74-2 | Di-n-butylphthalate | 440. | U | | |
| 206-44-0 | Fluoranthene | 440. | U | | |
| 129-00-0 | Pyrene | 440. | U | | |
| 85-68-7 | Butylbenzylphthalate | 440. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 440. | U | UJ | C |
| 56-55-3 | Benzo(a)anthracene | 440. | U | U | |
| 218-01-9 | Chrysene | 440. | U | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 440. | U | | |
| 117-84-0 | Di-n-octylphthalate | 440. | U | | |
| 205-99-2 | Benzo(b)fluoranthene | 440. | U | | |
| 207-08-9 | Benzo(k)fluoranthene | 440. | U | | |
| 50-32-8 | Benzo(a)pyrene | 440. | U | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 440. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 440. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 440. | U | U | |

(1) - Cannot be separated from Diphenylamine

DQ 9/26/96

OGDEN VALIDATED

FORM I SV-2

LEVEL D

10

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC135

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5846M

Matrix: (soil/water) SOIL Lab Sample ID:5846-03

Sample wt/vol: 30.0 (g/ml) G Lab File ID: A4603

Level: (low/med) LOW Date Received: 7/06/96

% Moisture: 24 decanted: (Y/N) N Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/17/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.4

Number TICs Found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Aldol Condensation Product | 5.89 | 500. | JB | R | B |
| 2. | Unknown Hydrocarbon | 29.58 | 800. | J | NJ | |
| 3. | Unknown Hydrocarbon | 29.83 | 1000. | J | | |
| 4. | Unknown Hydrocarbon | 33.64 | 2000. | J | | |
| 5. | Unknown Hydrocarbon | 33.96 | 900. | J | | |
| 6. | Unknown Hydrocarbon | 34.16 | 1000. | J | | |
| 7. | Unknown Hydrocarbon | 34.48 | 600. | J | NJ | |
| 8. | | | | | | |
| 9. | | | | | | |
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OGDEN VALIDATED

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC136

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No.:  SAS No.:  SDG No.: 5846M

Matrix: (soil/water) SOIL  Lab Sample ID: 5846-04

Sample wt/vol: 30.0 (g/ml) G  Lab File ID: 04604

Level: (low/med) LOW  Date Received: 7/06/96

% Moisture: 19 decanted: (Y/N) N  Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 8.5

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 410. | U | UJ | C |
| 111-44-4 | bis(2-Chloroethyl)ether | 410. | U | U | |
| 95-57-8 | 2-Chlorophenol | 410. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 410. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 410. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 410. | U | | |
| 95-48-7 | 2-Methylphenol | 410. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 410. | U | | |
| 106-44-5 | 4-Methylphenol | 410. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 410. | U | | |
| 67-72-1 | Hexachloroethane | 410. | U | | |
| 98-95-3 | Nitrobenzene | 410. | U | | |
| 78-59-1 | Isophorone | 410. | U | | |
| 88-75-5 | 2-Nitrophenol | 410. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 410. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 410. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 410. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 410. | U | | |
| 91-20-3 | Naphthalene | 410. | U | | |
| 106-47-8 | 4-Chloroaniline | 410. | U | | |
| 87-68-3 | Hexachlorobutadiene | 410. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 410. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 410. | U | U | |
| 77-47-4 | Hexachlorocyclopentadiene | 410. | U | UJ | C |
| 88-06-2 | 2,4,6-Trichlorophenol | 410. | U | U | |
| 95-95-4 | 2,4,5-Trichlorophenol | 1000. | U | U | |
| 91-58-7 | 2-Chloronaphthalene | 410. | U | U | |
| 88-74-4 | 2-Nitroaniline | 1000. | U | UJ | C |
| 131-11-3 | Dimethylphthalate | 410. | U | U | |
| 208-96-8 | Acenaphthylene | 410. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 410. | U | | |
| 99-09-2 | 3-Nitroaniline | 1000. | U | | |
| 83-32-9 | Acenaphthene | 410. | U | U | |

OGDEN VALIDATED

FORM I SV-1

LEVEL D

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC136

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No.:  SAS No.:  SDG No.: 5846M

Matrix: (soil/water) SOIL  Lab Sample ID: 5846-04

Sample wt/vol: 30.0 (g/ml) G  Lab File ID: O4604

Level: (low/med) LOW  Date Received: 7/06/96

% Moisture: 19 decanted: (Y/N) N  Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 8.5

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 1000. | U | UJ | C |
| 100-02-7 | 4-Nitrophenol | 1000. | U | U | |
| 132-64-9 | Dibenzofuran | 410. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 410. | U | | |
| 84-66-2 | Diethylphthalate | 410. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 410. | U | U | |
| 86-73-7 | Fluorene | 410. | U | UJ | C |
| 100-01-6 | 4-Nitroaniline | 1000. | U | U | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 1000. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 410. | U | RU | ~~O*3~~ |
| 101-55-3 | 4-Bromophenyl-phenylether | 410. | U | | |
| 118-74-1 | Hexachlorobenzene | 410. | U | | |
| 87-86-5 | Pentachlorophenol | 1000. | U | UJ | Q |
| 85-01-8 | Phenanthrene | 420. | | | |
| 120-12-7 | Anthracene | 410. | U | U | |
| 86-74-8 | Carbazole | 410. | U | UJ | C |
| 84-74-2 | Di-n-butylphthalate | 410. | U | U | |
| 206-44-0 | Fluoranthene | 360. | J | UJ | |
| 129-00-0 | Pyrene | 230. | J | UJ | |
| 85-68-7 | Butylbenzylphthalate | 410. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 410. | U | | |
| 56-55-3 | Benzo(a)anthracene | 410. | U | | |
| 218-01-9 | Chrysene | 410. | U | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 410. | U | U | |
| 117-84-0 | Di-n-octylphthalate | 410. | U | UJ | C |
| 205-99-2 | Benzo(b)fluoranthene | 410. | U | UJ | C |
| 207-08-9 | Benzo(k)fluoranthene | 410. | U | UJ | ~~C~~ |
| 50-32-8 | Benzo(a)pyrene | 410. | U | U | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 410. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 410. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 410. | U | U | |

(1) - Cannot be separated from Diphenylamine

DQ 9/26/96

OGDEN VALIDATED

FORM I SV-2

LEVEL D

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC136

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No.:  SAS No.:  SDG No.: 5846M

Matrix: (soil/water) SOIL  Lab Sample ID: 5846-04

Sample wt/vol: 30.0 (g/ml) G  Lab File ID: 04604

Level: (low/med) LOW  Date Received: 7/06/96

% Moisture: 19 decanted: (Y/N) N  Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 8.5

Number TICs Found: 12

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|---|
| 1. | | Unknown Hydrocarbon | 2.57 | 400. | J | NJ | |
| 2. | | Unknown Hydrocarbon | 2.70 | 3000. | J | | |
| 3. | | Unknown Hydrocarbon | 2.84 | 2000. | J | | |
| 4. | | Unknown Hydrocarbon | 4.04 | 1000. | J | | |
| 5. | | Unknown Hydrocarbon | 5.07 | 300. | J | NJ | |
| 6. | | Aldol Condensation Product | 6.10 | 800. | JB | R | B |
| 7. | | Unknown Hydrocarbon | 8.45 | 600. | J | NJ | |
| 8. | | Unknown Hydrocarbon | 20.59 | 200. | J | | |
| 9. | | Unknown Hydrocarbon | 29.76 | 500. | J | | |
| 10. | | Unknown Hydrocarbon | 31.61 | 400. | J | | |
| 11. | | Unknown Hydrocarbon | 34.16 | 2000. | J | | |
| 12. | | Unknown Hydrocarbon | 34.79 | 700. | J | NJ | |
| 13. | | | | | | | |
| 14. | | | | | | | |
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OGDEN VALIDATED

FORM I SV-TIC

LEVEL D

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC137

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5846M

Matrix: (soil/water) SOIL Lab Sample ID:5846-05

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 04605

Level: (low/med) LOW Date Received: 7/06/96

% Moisture: 10 decanted: (Y/N) N Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 9.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 740. | U | UJ | C |
| 111-44-4 | bis(2-Chloroethyl)ether | 740. | U | U | |
| 95-57-8 | 2-Chlorophenol | 740. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 740. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 740. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 740. | U | | |
| 95-48-7 | 2-Methylphenol | 740. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 740. | U | | |
| 106-44-5 | 4-Methylphenol | 740. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 740. | U | | |
| 67-72-1 | Hexachloroethane | 740. | U | | |
| 98-95-3 | Nitrobenzene | 740. | U | | |
| 78-59-1 | Isophorone | 740. | U | | |
| 88-75-5 | 2-Nitrophenol | 740. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 740. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 740. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 740. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 740. | U | | |
| 91-20-3 | Naphthalene | 740. | U | | |
| 106-47-8 | 4-Chloroaniline | 740. | U | | |
| 87-68-3 | Hexachlorobutadiene | 740. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 740. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 740. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 740. | U | UJ | C |
| 88-06-2 | 2,4,6-Trichlorophenol | 740. | U | U | |
| 95-95-4 | 2,4,5-Trichlorophenol | 1800. | U | U | |
| 91-58-7 | 2-Chloronaphthalene | 740. | U | U | |
| 88-74-4 | 2-Nitroaniline | 1800. | U | UJ | C |
| 131-11-3 | Dimethylphthalate | 740. | U | U | |
| 208-96-8 | Acenaphthylene | 740. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 740. | U | | |
| 99-09-2 | 3-Nitroaniline | 1800. | U | U | |
| 83-32-9 | Acenaphthene | 740. | U | | |

FORM I SV-1

LEVEL D

OGDEN VALIDATED

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC137

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5846M

Matrix: (soil/water) SOIL Lab Sample ID:5846-05

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 04605

Level: (low/med) LOW Date Received: 7/06/96

% Moisture: 10 decanted: (Y/N) N Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 9.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 1800. | U | UJ | C |
| 100-02-7 | 4-Nitrophenol | 1800. | U | U | |
| 132-64-9 | Dibenzofuran | 740. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 740. | U | | |
| 84-66-2 | Diethylphthalate | 740. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 740. | U | U | |
| 86-73-7 | Fluorene | 740. | U | UJ | C |
| 100-01-6 | 4-Nitroaniline | 1800. | U | U | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 1800. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 740. | U | RV | ~~OXT~~ |
| 101-55-3 | 4-Bromophenyl-phenylether | 740. | U | | |
| 118-74-1 | Hexachlorobenzene | 740. | U | | |
| 87-86-5 | Pentachlorophenol | 1800. | U | UJ | Q |
| 85-01-8 | Phenanthrene | 740. | U | | |
| 120-12-7 | Anthracene | 740. | U | U | |
| 86-74-8 | Carbazole | 740. | U | UJ | C |
| 84-74-2 | Di-n-butylphthalate | 740. | U | U | |
| 206-44-0 | Fluoranthene | 740. | U | | |
| 129-00-0 | Pyrene | 740. | U | | |
| 85-68-7 | Butylbenzylphthalate | 740. | U | | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 740. | U | | |
| 56-55-3 | Benzo(a)anthracene | 740. | U | | |
| 218-01-9 | Chrysene | 740. | U | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 740. | U | U | |
| 117-84-0 | Di-n-octylphthalate | 740. | U | UJ | C |
| 205-99-2 | Benzo(b)fluoranthene | 740. | U | UJ | C |
| 207-08-9 | Benzo(k)fluoranthene | 740. | U | U | |
| 50-32-8 | Benzo(a)pyrene | 740. | U | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 740. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 740. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 740. | U | U | |

(1) - Cannot be separated from Diphenylamine

DL 9/26/96

FORM I SV-2

OGDEN VALIDATED

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC137

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5846M

Matrix: (soil/water) SOIL Lab Sample ID:5846-05

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 04605

Level: (low/med) LOW Date Received: 7/06/96

% Moisture: 10 decanted: (Y/N) N Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 9.0

Number TICs Found: 12

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | RPV Qual | Qual Code |
|---|---|---|---|---|---|---|---|
| 1. | | Unknown Hydrocarbon | 2.70 | 3000. | J | NJ | |
| 2. | | Unknown Hydrocarbon | 2.83 | 2000. | J | | |
| 3. | | Unknown Hydrocarbon | 27.85 | 1000. | J | | |
| 4. | | Unknown Hydrocarbon | 28.22 | 2000. | J | | |
| 5. | | Unknown Phthalate | 28.86 | 2000. | J | | |
| 6. | | Unknown Hydrocarbon | 29.27 | 2000. | J | | |
| 7. | | Unknown Hydrocarbon | 29.74 | 2000. | J | | |
| 8. | | Unknown Hydrocarbon | 30.00 | 2000. | J | | |
| 9. | | Unknown Hydrocarbon | 30.24 | 1000. | J | | |
| 10. | | Unknown Hydrocarbon | 30.50 | 2000. | J | | |
| 11. | | Unknown Hydrocarbon | 31.59 | 2000. | J | | |
| 12. | | Unknown Hydrocarbon | 33.01 | 700. | J | NJ | |
| 13. | | | | | | | |
| 14. | | | | | | | |
| 15. | | | | | | | |
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FORM I SV-TIC

LEVEL D

OGDEN VALIDATED

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC138

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No.:  SAS No.:  SDG No.: 5846M

Matrix: (soil/water) SOIL  Lab Sample ID: 5846-06

Sample wt/vol: 30.0 (g/ml) G  Lab File ID: 04606

Level: (low/med) LOW  Date Received: 7/06/96

% Moisture: 13 decanted: (Y/N) N  Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 8.8

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 380. | U | UJ | C |
| 111-44-4 | bis(2-Chloroethyl)ether | 380. | U | U | |
| 95-57-8 | 2-Chlorophenol | 380. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 380. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 380. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 380. | U | | |
| 95-48-7 | 2-Methylphenol | 380. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 380. | U | | |
| 106-44-5 | 4-Methylphenol | 380. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 380. | U | | |
| 67-72-1 | Hexachloroethane | 380. | U | | |
| 98-95-3 | Nitrobenzene | 380. | U | | |
| 78-59-1 | Isophorone | 380. | U | | |
| 88-75-5 | 2-Nitrophenol | 380. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 380. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 380. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 380. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 380. | U | | |
| 91-20-3 | Naphthalene | 380. | U | | |
| 106-47-8 | 4-Chloroaniline | 380. | U | | |
| 87-68-3 | Hexachlorobutadiene | 380. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 380. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 380. | U | U | |
| 77-47-4 | Hexachlorocyclopentadiene | 380. | U | UJ | C |
| 88-06-2 | 2,4,6-Trichlorophenol | 380. | U | U | |
| 95-95-4 | 2,4,5-Trichlorophenol | 960. | U | U | |
| 91-58-7 | 2-Chloronaphthalene | 380. | U | U | |
| 88-74-4 | 2-Nitroaniline | 960. | U | UJ | C |
| 131-11-3 | Dimethylphthalate | 380. | U | U | |
| 208-96-8 | Acenaphthylene | 380. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 380. | U | | |
| 99-09-2 | 3-Nitroaniline | 960. | U | | |
| 83-32-9 | Acenaphthene | 380. | U | U | |

OGDEN VALIDATED

FORM I SV-1

LEVEL D

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC138

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5846M

Matrix: (soil/water) SOIL Lab Sample ID:5846-06

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 04606

Level: (low/med) LOW Date Received: 7/06/96

% Moisture: 13 decanted: (Y/N) N Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.8

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 960. | U | UJ | C |
| 100-02-7 | 4-Nitrophenol | 960. | U | U | |
| 132-64-9 | Dibenzofuran | 380. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 380. | U | | |
| 84-66-2 | Diethylphthalate | 380. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 380. | U | U | |
| 86-73-7 | Fluorene | 380. | U | UJ | C |
| 100-01-6 | 4-Nitroaniline | 960. | U | U | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 960. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 380. | U | RU | ~~Q~~ |
| 101-55-3 | 4-Bromophenyl-phenylether | 380. | U | | |
| 118-74-1 | Hexachlorobenzene | 380. | U | | |
| 87-86-5 | Pentachlorophenol | 960. | U | UJ | Q |
| 85-01-8 | Phenanthrene | 380. | U | | |
| 120-12-7 | Anthracene | 380. | U | U | |
| 86-74-8 | Carbazole | 380. | U | UJ | C |
| 84-74-2 | Di-n-butylphthalate | 380. | U | U | |
| 206-44-0 | Fluoranthene | 160. | J | J | |
| 129-00-0 | Pyrene | 180. | J | J | |
| 85-68-7 | Butylbenzylphthalate | 380. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 380. | U | | |
| 56-55-3 | Benzo(a)anthracene | 380. | U | | |
| 218-01-9 | Chrysene | 380. | U | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 380. | U | U | |
| 117-84-0 | Di-n-octylphthalate | 380. | U | UJ | C |
| 205-99-2 | Benzo(b)fluoranthene | 380. | U | UJ | C |
| 207-08-9 | Benzo(k)fluoranthene | 380. | U | U | |
| 50-32-8 | Benzo(a)pyrene | 380. | U | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 380. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 380. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 380. | U | U | |

(1) - Cannot be separated from Diphenylamine

DQ 9/26/96

OGDEN VALIDATED

FORM I SV-2

LEVEL D

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC138

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5846M

Matrix: (soil/water) SOIL Lab Sample ID:5846-06

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 04606

Level: (low/med) LOW Date Received: 7/06/96

% Moisture: 13 decanted: (Y/N) N Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.8

Number TICs Found: 17

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|---|
| 1. | | Unknown Hydrocarbon | 2.56 | 400. | J | NJ | |
| 2. | | Unknown Hydrocarbon | 2.71 | 4000. | J | | |
| 3. | | Unknown Hydrocarbon | 2.84 | 300. | J | | |
| 4. | | Unknown Hydrocarbon | 4.03 | 1000. | J | NJ | |
| 5. | | Aldol Condensation Product | 6.11 | 500. | JB | R | B |
| 6. | | Unknown Hydrocarbon | 8.46 | 1000. | J | NJ | |
| 7. | | Unknown Hydrocarbon | 26.58 | 400. | J | | |
| 8. | | Unknown Hydrocarbon | 27.34 | 1000. | J | | |
| 9. | | Unknown Hydrocarbon | 27.63 | 800. | J | | |
| 10. | | Unknown Hydrocarbon | 27.84 | 1000. | J | | |
| 11. | | Unknown Hydrocarbon | 27.94 | 1000. | J | | |
| 12. | | Unknown Hydrocarbon | 28.30 | 2000. | J | | |
| 13. | | Unknown Hydrocarbon | 28.95 | 2000. | J | | |
| 14. | | Unknown Hydrocarbon | 29.37 | 2000. | J | | |
| 15. | | Unknown Hydrocarbon | 29.86 | 3000. | J | | |
| 16. | | Unknown Hydrocarbon | 30.61 | 1000. | J | | |
| 17. | | Unknown Hydrocarbon | 31.69 | 2000. | J | NJ | |
| 18. | | | | | | | |
| 19. | | | | | | | |
| 20. | | | | | | | |
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OGDEN VALIDATED

FORM I SV-TIC 3/90

LEVEL D

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC139

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5846M

Matrix: (soil/water) SOIL Lab Sample ID:5846-07

Sample wt/vol: 30.0 (g/ml) G Lab File ID: A4607

Level: (low/med) LOW Date Received: 7/06/96

% Moisture: 21 decanted: (Y/N) N Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/17/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:12.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 420. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 420. | U | | |
| 95-57-8 | 2-Chlorophenol | 420. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 420. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 420. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 420. | U | | |
| 95-48-7 | 2-Methylphenol | 420. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 420. | U | | |
| 106-44-5 | 4-Methylphenol | 420. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 420. | U | | |
| 67-72-1 | Hexachloroethane | 420. | U | | |
| 98-95-3 | Nitrobenzene | 420. | U | | |
| 78-59-1 | Isophorone | 420. | U | | |
| 88-75-5 | 2-Nitrophenol | 420. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 420. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 420. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 420. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 420. | U | | |
| 91-20-3 | Naphthalene | 420. | U | | |
| 106-47-8 | 4-Chloroaniline | 420. | U | | |
| 87-68-3 | Hexachlorobutadiene | 420. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 420. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 420. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 420. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 420. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 1000. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 420. | U | | |
| 88-74-4 | 2-Nitroaniline | 1000. | U | | |
| 131-11-3 | Dimethylphthalate | 420. | U | | |
| 208-96-8 | Acenaphthylene | 420. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 420. | U | | |
| 99-09-2 | 3-Nitroaniline | 1000. | U | | |
| 83-32-9 | Acenaphthene | 420. | U | U | |

OGDEN VALIDATED

FORM I SV-1 3/90

LEVEL 3

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC139

Lab Name:CEIMIC CORPORATION, SD  Contract:CTO 136

Lab Code:CCSD  Case No.:  SAS No.:  SDG No.:5846M

Matrix: (soil/water) SOIL  Lab Sample ID:5846-07

Sample wt/vol: 30.0 (g/ml) G  Lab File ID: A4607

Level: (low/med) LOW  Date Received: 7/06/96

% Moisture: 21 decanted: (Y/N) N  Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/17/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH:12.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 1000. | U | U | |
| 100-02-7 | 4-Nitrophenol | 1000. | U | | |
| 132-64-9 | Dibenzofuran | 420. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 420. | U | | |
| 84-66-2 | Diethylphthalate | 420. | U | U | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 420. | U | UJ | C |
| 86-73-7 | Fluorene | 420. | U | UJ | C |
| 100-01-6 | 4-Nitroaniline | 1000. | U | U | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 1000. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 420. | U | RU | P*J |
| 101-55-3 | 4-Bromophenyl-phenylether | 420. | U | | |
| 118-74-1 | Hexachlorobenzene | 420. | U | | |
| 87-86-5 | Pentachlorophenol | 1000. | U | UJ | Q |
| 85-01-8 | Phenanthrene | 420. | U | | |
| 120-12-7 | Anthracene | 420. | U | | |
| 86-74-8 | Carbazole | 420. | U | | |
| 84-74-2 | Di-n-butylphthalate | 420. | U | | |
| 206-44-0 | Fluoranthene | 420. | U | | |
| 129-00-0 | Pyrene | 420. | U | | |
| 85-68-7 | Butylbenzylphthalate | 420. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 420. | U | UJ | C |
| 56-55-3 | Benzo(a)anthracene | 420. | U | U | |
| 218-01-9 | Chrysene | 420. | U | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 420. | U | | |
| 117-84-0 | Di-n-octylphthalate | 420. | U | | |
| 205-99-2 | Benzo(b)fluoranthene | 420. | U | | |
| 207-08-9 | Benzo(k)fluoranthene | 420. | U | | |
| 50-32-8 | Benzo(a)pyrene | 420. | U | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 420. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 420. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 420. | U | U | |

(1) - Cannot be separated from Diphenylamine

DQ 9/26/96

OGDEN VALIDATED

FORM I SV-2

LEVEL D

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC139

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5846M

Matrix: (soil/water) SOIL Lab Sample ID:5846-07

Sample wt/vol: 30.0 (g/ml) G Lab File ID: A4607

Level: (low/med) LOW Date Received: 7/06/96

% Moisture: 21 decanted: (Y/N) N Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/17/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:12.0

Number TICs Found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Code | Qual Code |
|---|---|---|---|---|---|---|---|
| 1. | | Aldol Condensation Product | 5.97 | 8000. | JB | R | B |
| 2. | | Unknown Hydrocarbon | 8.22 | 600. | J | NJ | |
| 3. | | Unknown Hydrocarbon | 26.98 | 900. | J | ↓ | |
| 4. | | Unknown Hydrocarbon | 30.17 | 800. | J | ↓ | |
| 5. | | Unknown Hydrocarbon | 31.20 | 900. | J | ↓ | |
| 6. | | Unknown Hydrocarbon | 33.64 | 1000. | J | NJ | |
| 7. | | | | | | | |
| 8. | | | | | | | |
| 9. | | | | | | | |
| 10. | | | | | | | |
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OGDEN VALIDATED

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC140

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5846M

Matrix: (soil/water) SOIL Lab Sample ID:5846-08

Sample wt/vol: 30.0 (g/ml) G Lab File ID: A4608

Level: (low/med) LOW Date Received: 7/06/96

% Moisture: 11 decanted: (Y/N) N Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/17/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.5

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 370. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 370. | U | | |
| 95-57-8 | 2-Chlorophenol | 370. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 370. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 370. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 370. | U | | |
| 95-48-7 | 2-Methylphenol | 370. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 370. | U | | |
| 106-44-5 | 4-Methylphenol | 370. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 370. | U | | |
| 67-72-1 | Hexachloroethane | 370. | U | | |
| 98-95-3 | Nitrobenzene | 370. | U | | |
| 78-59-1 | Isophorone | 370. | U | | |
| 88-75-5 | 2-Nitrophenol | 370. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 370. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 370. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 370. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 370. | U | | |
| 91-20-3 | Naphthalene | 370. | U | | |
| 106-47-8 | 4-Chloroaniline | 370. | U | | |
| 87-68-3 | Hexachlorobutadiene | 370. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 370. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 370. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 370. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 370. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 940. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 370. | U | | |
| 88-74-4 | 2-Nitroaniline | 940. | U | | |
| 131-11-3 | Dimethylphthalate | 370. | U | | |
| 208-96-8 | Acenaphthylene | 370. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 370. | U | | |
| 99-09-2 | 3-Nitroaniline | 940. | U | | |
| 83-32-9 | Acenaphthene | 370. | U | U | |

FORM I SV-1

OGDEN VALIDATED

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC140

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5846M

Matrix: (soil/water) SOIL Lab Sample ID:5846-08

Sample wt/vol: 30.0 (g/ml) G Lab File ID: A4608

Level: (low/med) LOW Date Received: 7/06/96

% Moisture: 11 decanted: (Y/N) N Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/17/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.5

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 940. | U | U | |
| 100-02-7 | 4-Nitrophenol | 940. | U | | |
| 132-64-9 | Dibenzofuran | 370. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 370. | U | | |
| 84-66-2 | Diethylphthalate | 370. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 370. | U | | |
| 86-73-7 | Fluorene | 370. | U | | |
| 100-01-6 | 4-Nitroaniline | 940. | U | U | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 940. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 370. | U | RU | |
| 101-55-3 | 4-Bromophenyl-phenylether | 370. | U | | |
| 118-74-1 | Hexachlorobenzene | 370. | U | | |
| 87-86-5 | Pentachlorophenol | 940. | U | U | Q |
| 85-01-8 | Phenanthrene | 370. | U | | |
| 120-12-7 | Anthracene | 370. | U | | |
| 86-74-8 | Carbazole | 370. | U | | |
| 84-74-2 | Di-n-butylphthalate | 370. | U | U | |
| 206-44-0 | Fluoranthene | 82. | J | | |
| 129-00-0 | Pyrene | 130. | J | | |
| 85-68-7 | Butylbenzylphthalate | 370. | U | | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 370. | U | | |
| 56-55-3 | Benzo(a)anthracene | 150. | J | | |
| 218-01-9 | Chrysene | 390. | | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 280. | J | | |
| 117-84-0 | Di-n-octylphthalate | 370. | U | U | |
| 205-99-2 | Benzo(b)fluoranthene | 440. | | | |
| 207-08-9 | Benzo(k)fluoranthene | 310. | J | | |
| 50-32-8 | Benzo(a)pyrene | 200. | J | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 370. | U | U | |
| 53-70-3 | Dibenz(a,h)anthracene | 370. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 370. | U | | |

(1) - Cannot be separated from Diphenylamine

DQ 9/26/96

OGDEN VALIDATED

FORM I SV-2

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC140

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5846M

Matrix: (soil/water) SOIL Lab Sample ID:5846-08

Sample wt/vol: 30.0 (g/ml) G Lab File ID: A4608

Level: (low/med) LOW Date Received: 7/06/96

% Moisture: 11 decanted: (Y/N) N Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/17/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.5

Number TICs Found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Unknown Hydrocarbon | 4.85 | 300. | J | NJ | |
| 2. | Aldol Condensation Product | 5.88 | 500. | JB | R | B |
| 3. | Unknown Hydrocarbon | 8.22 | 500. | J | NJ | |
| 4. | Unknown Polyaromatic Hydroca | 8.22 | 400. | J | NJ | |
| 5. | | | | | | |
| 6. | | | | | | |
| 7. | | | | | | |
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| 29. | | | | | | |
| 30. | | | | | | |

FORM I SV-TIC

LEVEL D

GOOEN VALIDATED

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC141

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5846M

Matrix: (soil/water) SOIL Lab Sample ID:5846-09DL

Sample wt/vol: 30.0 (g/ml) G Lab File ID: A4609

Level: (low/med) LOW Date Received: 7/06/96

% Moisture: 17 decanted: (Y/N) N Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/17/96

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 8.9

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 800. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 800. | U | | |
| 95-57-8 | 2-Chlorophenol | 800. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 800. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 800. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 800. | U | | |
| 95-48-7 | 2-Methylphenol | 800. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 800. | U | | |
| 106-44-5 | 4-Methylphenol | 800. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 800. | U | | |
| 67-72-1 | Hexachloroethane | 800. | U | | |
| 98-95-3 | Nitrobenzene | 800. | U | | |
| 78-59-1 | Isophorone | 800. | U | | |
| 88-75-5 | 2-Nitrophenol | 800. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 800. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 800. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 800. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 800. | U | | |
| 91-20-3 | Naphthalene | 800. | U | | |
| 106-47-8 | 4-Chloroaniline | 800. | U | | |
| 87-68-3 | Hexachlorobutadiene | 800. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 800. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 800. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 800. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 800. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 2000. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 800. | U | | |
| 88-74-4 | 2-Nitroaniline | 2000. | U | | |
| 131-11-3 | Dimethylphthalate | 800. | U | | |
| 208-96-8 | Acenaphthylene | 800. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 800. | U | | |
| 99-09-2 | 3-Nitroaniline | 2000. | U | | |
| 83-32-9 | Acenaphthene | 800. | U | U | |

FORM I SV-1

OGDEN VALIDATED

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC141

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No.:  SAS No.:  SDG No.: 5846M

Matrix: (soil/water) SOIL  Lab Sample ID: 5846-09DL

Sample wt/vol: 30.0 (g/ml) G  Lab File ID: A4609

Level: (low/med) LOW  Date Received: 7/06/96

% Moisture: 17 decanted: (Y/N) N  Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/17/96

Injection Volume: 1.0 (uL)  Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y  pH: 8.9

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 2000. | U | U | |
| 100-02-7 | 4-Nitrophenol | 2000. | U | | |
| 132-64-9 | Dibenzofuran | 800. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 800. | U | | |
| 84-66-2 | Diethylphthalate | 800. | U | U | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 800. | U | UJ | C |
| 86-73-7 | Fluorene | 800. | U | UJ | C |
| 100-01-6 | 4-Nitroaniline | 2000. | U | U | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 2000. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 800. | U | RU | ** |
| 101-55-3 | 4-Bromophenyl-phenylether | 800. | U | | |
| 118-74-1 | Hexachlorobenzene | 800. | U | | |
| 87-86-5 | Pentachlorophenol | 2000. | U | UJ | Q |
| 85-01-8 | Phenanthrene | 800. | U | | |
| 120-12-7 | Anthracene | 800. | U | | |
| 86-74-8 | Carbazole | 800. | U | | |
| 84-74-2 | Di-n-butylphthalate | 800. | U | | |
| 206-44-0 | Fluoranthene | 800. | U | | |
| 129-00-0 | Pyrene | 800. | U | U | |
| 85-68-7 | Butylbenzylphthalate | 800. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 800. | U | UJ | C |
| 56-55-3 | Benzo(a)anthracene | 800. | U | U | |
| 218-01-9 | Chrysene | 800. | U | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 800. | U | | |
| 117-84-0 | Di-n-octylphthalate | 800. | U | | |
| 205-99-2 | Benzo(b)fluoranthene | 800. | U | | |
| 207-08-9 | Benzo(k)fluoranthene | 800. | U | | |
| 50-32-8 | Benzo(a)pyrene | 800. | U | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 800. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 800. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 800. | U | U | |

(1) - Cannot be separated from Diphenylamine

DQ 9/26/96

FORM I SV-2

LEVEL D

OGDEN VALIDATED

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC141

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5846M

Matrix: (soil/water) SOIL Lab Sample ID:5846-09DL

Sample wt/vol: 30.0 (g/ml) G Lab File ID: A4609

Level: (low/med) LOW Date Received: 7/06/96

% Moisture: 17 decanted: (Y/N) N Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/17/96

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 8.9

Number TICs Found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Unknown Hydrocarbon | 27.97 | 1000. | J | NJ | |
| 2. | Unknown Hydrocarbon | 28.59 | 1000. | J | | |
| 3. | Unknown Hydrocarbon | 28.99 | 1000. | J | | |
| 4. | Unknown Hydrocarbon | 29.44 | 2000. | J | | |
| 5. | Unknown Hydrocarbon | 29.93 | 1000. | J | | |
| 6. | Unknown Hydrocarbon | 30.18 | 800. | J | | |
| 7. | Unknown Hydrocarbon | 31.20 | 1000. | J | NJ | |
| 8. | | | | | | |
| 9. | | | | | | |
| 10. | | | | | | |
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OGDEN VALIDATED

FORM I SV-TIC 3/90

LEVEL D

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC142

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5846M

Matrix: (soil/water) SOIL Lab Sample ID:5846-10

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 04610

Level: (low/med) LOW Date Received: 7/06/96

% Moisture: 12 decanted: (Y/N) N Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 9.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 760. | U | UJ | C |
| 111-44-4 | bis(2-Chloroethyl)ether | 760. | U | U | |
| 95-57-8 | 2-Chlorophenol | 760. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 760. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 760. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 760. | U | | |
| 95-48-7 | 2-Methylphenol | 760. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 760. | U | | |
| 106-44-5 | 4-Methylphenol | 760. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 760. | U | | |
| 67-72-1 | Hexachloroethane | 760. | U | | |
| 98-95-3 | Nitrobenzene | 760. | U | | |
| 78-59-1 | Isophorone | 760. | U | | |
| 88-75-5 | 2-Nitrophenol | 760. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 760. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 760. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 760. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 760. | U | | |
| 91-20-3 | Naphthalene | 760. | U | | |
| 106-47-8 | 4-Chloroaniline | 760. | U | | |
| 87-68-3 | Hexachlorobutadiene | 760. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 760. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 760. | U | U | |
| 77-47-4 | Hexachlorocyclopentadiene | 760. | U | UJ | C |
| 88-06-2 | 2,4,6-Trichlorophenol | 760. | U | U | |
| 95-95-4 | 2,4,5-Trichlorophenol | 1900. | U | U | |
| 91-58-7 | 2-Chloronaphthalene | 760. | U | U | |
| 88-74-4 | 2-Nitroaniline | 1900. | U | UJ | C |
| 131-11-3 | Dimethylphthalate | 760. | U | U | |
| 208-96-8 | Acenaphthylene | 760. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 760. | U | | |
| 99-09-2 | 3-Nitroaniline | 1900. | U | | |
| 83-32-9 | Acenaphthene | 760. | U | U | |



LEVEL D

OGDEN VALIDATED

33

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC142

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No.:  SAS No.:  SDG No.: 5846M

Matrix: (soil/water) SOIL  Lab Sample ID: 5846-10

Sample wt/vol: 30.0 (g/ml) G  Lab File ID: 04610

Level: (low/med) LOW  Date Received: 7/06/96

% Moisture: 12 decanted: (Y/N) N  Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL)  Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y  pH: 9.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 1900. | U | UJ | C |
| 100-02-7 | 4-Nitrophenol | 1900. | U | U | |
| 132-64-9 | Dibenzofuran | 760. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 760. | U | | |
| 84-66-2 | Diethylphthalate | 760. | U | U | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 760. | U | | |
| 86-73-7 | Fluorene | 760. | U | UJ | C |
| 100-01-6 | 4-Nitroaniline | 1900. | U | U | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 1900. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 760. | U | RU | Q #5 |
| 101-55-3 | 4-Bromophenyl-phenylether | 760. | U | | |
| 118-74-1 | Hexachlorobenzene | 760. | U | | |
| 87-86-5 | Pentachlorophenol | 1900. | U | UJ | Q |
| 85-01-8 | Phenanthrene | 760. | U | | |
| 120-12-7 | Anthracene | 760. | U | U | |
| 86-74-8 | Carbazole | 760. | U | UJ | C |
| 84-74-2 | Di-n-butylphthalate | 760. | U | U | |
| 206-44-0 | Fluoranthene | 390. | J | UJ | |
| 129-00-0 | Pyrene | 460. | J | UJ | |
| 85-68-7 | Butylbenzylphthalate | 760. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 760. | U | | |
| 56-55-3 | Benzo(a)anthracene | 760. | U | | |
| 218-01-9 | Chrysene | 760. | U | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 760. | U | U | |
| 117-84-0 | Di-n-octylphthalate | 760. | U | UJ | C |
| 205-99-2 | Benzo(b)fluoranthene | 760. | U | UJ | C |
| 207-08-9 | Benzo(k)fluoranthene | 760. | U | U | |
| 50-32-8 | Benzo(a)pyrene | 760. | U | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 760. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 760. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 760. | U | U | |

(1) - Cannot be separated from Diphenylamine

DQ 9/26/96

OGDEN VALIDATED

FORM I SV-2

LEVEL 3

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC142

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No.:  SAS No.:  SDG No.: 5846M

Matrix: (soil/water) SOIL  Lab Sample ID: 5846-10

Sample wt/vol: 30.0 (g/ml) G  Lab File ID: 04610

Level: (low/med) LOW  Date Received: 7/06/96

% Moisture: 12 decanted: (Y/N) N  Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL)  Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y  pH: 9.0

Number TICs Found: 16

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|---|
| 1. | | Unknown Hydrocarbon | 2.70 | 4000. | J | NJ | |
| 2. | | Unknown Hydrocarbon | 2.83 | 2000. | J | NJ | |
| 3. | | Unknown Hydrocarbon | 4.03 | 600. | J | NJ | |
| 4. | | Aldol Condensation Product | 6.08 | 300. | JB | R | B |
| 5. | | Unknown Hydrocarbon | 26.81 | 600. | J | NJ | |
| 6. | | Unknown Hydrocarbon | 27.23 | 900. | J | | |
| 7. | | Unknown Hydrocarbon | 27.76 | 1000. | J | | |
| 8. | | Unknown Hydrocarbon | 27.86 | 1000. | J | | |
| 9. | | Unknown Hydrocarbon | 28.22 | 2000. | J | | |
| 10. | | Unknown Hydrocarbon | 28.87 | 2000. | J | | |
| 11. | | Unknown Hydrocarbon | 29.27 | 2000. | J | | |
| 12. | | Unknown Hydrocarbon | 29.76 | 2000. | J | | |
| 13. | | Unknown Hydrocarbon | 29.99 | 2000. | J | | |
| 14. | | Unknown Hydrocarbon | 30.51 | 2000. | J | | |
| 15. | | Unknown Hydrocarbon | 31.58 | 2000. | J | | |
| 16. | | Unknown Hydrocarbon | 33.00 | 800. | J | NJ | |
| 17. | | | | | | | |
| 18. | | | | | | | |
| 19. | | | | | | | |
| 20. | | | | | | | |
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| 30. | | | | | | | |



FORM I SV-TIC

OGDEN VALIDATED

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC143

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5846M

Matrix: (soil/water) SOIL Lab Sample ID:5846-11DL

Sample wt/vol: 30.0 (g/ml) G Lab File ID: A4611

Level: (low/med) LOW Date Received: 7/06/96

% Moisture: 11 decanted: (Y/N) N Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/17/96

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 9.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 750. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 750. | U | | |
| 95-57-8 | 2-Chlorophenol | 750. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 750. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 750. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 750. | U | | |
| 95-48-7 | 2-Methylphenol | 750. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 750. | U | | |
| 106-44-5 | 4-Methylphenol | 750. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 750. | U | | |
| 67-72-1 | Hexachloroethane | 750. | U | | |
| 98-95-3 | Nitrobenzene | 750. | U | | |
| 78-59-1 | Isophorone | 750. | U | | |
| 88-75-5 | 2-Nitrophenol | 750. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 750. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 750. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 750. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 750. | U | | |
| 91-20-3 | Naphthalene | 750. | U | | |
| 106-47-8 | 4-Chloroaniline | 750. | U | | |
| 87-68-3 | Hexachlorobutadiene | 750. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 750. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 750. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 750. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 750. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 1900. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 750. | U | | |
| 88-74-4 | 2-Nitroaniline | 1900. | U | | |
| 131-11-3 | Dimethylphthalate | 750. | U | | |
| 208-96-8 | Acenaphthylene | 750. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 750. | U | | |
| 99-09-2 | 3-Nitroaniline | 1900. | U | | |
| 83-32-9 | Acenaphthene | 750. | U | U | |

FORM I SV-1

LEVEL D

OGDEN VALIDATED

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC143

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5846M

Matrix: (soil/water) SOIL Lab Sample ID:5846-11DL

Sample wt/vol: 30.0 (g/ml) G Lab File ID: A4611

Level: (low/med) LOW Date Received: 7/06/96

% Moisture: 11 decanted: (Y/N) N Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/17/96

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 9.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 1900. | U | U | |
| 100-02-7 | 4-Nitrophenol | 1900. | U | | |
| 132-64-9 | Dibenzofuran | 750. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 750. | U | | |
| 84-66-2 | Diethylphthalate | 750. | U | U | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 750. | U | UJ | C |
| 86-73-7 | Fluorene | 750. | U | UJ | C |
| 100-01-6 | 4-Nitroaniline | 1900. | U | U | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 1900. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 750. | U | RU | Q * |
| 101-55-3 | 4-Bromophenyl-phenylether | 750. | U | | |
| 118-74-1 | Hexachlorobenzene | 750. | U | | |
| 87-86-5 | Pentachlorophenol | 1900. | U | UJ | Q |
| 85-01-8 | Phenanthrene | 750. | U | | |
| 120-12-7 | Anthracene | 750. | U | | |
| 86-74-8 | Carbazole | 750. | U | | |
| 84-74-2 | Di-n-butylphthalate | 750. | U | U | |
| 206-44-0 | Fluoranthene | 510. | J | JJ | |
| 129-00-0 | Pyrene | 540. | J | | |
| 85-68-7 | Butylbenzylphthalate | 750. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 750. | U | UJ | C |
| 56-55-3 | Benzo(a)anthracene | 270. | J | JJ | |
| 218-01-9 | Chrysene | 370. | J | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 750. | U | U | |
| 117-84-0 | Di-n-octylphthalate | 750. | U | | |
| 205-99-2 | Benzo(b)fluoranthene | 270. | J | JJ | |
| 207-08-9 | Benzo(k)fluoranthene | 200. | J | | |
| 50-32-8 | Benzo(a)pyrene | 750. | U | U | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 750. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 750. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 750. | U | U | |

(1) - Cannot be separated from Diphenylamine

9/26/96

OGDEN VALIDATED

FORM I SV-2

LEVEL D

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC143

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5846M

Matrix: (soil/water) SOIL Lab Sample ID:5846-11DL

Sample wt/vol: 30.0 (g/ml) G Lab File ID: A4611

Level: (low/med) LOW Date Received: 7/06/96

% Moisture: 11 decanted: (Y/N) N Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/17/96

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 9.0

Number TICs Found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Aldol Condensation Product | 5.89 | 900. | JB | R | B |
| 2. | Unknown Hydrocarbon | 26.61 | 800. | J | NJ | |
| 3. | Unknown Hydrocarbon | 28.00 | 2000. | J | | |
| 4. | Unknown Hydrocarbon | 28.62 | 2000. | J | | |
| 5. | Unknown Hydrocarbon | 29.46 | 2000. | J | | |
| 6. | Unknown Hydrocarbon | 29.70 | 2000. | J | | |
| 7. | Unknown Hydrocarbon | 30.20 | 2000. | J | | |
| 8. | Unknown Hydrocarbon | 31.24 | 2000. | J | | |
| 9. | Unknown Hydrocarbon | 32.61 | 800. | J | NJ | |
| 10. | | | | | | |
| 11. | | | | | | |
| 12. | | | | | | |
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OGDEN VALIDATED

FORM I SV-TIC

LEVEL D

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC147

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5846M

Matrix: (soil/water) WATER Lab Sample ID:5846-12

Sample wt/vol: 1000.0 (g/ml) ML Lab File ID: AA112

Level: (low/med) LOW Date Received: 7/06/96

% Moisture: decanted: (Y/N) Date Extracted: 7/08/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/10/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 10. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 10. | U | | |
| 95-57-8 | 2-Chlorophenol | 10. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 10. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 10. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 10. | U | | |
| 95-48-7 | 2-Methylphenol | 10. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10. | U | | |
| 106-44-5 | 4-Methylphenol | 10. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 10. | U | | |
| 67-72-1 | Hexachloroethane | 10. | U | | |
| 98-95-3 | Nitrobenzene | 10. | U | | |
| 78-59-1 | Isophorone | 10. | U | | |
| 88-75-5 | 2-Nitrophenol | 10. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 10. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 10. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 10. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10. | U | | |
| 91-20-3 | Naphthalene | 10. | U | | |
| 106-47-8 | 4-Chloroaniline | 10. | U | | |
| 87-68-3 | Hexachlorobutadiene | 10. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 10. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 10. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 10. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 10. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 25. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 10. | U | | |
| 88-74-4 | 2-Nitroaniline | 25. | U | | |
| 131-11-3 | Dimethylphthalate | 10. | U | | |
| 208-96-8 | Acenaphthylene | 10. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 10. | U | | |
| 99-09-2 | 3-Nitroaniline | 25. | U | | |
| 83-32-9 | Acenaphthene | 10. | U | U | |

FORM I SV-1

LEVEL D

OGDEN VALIDATED

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC147

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No.:  SAS No.:  SDG No.: 5846M

Matrix: (soil/water) WATER  Lab Sample ID: 5846-12

Sample wt/vol: 1000.0 (g/ml) ML  Lab File ID: AA112

Level: (low/med) LOW  Date Received: 7/06/96

% Moisture: decanted: (Y/N)  Date Extracted: 7/08/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/10/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) N  pH: 7.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 25. | U | U | |
| 100-02-7 | 4-Nitrophenol | 25. | U | | |
| 132-64-9 | Dibenzofuran | 10. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 10. | U | | |
| 84-66-2 | Diethylphthalate | 10. | U | | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10. | U | | |
| 86-73-7 | Fluorene | 10. | U | | |
| 100-01-6 | 4-Nitroaniline | 25. | U | | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10. | U | RU | R #3 |
| 101-55-3 | 4-Bromophenyl-phenylether | 10. | U | | |
| 118-74-1 | Hexachlorobenzene | 10. | U | | |
| 87-86-5 | Pentachlorophenol | 25. | U | | |
| 85-01-8 | Phenanthrene | 10. | U | | |
| 120-12-7 | Anthracene | 10. | U | | |
| 86-74-8 | Carbazole | 10. | U | | |
| 84-74-2 | Di-n-butylphthalate | 10. | U | | |
| 206-44-0 | Fluoranthene | 10. | U | | |
| 129-00-0 | Pyrene | 10. | U | | |
| 85-68-7 | Butylbenzylphthalate | 10. | U | | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10. | U | | |
| 56-55-3 | Benzo(a)anthracene | 10. | U | | |
| 218-01-9 | Chrysene | 10. | U | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 10. | U | | |
| 117-84-0 | Di-n-octylphthalate | 10. | U | | |
| 205-99-2 | Benzo(b)fluoranthene | 10. | U | | |
| 207-08-9 | Benzo(k)fluoranthene | 10. | U | | |
| 50-32-8 | Benzo(a)pyrene | 10. | U | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 10. | U | | |
| 53-70-3 | Dibenz(a,h)anthracene | 10. | U | | |
| 191-24-2 | Benzo(g,h,i)perylene | 10. | U | U | |

(1) - Cannot be separated from Diphenylamine

DQ 9/26/96

FORM I SV-2

LEVEL D

OGDEN VALIDATED

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC147

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No.:  SAS No.:  SDG No.: 5846M

Matrix: (soil/water) WATER  Lab Sample ID: 5846-12

Sample wt/vol: 1000.0 (g/ml) ML  Lab File ID: AA112

Level: (low/med) LOW  Date Received: 7/06/96

% Moisture: decanted: (Y/N)  Date Extracted: 7/08/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/10/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) N  pH: 7.0

Number TICs Found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual Code |
|---|---|---|---|---|---|
| 1. | Unknown Hydrocarbon | 20.13 | 9. | J | NJ |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |
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FORM I SV-TIC

LEVEL D

OGDEN VALIDATED

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC148

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5846M

Matrix: (soil/water) SOIL Lab Sample ID:5846-13DL

Sample wt/vol: 30.0 (g/ml) G Lab File ID: A4613

Level: (low/med) LOW Date Received: 7/06/96

% Moisture: 10 decanted: (Y/N) N Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/17/96

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 8.7

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 108-95-2 | Phenol | 740. | U | U | |
| 111-44-4 | bis(2-Chloroethyl)ether | 740. | U | | |
| 95-57-8 | 2-Chlorophenol | 740. | U | | |
| 541-73-1 | 1,3-Dichlorobenzene | 740. | U | | |
| 106-46-7 | 1,4-Dichlorobenzene | 740. | U | | |
| 95-50-1 | 1,2-Dichlorobenzene | 740. | U | | |
| 95-48-7 | 2-Methylphenol | 740. | U | | |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 740. | U | | |
| 106-44-5 | 4-Methylphenol | 740. | U | | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 740. | U | | |
| 67-72-1 | Hexachloroethane | 740. | U | | |
| 98-95-3 | Nitrobenzene | 740. | U | | |
| 78-59-1 | Isophorone | 740. | U | | |
| 88-75-5 | 2-Nitrophenol | 740. | U | | |
| 105-67-9 | 2,4-Dimethylphenol | 740. | U | | |
| 111-91-1 | bis(2-Chloroethoxy)methane | 740. | U | | |
| 120-83-2 | 2,4-Dichlorophenol | 740. | U | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 740. | U | | |
| 91-20-3 | Naphthalene | 740. | U | | |
| 106-47-8 | 4-Chloroaniline | 740. | U | | |
| 87-68-3 | Hexachlorobutadiene | 740. | U | | |
| 59-50-7 | 4-Chloro-3-methylphenol | 740. | U | | |
| 91-57-6 | 2-Methylnaphthalene | 740. | U | | |
| 77-47-4 | Hexachlorocyclopentadiene | 740. | U | | |
| 88-06-2 | 2,4,6-Trichlorophenol | 740. | U | | |
| 95-95-4 | 2,4,5-Trichlorophenol | 1800. | U | | |
| 91-58-7 | 2-Chloronaphthalene | 740. | U | | |
| 88-74-4 | 2-Nitroaniline | 1800. | U | | |
| 131-11-3 | Dimethylphthalate | 740. | U | | |
| 208-96-8 | Acenaphthylene | 740. | U | | |
| 606-20-2 | 2,6-Dinitrotoluene | 740. | U | | |
| 99-09-2 | 3-Nitroaniline | 1800. | U | | |
| 83-32-9 | Acenaphthene | 740. | U | U | |

FORM I SV-1

OGDEN VALIDATED

LEVEL

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC148

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No.:  SAS No.:  SDG No.: 5846M

Matrix: (soil/water) SOIL  Lab Sample ID: 5846-13DL

Sample wt/vol: 30.0 (g/ml) G  Lab File ID: A4613

Level: (low/med) LOW  Date Received: 7/06/96

% Moisture: 10 decanted: (Y/N) N  Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL)  Date Analyzed: 7/17/96

Injection Volume: 1.0 (uL)  Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y  pH: 8.7

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 51-28-5 | 2,4-Dinitrophenol | 1800. | U | U | |
| 100-02-7 | 4-Nitrophenol | 1800. | U | | |
| 132-64-9 | Dibenzofuran | 740. | U | | |
| 121-14-2 | 2,4-Dinitrotoluene | 740. | U | | |
| 84-66-2 | Diethylphthalate | 740. | U | U | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 740. | U | UJ | C |
| 86-73-7 | Fluorene | 740. | U | UJ | C |
| 100-01-6 | 4-Nitroaniline | 1800. | U | U | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 1800. | U | | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 740. | U | RU | R ~~X~~ |
| 101-55-3 | 4-Bromophenyl-phenylether | 740. | U | | |
| 118-74-1 | Hexachlorobenzene | 740. | U | | |
| 87-86-5 | Pentachlorophenol | 1800. | U | UJ | Q |
| 85-01-8 | Phenanthrene | 1700. | | | |
| 120-12-7 | Anthracene | 570. | J | J | |
| 86-74-8 | Carbazole | 170. | J | J | |
| 84-74-2 | Di-n-butylphthalate | 740. | U | U | |
| 206-44-0 | Fluoranthene | 6700. | | | |
| 129-00-0 | Pyrene | 7100. | | | |
| 85-68-7 | Butylbenzylphthalate | 740. | U | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 740. | U | UJ | C |
| 56-55-3 | Benzo(a)anthracene | 3800. | | | |
| 218-01-9 | Chrysene | 4500. | | | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 740. | U | U | |
| 117-84-0 | Di-n-octylphthalate | 740. | U | U | |
| 205-99-2 | Benzo(b)fluoranthene | 2600. | | | |
| 207-08-9 | Benzo(k)fluoranthene | 2700. | | | |
| 50-32-8 | Benzo(a)pyrene | 2600. | | | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 620. | J | J | |
| 53-70-3 | Dibenz(a,h)anthracene | 740. | U | U | |
| 191-24-2 | Benzo(g,h,i)perylene | 740. | U | U | |

(1) - Cannot be separated from Diphenylamine

9/26/96



LEVEL D

OGDEN VALIDATED

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MC148

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.: SAS No.: SDG No.:5846M

Matrix: (soil/water) SOIL Lab Sample ID:5846-13DL

Sample wt/vol: 30.0 (g/ml) G Lab File ID: A4613

Level: (low/med) LOW Date Received: 7/06/96

% Moisture: 10 decanted: (Y/N) N Date Extracted: 7/09/96

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 7/17/96

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 8.7

Number TICs Found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1. | Unknown Polyaromatic Hydroca | 20.67 | 700. | J | NJ | |
| 2. | Unknown Polyaromatic Hydroca | 22.69 | 600. | J | | |
| 3. | Unknown Polyaromatic Hydroca | 22.97 | 600. | J | | |
| 4. | Unknown Polyaromatic Hydroca | 23.19 | 2000. | J | | |
| 5. | Unknown Polychlorinated Biph | 23.38 | 1000. | J | | |
| 6. | Unknown Hydrocarbon | 23.48 | 600. | J | | |
| 7. | Unknown Hydrocarbon | 23.63 | 600. | J | | |
| 8. | Unknown Hydrocarbon | 23.68 | 700. | J | | |
| 9. | Unknown Polychlorinated Biph | 23.78 | 2000. | J | | |
| 10. | Unknown Hydrocarbon | 23.99 | 600. | J | | |
| 11. | Unknown Polychlorinated Biph | 24.25 | 700. | J | | |
| 12. | Unknown Polyaromatic Hydroca | 24.32 | 600. | J | | |
| 13. | Unknown Polychlorinated Biph | 24.52 | 1000. | J | | |
| 14. | Unknown Polyaromatic Hydroca | 24.62 | 900. | J | | |
| 15. | Unknown Polyaromatic Hydroca | 24.77 | 700. | J | | |
| 16. | Unknown Polychlorinated Biph | 25.35 | 2000. | J | | |
| 17. | Unknown Polyaromatic Hydroca | 25.96 | 1000. | J | | |
| 18. | Unknown Polyaromatic Hydroca | 26.05 | 700. | J | | |
| 19. | Unknown Polyaromatic Hydroca | 26.27 | 400. | J | | |
| 20. | Unknown Polyaromatic Hydroca | 28.15 | 2000. | J | NJ | |
| 21. | | | | | | |
| 22. | | | | | | |
| 23. | | | | | | |
| 24. | | | | | | |
| 25. | | | | | | |
| 26. | | | | | | |
| 27. | | | | | | |
| 28. | | | | | | |
| 29. | | | | | | |
| 30. | | | | | | |



LEVEL D

OGDEN VALIDATED

OGDEN

# DATA VALIDATION REPORT

CLEAN CONTRACT TASK ORDER #136
NAF Midway Site Investigations

ANALYSIS: PESTICIDES/PCBs
SAMPLE DELIVERY GROUP: 5846M

Prepared by

Ogden—Denver Operations
550 South Wadsworth Boulevard, Suite 500
Lakewood, Colorado 80226

# CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

Ogden Environmental and Energy Services Co., Inc.
550 South Wadsworth Boulevard
Suite 500
Lakewood, CO 80226

Package ID C136PP56
Task Order 1101901 36
SDG No. 5846M
No. of Analyses 13

Laboratory Cumis / S-Cubed
Reviewer H.White
Analysis/Method Pesticides/PCBs

Date: 2 October 1996
Reviewer's Signature Heidi A. White

| ACTION ITEMS[a] | |
|---|---|
| 1. Case Narrative Deficiencies | |
| 2. Out of Scope Analyses | |
| 3. Analyses Not Conducted | |
| 4. Missing Hardcopy Deliverables | |
| 5. Incorrect Hardcopy Deliverables | |
| 6. Deviations from Analysis Protocol, e.g., | MC137 ~~was~~ arrived 1 day outside holding times and was extracted 3 days outside holding time. No quals assigned see Sec 2.1.3 |
| Holding Times | |
| GC/MS Tune/Inst. Perform | - % Resolutions for 2 CCVs did not meet 90% criteria |
| Calibrations | - Overlapping RTs noted for standards |
| Blanks | |
| Surrogates | - Overlapping peaks for Aroclors and single |
| Matrix Spike/Dup LCS | peak pesticides noted resulting in |
| Field QC | disqualification. See Sec 2.10 & 2.11 |
| Internal Standard Performance | |
| Compound Identification and Quantitation | - % Ds exceeded QC criteria |
| System Performance | - False negative identified (Aroclor-1260 sampled MC137 |

| COMMENTS[b] | |
|---|---|
| | |

[a] Subcontracted analytical laboratory is not meeting contract and/or method requirements.
[b] Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.

# 1. INTRODUCTION

| | |
|---|---|
| Task Order Title: | NAF Midway Site Investigations |
| CLEAN Contract Task Order #: | 0136 |
| SDG#: | 5846M |
| CTO Manager: | J. Cotter |
| Project Contact: | M. Medeiros |
| Matrix: | Soil/Water |
| Analysis: | Pesticides/PCBs |
| NEESA QC Level: | D |
| No. of Samples: | 13 |
| No. of Reanalyses/Dilutions: | 8 |
| Reviewer: | H.White |
| Date of Review: | October 1, 1996 |

The samples listed in Table 1 were validated based on the guidelines outlined in the Ogden *Project Procedures Manual, Comprehensive Long-Term Environmental Action Navy (CLEAN) Program* data validation procedure for Level C and D pesticides/PCBs (DVP-4, Rev. 2) and the *National Functional Guidelines For Organic Data Review* (2/94). Any deviations from these procedures are documented herein. These procedures are designed to meet the data quality objectives required by the Naval Energy and Environmental Support Activity for all analyses at the requested QC level. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

**Table 1. Sample identification**

| Client ID | EPA ID | Laboratory ID | Matrix | COC Method |
|---|---|---|---|---|
| M01TS16S01 | MC133 | 5846-01 | soil | OLM03.1P |
| M01TS16S02 | MC134 | 5846-02 | soil | OLM03.1P |
| M01TS17S01 | MC135 | 5846-03 | soil | OLM03.1P |
| M01TS17S01 | MC135DL | 5846-03DL | soil | OLM03.1P |
| M01TS17S02 | MC136 | 5846-04 | soil | OLM03.1P |
| M01TS17S02 | MC136DL | 5846-04DL | soil | OLM03.1P |
| M01TS18S01 | MC137 | 5846-05DL1 | soil | OLM03.1P |
| M01TS18S02 | MC138 | 5846-06 | soil | OLM03.1P |
| M01TS18S02 | MC138DL | 5846-06DL | soil | OLM03.1P |
| M01TS19S01 | MC139 | 5846-07 | soil | OLM03.1P |
| M01TS19S01 | MC139DL | 5846-07DL | soil | OLM03.1P |
| M01TS19S02 | MC140 | 5846-08 | soil | OLM03.1P |
| M01TS20S01 | MC141 | 5846-09DL1 | soil | OLM03.1P |
| M01TS20S01 | MC141DL | 5846-DL | soil | OLM03.1P |
| M01TS20S02 | MC142 | 5846-10 | soil | OLM03.1P |
| M01TS20S02 | MC142DL | 5846-10DL | soil | OLM03.1P |
| M01TS20D02 | MC143 | 5846-11 | soil | OLM03.1P |
| M01TS20D02 | MC143DL | 5846-11DL | soil | OLM03.1P |
| M01QW17E02 | MC147 | 5846-12 | water | OLM03.1P |
| M01TP11S02 | MC148 | 5846-13DL1 | soil | OLM03.1P |
| M01TP11S02 | MC148DL | 5846-13DL | soil | OLM03.1P |

# 2. DATA VALIDATION FINDINGS

## 2.1 SAMPLE MANAGEMENT

The following are findings associated with sample management:

### 2.1.1 Sample Preservation, Handling, and Transport

No preservations were required for pesticide/PCB analysis. All samples in this SDG were received by the laboratory within the temperature limits established in NEESA 20.2-047B. A sample bottle was noted to be broken upon arrival, with all sample lost. The laboratory did not identify which sample had been broken. No qualifications were required.

### 2.1.2 Chain of Custody

All COCs were legible and complete. All COCs were signed by laboratory and field personnel. Questions regarding sample conditions were answered on the COC. A sample receipt checklist was completed by the laboratory which supplied additional information. A pH analysis was performed on water sample MC137. Custody seals were present on the cooler but not on sample containers. No qualifications were required based on sample receipt information.

### 2.1.3 Holding Times

All samples in this SDG were extracted and analyzed within the allowed holding times, with the exception of sample MC147. Sample MC147 arrived at the laboratory one day outside of the seven-day holding time. The sample was extracted three days outside the holding time. No qualifications were assigned to the sample since the Analytical Summary Table identified the sample as an equipment rinsate.

## 2.2 PESTICIDES INSTRUMENT PERFORMANCE

According to the summary forms and review of the raw data, the endrin/4,4´-DDT degradations were within QC limits. All surrogate retention times for the samples were within the allowed retention time windows as established by the initial calibrations. All calibration standard peaks were within established retention time windows. The reviewer noted that the Form VI for PEM07 reported the retention time for alpha-BHC at 3.45, which was outside the retention time window of 3.95-4.05. Review of the raw data indicated the actual retention time as 3.99. The Form VI was corrected. No further transcription or calculation errors were noted.

The initial resolution check was within the QC criteria of 60%; however, several compounds in the continuing calibration check standards exceeded the 90% QC criteria for the DB-1701 column. The resolution between heptachlor epoxide/gamma chlordane and gamma chlordane/alpha chlordane were noted to be 85% for INDBM12 and 83% for INDBM13. In addition, alpha chlordane/endosulfan I, dieldrin/4,4'-DDE, and endosulfan II/4,4'-DDD were noted to have overlapping retention time windows on the DB608 column, while endosulfan II/4,4'-DDD and gamma chlordane/endosulfan I had overlapping retention time windows on the DB-1701. Poor resolution and overlapping retention time windows were a result of insufficient run times. Qualifications assigned due to possible coelution are noted in Section 2.10 and 2.11.

## 2.3 CALIBRATION

### 2.3.1 Analytical Sequence

The analytical sequence met the requirements set in the CLP SOW (8/94) and was therefore acceptable.

### 2.3.2 Initial Calibration

The %RSDs were within the QC limit of 20% for all target compounds. The low-level calibration factor for alpha-BHC was calculated incorrectly by the laboratory. The Form VI was corrected and the %RSD was recalculated by the reviewer. No additional calculation or transcription errors were noted and no qualifications were assigned.

### 2.3.3 Continuing Calibration

The RPDs were within the QC limit of 25% for all target compounds. No transcription or calculation errors were noted; therefore, no qualifications were assigned to the data.

## 2.4 BLANKS

### 2.4.1 Instrument Blanks

There was no pesticide/PCB contamination above 1/2 the CRQL in any of the instrument blanks; therefore, no qualifications were required.

### 2.4.2 Method Blanks

One soil and one water method blank were extracted and analyzed with this SDG. No target compounds were detected in the method blanks, however, the soil method blank had low level non-target compound contamination. No qualifications were assigned to the data.

## 2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

One water and one soil blank spike were extracted and analyzed with the samples in this SDG. The percent recoveries of all spiked compounds were within QC limits for both blank spikes; therefore, no qualifications were required. The reviewer noted that blank spike QC limits were the same as CLP MS/MSD limits.

## 2.6 SURROGATE RECOVERY

All samples, blanks, and spikes were noted to contain surrogate compounds. Review of the raw data indicated that a ten-fold dilution or greater resulted in non-quantifiable surrogate recoveries; therefore, samples analyzed at a 10× dilution or greater were not evaluated for surrogate performance. The reviewer noted that incorrect surrogate limits of 60 to 150 percent were used by the laboratory. According to OLM03.1P, surrogate QC limits are 30 to 150. These limits were used to evaluate the data.

The surrogate recoveries for DCB exceeded the QC limits on one column for samples MC133, MC137, and MC143. The surrogate recoveries for DCB exceeded the QC limits on both columns for samples MC136 and MC136DL. The surrogate recoveries for TCX were within QC limits for all samples.

## 2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

No MS/MSD analysis was performed for the samples in this SDG. No MS/MSD was requested on the COC form. An MS/MSD analysis is required at an overall frequency of 10% per matrix, per analysis; therefore, not every SDG will contain an MS/MSD analysis.

## 2.8 SAMPLE CLEANUP PERFORMANCE

Florisil cleanup was performed on all samples as required. GPC cleanup was performed for the soil samples. Percent recoveries were acceptable for both cleanup procedures; therefore, no qualifications were required.

## 2.9 FIELD QC SAMPLES

Field QC samples are evaluated, and if necessary, qualified based only on method blanks. Any remaining detects are used to evaluate the associated samples. The following are findings associated with field QC samples:

### 2.9.1 Field Blanks and Equipment Rinsates

Sample MC155 from SDG 5811M and MC143 were identified as the field blank and equipment rinsate, respectively, associated with the samples in this SDG. No detects were reported in either sample; therefore, qualifications were not assigned to the data.

### 2.9.2 Field Duplicates

Samples MC142 and MC143 were identified as the field duplicate pair for this SDG. Qualifications are not assigned to the data based on field duplicate result; however, RPDs are calculated and compounds with RPDs greater than 100% are noted. RPDs were not calculated for samples that were qualified as tentatively identified. Methoxychlor was detected in sample MC143 only and Aroclor-1254 was detected in sample MC142 only.

## 2.10 COMPOUND IDENTIFICATION

Compound identification was performed by the reviewer. Several potential false positives were identified by the reviewer. Raw data was reviewed to determine pattern matching for multicomponent compounds. Based on calculations of the Aroclors' peak ratio to the calibration standard and pattern matching, the reviewer determined that the single peak pesticides were identified as detects using same peaks used for Aroclor identification. Many of the Aroclor peaks fell within the retention time windows of the single peak pesticides on both columns. The samples were qualified as follows:

| Findings | Associated Samples | Qualification of Data |
|---|---|---|
| Aroclor-1260 peaks were used for the identification of endrin aldehyde. | MC133, MC134, MC136, MC138, MC141, MC142, MC148 | Endrin aldehyde was qualified as tentatively identified, "N" in the samples. |
| Aroclor-1260 peaks were used for the identification of endosulfan II. | MC139, MC141, MC142, MC148 | Endosulfan II was qualified as tentatively identified, "N" in the samples. |
| Aroclor-1254 peaks were used for the identification of aldrin. | MC135, MC142 | Aldrin was qualified as tentatively identified, "N" in the samples. |
| Aroclor-1254 peaks were used for the identification of endrin. | MC135, MC142 | Endrin was qualified as tentatively identified, "N" in the samples. |
| Aroclor-1254 peaks were used for the identification of alpha-chlordane. | MC135, MC142 | Alpha-chlordane was qualified as tentatively identified, "N" in the samples. |
| Aroclor-1254 peaks were used for the identification of dieldrin. | MC142 | Dieldrin was qualified as tentatively identified, "N" in the samples. |
| Aroclor-1248 peaks were used for the identification of aldrin. | MC148 | Aldrin was qualified as tentatively identified, "N" in the samples. |
| Aroclor-1248 peaks were used for the identification of heptachlor epoxide. | MC148 | Heptachlor epoxide was qualified as tentatively identified, "N" in the samples. |

The compound 4,4'-DDE coeluted with Aroclor-1254 on both columns; however, review of the chromatograms and peak ratios indicated that 4,4'-DDE was present in the samples and the compound was not tentatively identified. In addition, Aroclor-1254 and Aroclor-1260 coeluted in sample MC142. The reviewer selected three non-coeluting peaks for each Aroclor and re-quantitated the values.

There was one false negative for Aroclor-1260 in sample MC137. The reviewer quantitated the result from the raw data and the result is presented on the Form I. Additionally, the reviewer noted that Aroclor-1254 may be present in sample MC137, but due to inconclusive evidence, the reporting limit was raised to a level above the interference at which the reviewer believed Aroclor-1254 was not present in the sample and qualified as a nondetect. The reviewer noted that GC/MS confirmation was not performed for samples with confirmed concentrations exceeding 10 ng/$\mu$L, as required by the CLP SOW (8/94). No qualifications were assigned.

The %Ds between the two column results exceeded 100% for several compounds and samples. The samples were qualified as follows:

| Findings | Associated Samples | Qualification of Data |
|---|---|---|
| The %D for 4,4'-DDD exceeded 100%. | MC133, MC137 | The samples were qualified as tentatively identified, "N." |
| The %D for endrin aldehyde exceeded 100%. | MC133, MC134, MC136, | The samples were qualified as tentatively identified, "N." |
| The %D for aldrin exceeded 100%. | MC135, MC148 | The samples were qualified as tentatively identified, "N." |
| The %D for gamma-chlordane exceeded 100%. | MC135, MC142, MC148 | The samples were qualified as tentatively identified, "N." |
| The %D for endrin ketone exceeded 100%. | MC137 | The sample was qualified as tentatively identified, "N." |
| The %D for 4,4'-DDT exceeded 100%. | MC137, MC139 | The samples were qualified as tentatively identified, "N." |
| The %D for endosulfan II exceeded 100%. | MC139, MC141, MC142, MC148 | The samples were qualified as tentatively identified, "N." |
| The %D for heptachlor epoxide exceeded 100%. | MC148 | The sample was qualified as tentatively identified, "N." |
| The %D for endrin exceeded 100%. | MC148 | The sample was qualified as tentatively identified, "N." |
| The %D for Aroclor-1260 exceeded 100%. | MC143 | The sample was qualified as tentatively identified, "N." |
| The %D for Aroclor-1248 exceeded 100%. | MC148 | The sample was qualified as tentatively identified, "N." |
| The %D for dieldrin exceeded 100%. | MC142, MC148 | The samples were qualified as tentatively identified, "N." |

## 2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantification was verified in the samples in this SDG. Samples MC135, MC138, MC141, MC142, and MC143 were analyzed at a 10× dilution. Sample MC137 was analyzed at a 2× dilution, sample MC136 was analyzed at 5× dilution, sample MC148 was analyzed at 20× and 200× dilution, and sample MC141 at a 100× dilution. Dilutions were performed due to high concentrations of Aroclors, 4,'4-DDE, and 4,4'-DDT. All reporting limits were consistent with the CRQLs listed in the CLP (8/94) after adjustments for percent moisture, sample volume, and dilution factors.

The %Ds for several compounds exceeded 25 % and were qualified as follows:

| Findings | Associated Samples | Qualification of Data |
|---|---|---|
| The %D for 4,4'-DDD exceeded 25%. | MC133, MC137, MC138, MC142, MC143 | The samples were qualified as estimated, "J." |
| The %D for endrin aldehyde exceeded 25%. | MC133, MC134, MC136, MC135, MC138, MC141, MC142, MC148 | The samples were qualified as estimated, "J." |
| The %D for aldrin exceeded 25%. | MC142, MC148, MC135, | The samples were qualified as estimated, "J." |
| The %D for gamma-chlordane exceeded 25%. | MC135, MC142, MC148, MC133, MC134, MC136, MC137, MC138, MC143 | The samples were qualified as estimated, "J." |
| The %D for endrin ketone exceeded 25%. | MC137 | The samples were qualified as estimated, "J." |
| The %D for 4,4'-DDT exceeded 25%. | MC137, MC139, MC133, MC134, MC138DL, MC142DL, MC143DL | The samples were qualified as estimated, "J." |
| The %D for endosulfan II exceeded 25%. | MC139, MC141, MC142, MC148 | The samples were qualified as estimated, "J." |
| The %D for heptachlor epoxide exceeded 25%. | MC148 | The samples were qualified as estimated, "J." |
| The %D for endrin exceeded 25%. | MC148, MC142 | The samples were qualified as estimated, "J." |
| The %D for Aroclor-1248 exceeded 25%. | MC148 | The samples were qualified as estimated, "J." |
| The %D for alpha-chlordane exceeded 25%. | MC135, MC137, MC138, MC142 | The samples were qualified as estimated, "J." |
| The %D for Aroclor-1260 exceeded 25%. | MC142, MC143, MC137 | The samples were qualified as estimated, "J." |

| Findings | Associated Samples | Qualification of Data |
|---|---|---|
| The %D for Aroclor-1254 exceeded 25%. | MC135, MC142 | The samples were qualified as estimated, "J." |
| The %D for 4,4'-DDE exceeded 25%. | MC137, MC141, MC148 | The samples were qualified as estimated, "J." |
| The %D for methoxychlor exceeded 25%. | MC137, MC143 | The samples were qualified as estimated, "J." |
| The %D for dieldrin exceeded 25%. | MC142, MC148, MC136, MC137, MC138, MC143 | The samples were qualified as estimated, "J." |

Due to values exceeding the instrument linear range, 4,4'-DDE was rejected, "R" in samples MC135, MC136, MC138, MC142, and MC143, 4,4'-DDT was rejected in samples MC138, MC142, and MC143 were rejected for 4,4'-DDT, and Aroclor-1260 was rejected in samples MC141 and MC148. Values for the samples and compounds were reported from the diluted analyses.

Although the %D for endrin was 0% for sample MC135, the reviewer noted that Aroclor-1254 peaks were used for the identification of endrin on both columns. Upon review of the raw data, the validator determined that the quantitated value could only be estimated; therefore, endrin was qualified as estimated, "J" in sample MC135.

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC133

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5846M

Matrix: (soil/water) SOIL  Lab Sample ID: 5846-01

Sample wt/vol: 30.0 (g/ml) G  Lab File ID:

% Moisture: 13 decanted: (Y/N) N  Date Received: 7/06/96

Extraction: (SepF/Cont/Sonc) SONC  Date Extracted: 7/09/96

Concentrated Extract Volume: 5000 (uL)  Date Analyzed: 7/18/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 9.6  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 1.9 | U | U | |
| 319-85-7 | beta-BHC | 1.9 | U | | |
| 319-86-8 | delta-BHC | 1.9 | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 1.9 | U | | |
| 76-44-8 | Heptachlor | 1.9 | U | | |
| 309-00-2 | Aldrin | 1.9 | U | | |
| 1024-57-3 | Heptachlor epoxide | 1.9 | U | | |
| 959-98-8 | Endosulfan I | 1.9 | U | | |
| 60-57-1 | Dieldrin | 3.8 | U | U | |
| 72-55-9 | 4,4'-DDE | 29. | | | |
| 72-20-8 | Endrin | 3.8 | U | U | |
| 33213-65-9 | Endosulfan II | 3.8 | U | U | |
| 72-54-8 | 4,4'-DDD | 6.3 | P | NJ | *10, *11 |
| 1031-07-8 | Endosulfan sulfate | 3.8 | U | U | |
| 50-29-3 | 4,4'-DDT | 37. | P | J | *11 |
| 72-43-5 | Methoxychlor | 19. | U | U | |
| 53494-70-5 | Endrin ketone | 3.8 | U | U | |
| 7421-36-3 | Endrin aldehyde | 6.3 | P | NJ | *10, *11 |
| 5103-71-9 | alpha-Chlordane | 5.5 | | | |
| 5103-74-2 | gamma-Chlordane | 8.5 | P | J | *11 |
| 8001-35-2 | Toxaphene | 190. | U | U | |
| 12674-11-2 | Aroclor-1016 | 38. | U | | |
| 11104-28-2 | Aroclor-1221 | 77. | U | | |
| 11141-16-5 | Aroclor-1232 | 38. | U | | |
| 53469-21-9 | Aroclor-1242 | 38. | U | | |
| 12672-29-6 | Aroclor-1248 | 38. | U | | |
| 11097-69-1 | Aroclor-1254 | 38. | U | U | |
| 11096-82-5 | Aroclor-1260 | 89. | | | |

FORM I PEST

OGDEN VALIDATED

LEVEL D

7

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC134

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5846M

Matrix: (soil/water) SOIL  Lab Sample ID: 5846-02

Sample wt/vol: 30.0 (g/ml) G  Lab File ID:

% Moisture: 5 decanted: (Y/N) N  Date Received: 7/06/96

Extraction: (SepF/Cont/Sonc) SONC  Date Extracted: 7/09/96

Concentrated Extract Volume: 5000 (uL)  Date Analyzed: 7/18/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 9.0  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 1.8 | U | u | |
| 319-85-7 | beta-BHC | 1.8 | U | | |
| 319-86-8 | delta-BHC | 1.8 | U | | |
| 58-89-9 | gamma-BHC (Lindane) | 1.8 | U | | |
| 76-44-8 | Heptachlor | 1.8 | U | | |
| 309-00-2 | Aldrin | 1.8 | U | | |
| 1024-57-3 | Heptachlor epoxide | 1.8 | U | | |
| 959-98-8 | Endosulfan I | 1.8 | U | | |
| 60-57-1 | Dieldrin | 3.5 | U | u | |
| 72-55-9 | 4,4'-DDE | 12. | | | |
| 72-20-8 | Endrin | 3.5 | U | u | |
| 33213-65-9 | Endosulfan II | 3.5 | U | | |
| 72-54-8 | 4,4'-DDD | 3.5 | U | | |
| 1031-07-8 | Endosulfan sulfate | 3.5 | U | u | |
| 50-29-3 | 4,4'-DDT | 24. | P | J | *11 |
| 72-43-5 | Methoxychlor | 18. | U | u | |
| 53494-70-5 | Endrin ketone | 3.5 | U | u | |
| 7421-36-3 | Endrin aldehyde | 5.2 | P | NJ | *10, *11 |
| 5103-71-9 | alpha-Chlordane | 1.8 | U | u | |
| 5103-74-2 | gamma-Chlordane | 2.3 | P | J | *11 |
| 8001-35-2 | Toxaphene | 180. | U | u | |
| 12674-11-2 | Aroclor-1016 | 35. | U | | |
| 11104-28-2 | Aroclor-1221 | 70. | U | | |
| 11141-16-5 | Aroclor-1232 | 35. | U | | |
| 53469-21-9 | Aroclor-1242 | 35. | U | | |
| 12672-29-6 | Aroclor-1248 | 35. | U | | |
| 11097-69-1 | Aroclor-1254 | 35. | U | u | |
| 11096-82-5 | Aroclor-1260 | 85. | | | |

FORM I PEST

OGDEN VALIDATED

LEVEL D

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC135

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5846M

Matrix: (soil/water)SOIL Lab Sample ID: 5846-03

Sample wt/vol: 30.0 (g/ml)G Lab File ID:

% Moisture: 24 decanted: (Y/N) N Date Received: 7/06/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/09/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 7/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N)Y pH: 8.4 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg)UG/KG | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 2.2 | U | U | |
| 319-85-7 | beta-BHC | 2.2 | U | U | |
| 319-86-8 | delta-BHC | 2.2 | U | U | |
| 58-89-9 | gamma-BHC(Lindane) | 2.2 | U | U | |
| 76-44-8 | Heptachlor | 2.2 | U | U | |
| 309-00-2 | Aldrin | 2.6 | P | NJ | *10, *11 |
| 1024-57-3 | Heptachlor epoxide | 2.2 | U | U | |
| 959-98-8 | Endosulfan I | 2.2 | U | U | |
| 60-57-1 | Dieldrin | 4.4 | U | U | |
| 72-55-9 | 4,4'-DDE | 140. | E | R | D |
| 72-20-8 | Endrin | 20. | | NJ | *10, *11 |
| 33213-65-9 | Endosulfan II | 4.4 | U | U | |
| 72-54-8 | 4,4'-DDD | 4.4 | U | | |
| 1031-07-8 | Endosulfan sulfate | 4.4 | U | | |
| 50-29-3 | 4,4'-DDT | 4.4 | U | | |
| 72-43-5 | Methoxychlor | 22. | U | | |
| 53494-70-5 | Endrin ketone | 4.4 | U | U | |
| 7421-36-3 | Endrin aldehyde | 7.5 | P | J | *11 |
| 5103-71-9 | alpha-Chlordane | 12. | P | NJ | *10, *11 |
| 5103-74-2 | gamma-Chlordane | 6.6 | P | NJ | *10, *11 |
| 8001-35-2 | Toxaphene | 220. | U | U | |
| 12674-11-2 | Aroclor-1016 | 44. | U | | |
| 11104-28-2 | Aroclor-1221 | 88. | U | | |
| 11141-16-5 | Aroclor-1232 | 44. | U | | |
| 53469-21-9 | Aroclor-1242 | 44. | U | | |
| 12672-29-6 | Aroclor-1248 | 44. | U | U | |
| 11097-69-1 | Aroclor-1254 | 230. | P | J | *11 |
| 11096-82-5 | Aroclor-1260 | 44. | U | U | |

OGDEN VALIDATED

FORM I PEST 3/90

LEVEL D

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC135DL

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5846M

Matrix: (soil/water)SOIL Lab Sample ID: 5846-03DL

Sample wt/vol: 30.0 (g/ml)G Lab File ID:

% Moisture: 24 decanted: (Y/N) N Date Received: 7/06/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/09/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 7/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N)Y pH: 8.4 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg)UG/KG | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 22. | U | R | D |
| 319-85-7 | beta-BHC | 22. | U | | |
| 319-86-8 | delta-BHC | 22. | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 22. | U | | |
| 76-44-8 | Heptachlor | 22. | U | | |
| 309-00-2 | Aldrin | 22. | U | | |
| 1024-57-3 | Heptachlor epoxide | 22. | U | | |
| 959-98-8 | Endosulfan I | 22. | U | | |
| 60-57-1 | Dieldrin | 44. | U | R | D |
| 72-55-9 | 4,4'-DDE | 190. | D | | |
| 72-20-8 | Endrin | 44. | U | R | D |
| 33213-65-9 | Endosulfan II | 44. | U | | |
| 72-54-8 | 4,4'-DDD | 44. | U | | |
| 1031-07-8 | Endosulfan sulfate | 44. | U | | |
| 50-29-3 | 4,4'-DDT | 44. | U | | |
| 72-43-5 | Methoxychlor | 220. | U | | |
| 53494-70-5 | Endrin ketone | 44. | U | | |
| 7421-36-3 | Endrin aldehyde | 44. | U | | |
| 5103-71-9 | alpha-Chlordane | 22. | U | | |
| 5103-74-2 | gamma-Chlordane | 22. | U | | |
| 8001-35-2 | Toxaphene | 2200. | U | | |
| 12674-11-2 | Aroclor-1016 | 440. | U | | |
| 11104-28-2 | Aroclor-1221 | 880. | U | | |
| 11141-16-5 | Aroclor-1232 | 440. | U | | |
| 53469-21-9 | Aroclor-1242 | 440. | U | | |
| 12672-29-6 | Aroclor-1248 | 440. | U | | |
| 11097-69-1 | Aroclor-1254 | 440. | U | | |
| 11096-82-5 | Aroclor-1260 | 440. | U | R | D |

OGDEN VALIDATED

LEVEL D

FORM I PEST 3/90

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC136

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5846M

Matrix: (soil/water)SOIL Lab Sample ID: 5846-04

Sample wt/vol: 30.0 (g/ml)G Lab File ID:

% Moisture: 19 decanted: (Y/N) N Date Received: 7/06/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/09/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 7/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N)Y pH: 8.5 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg)UG/KG | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 2.1 | U | U | |
| 319-85-7 | beta-BHC | 2.1 | U | | |
| 319-86-8 | delta-BHC | 2.1 | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 2.1 | U | | |
| 76-44-8 | Heptachlor | 2.1 | U | | |
| 309-00-2 | Aldrin | 2.1 | U | | |
| 1024-57-3 | Heptachlor epoxide | 2.1 | U | | |
| 959-98-8 | Endosulfan I | 2.1 | U | U | |
| 60-57-1 | Dieldrin | 4.1 | P | ~~NJ~~ | *11, ~~*10~~ |
| 72-55-9 | 4,4'-DDE | 67. | E | R | D |
| 72-20-8 | Endrin | 4.1 | U | U | |
| 33213-65-9 | Endosulfan II | 4.1 | U | | |
| 72-54-8 | 4,4'-DDD | 4.1 | U | | |
| 1031-07-8 | Endosulfan sulfate | 4.1 | U | | |
| 50-29-3 | 4,4'-DDT | 4.1 | U | | |
| 72-43-5 | Methoxychlor | 21. | U | | |
| 53494-70-5 | Endrin ketone | 4.1 | U | U | |
| 7421-36-3 | Endrin aldehyde | 7.7 | P | NJ | *10, *11 |
| 5103-71-9 | alpha-Chlordane | 3.3 | | | |
| 5103-74-2 | gamma-Chlordane | 4.1 | P | NJ | *10, *11 |
| 8001-35-2 | Toxaphene | 210. | U | U | |
| 12674-11-2 | Aroclor-1016 | 41. | U | | |
| 11104-28-2 | Aroclor-1221 | 82. | U | | |
| 11141-16-5 | Aroclor-1232 | 41. | U | | |
| 53469-21-9 | Aroclor-1242 | 41. | U | | |
| 12672-29-6 | Aroclor-1248 | 41. | U | | |
| 11097-69-1 | Aroclor-1254 | 41. | U | U | |
| 11096-82-5 | Aroclor-1260 | 120. | | | |

OGDEN VALIDATED

FORM I PEST 3/90

LEVEL D

9/30/96

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC136DL

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5846M

Matrix: (soil/water)SOIL Lab Sample ID: 5846-04DL

Sample wt/vol: 30.0 (g/ml)G Lab File ID:

% Moisture: 19 decanted: (Y/N) N Date Received: 7/06/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/09/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 7/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N)Y pH: 8.5 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 10. | U | R | D |
| 319-85-7 | beta-BHC | 10. | U | | |
| 319-86-8 | delta-BHC | 10. | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 10. | U | | |
| 76-44-8 | Heptachlor | 10. | U | | |
| 309-00-2 | Aldrin | 10. | U | | |
| 1024-57-3 | Heptachlor epoxide | 10. | U | | |
| 959-98-8 | Endosulfan I | 10. | U | | |
| 60-57-1 | Dieldrin | 21. | U | R | D |
| 72-55-9 | 4,4'-DDE | 85. | D | | |
| 72-20-8 | Endrin | 21. | U | R | D |
| 33213-65-9 | Endosulfan II | 21. | U | | |
| 72-54-8 | 4,4'-DDD | 21. | U | | |
| 1031-07-8 | Endosulfan sulfate | 21. | U | | |
| 50-29-3 | 4,4'-DDT | 21. | U | | |
| 72-43-5 | Methoxychlor | 100. | U | | |
| 53494-70-5 | Endrin ketone | 21. | U | | |
| 7421-36-3 | Endrin aldehyde | 21. | U | | |
| 5103-71-9 | alpha-Chlordane | 10. | U | | |
| 5103-74-2 | gamma-Chlordane | 10. | U | | |
| 8001-35-2 | Toxaphene | 1000. | U | | |
| 12674-11-2 | Aroclor-1016 | 210. | U | | |
| 11104-28-2 | Aroclor-1221 | 410. | U | | |
| 11141-16-5 | Aroclor-1232 | 210. | U | | |
| 53469-21-9 | Aroclor-1242 | 210. | U | | |
| 12672-29-6 | Aroclor-1248 | 210. | U | | |
| 11097-69-1 | Aroclor-1254 | 210. | U | | |
| 11096-82-5 | Aroclor-1260 | 210. | U | R | D |

OGDEN VALIDATED

FORM I PEST 3/90

LEVEL D

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC137

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5846M

Matrix: (soil/water)SOIL Lab Sample ID: 5846-05DL1

Sample wt/vol: 30.0 (g/ml)G Lab File ID:

% Moisture: 10 decanted: (Y/N) N Date Received: 7/06/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/09/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 7/19/96

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N)Y pH: 9.0 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 3.7 | U | U | |
| 319-85-7 | beta-BHC | 3.7 | U | | |
| 319-86-8 | delta-BHC | 3.7 | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 3.7 | U | | |
| 76-44-8 | Heptachlor | 3.7 | U | | |
| 309-00-2 | Aldrin | 3.7 | U | | |
| 1024-57-3 | Heptachlor epoxide | 3.7 | U | | |
| 959-98-8 | Endosulfan I | 3.7 | U | U | |
| 60-57-1 | Dieldrin | 23. | P | J | *11 |
| 72-55-9 | 4,4'-DDE | 65. | P | J | *11 |
| 72-20-8 | Endrin | 7.4 | U | U | |
| 33213-65-9 | Endosulfan II | 7.4 | U | U | |
| 72-54-8 | 4,4'-DDD | 7.4 | P | NJ | *10, *11 |
| 1031-07-8 | Endosulfan sulfate | 7.4 | U | U | |
| 50-29-3 | 4,4'-DDT | 39. | P | NJ | *10, *11 |
| 72-43-5 | Methoxychlor | 63. | P | J | *11 |
| 53494-70-5 | Endrin ketone | 8.4 | P | NJ | *10, *11 |
| 7421-36-3 | Endrin aldehyde | 7.4 | U | U | |
| 5103-71-9 | alpha-Chlordane | 11. | P | J | *11 |
| 5103-74-2 | gamma-Chlordane | 6.4 | P | J | *11 |
| 8001-35-2 | Toxaphene | 370. | U | U | |
| 12674-11-2 | Aroclor-1016 | 74. | U | | |
| 11104-28-2 | Aroclor-1221 | 150. | U | | |
| 11141-16-5 | Aroclor-1232 | 74. | U | | |
| 53469-21-9 | Aroclor-1242 | 74. | U | | |
| 12672-29-6 | Aroclor-1248 | 74. | U | | |
| 11097-69-1 | Aroclor-1254 | 230 ~~74.~~ | U | U | ~~5~~ |
| 11096-82-5 | Aroclor-1260 | 190 ~~74.~~ | ~~U~~ | J | ~~*~~, *10, *11, – |

OGDEN VALIDATED
LEVEL D

FORM I PEST 3/90

9/30/96

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC138

Lab Name: CEIMIC CORPORATION, SD  Contract: CTO 136

Lab Code: CCSD  Case No. N/A  SAS No.: N/A  SDG No.: 5846M

Matrix: (soil/water) SOIL  Lab Sample ID: 5846-06

Sample wt/vol: 30.0 (g/ml) G  Lab File ID:

% Moisture: 13 decanted: (Y/N) N  Date Received: 7/06/96

Extraction: (SepF/Cont/Sonc) SONC  Date Extracted: 7/09/96

Concentrated Extract Volume: 5000 (uL)  Date Analyzed: 7/19/96

Injection Volume: 1.0 (uL)  Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y  pH: 8.8  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 1.9 | U | U | |
| 319-85-7 | beta-BHC | 1.9 | U | | |
| 319-86-8 | delta-BHC | 1.9 | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 1.9 | U | | |
| 76-44-8 | Heptachlor | 1.9 | U | | |
| 309-00-2 | Aldrin | 1.9 | U | | |
| 1024-57-3 | Heptachlor epoxide | 1.9 | U | | |
| 959-98-8 | Endosulfan I | 1.9 | U | U | |
| 60-57-1 | Dieldrin | 40. | P | J | *11 |
| 72-55-9 | 4,4'-DDE | 110. | E | R | D |
| 72-20-8 | Endrin | 3.8 | U | U | |
| 33213-65-9 | Endosulfan II | 3.8 | U | U | |
| 72-54-8 | 4,4'-DDD | 20. | P | J | *11 |
| 1031-07-8 | Endosulfan sulfate | 3.8 | U | U | |
| 50-29-3 | 4,4'-DDT | 100. | PE | R | D |
| 72-43-5 | Methoxychlor | 19. | U | U | |
| 53494-70-5 | Endrin ketone | 3.8 | U | U | |
| 7421-36-3 | Endrin aldehyde | 10. | P | UJ | *11, *10 |
| 5103-71-9 | alpha-Chlordane | 11. | P | J | *11 |
| 5103-74-2 | gamma-Chlordane | 14. | P | J | *11 |
| 8001-35-2 | Toxaphene | 190. | U | U | |
| 12674-11-2 | Aroclor-1016 | 38. | U | | |
| 11104-28-2 | Aroclor-1221 | 77. | U | | |
| 11141-16-5 | Aroclor-1232 | 38. | U | | |
| 53469-21-9 | Aroclor-1242 | 38. | U | | |
| 12672-29-6 | Aroclor-1248 | 38. | U | | |
| 11097-69-1 | Aroclor-1254 | 38. | U | U | |
| 11096-82-5 | Aroclor-1260 | 180. | | | |

OGDEN VALIDATED

FORM I PEST 3/90

LEVEL D

78 thru 85

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC138DL

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5846M

Matrix: (soil/water)SOIL Lab Sample ID: 5846-06DL

Sample wt/vol: 30.0 (g/ml)G Lab File ID:

% Moisture: 13 decanted: (Y/N) N Date Received: 7/06/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/09/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 7/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N)Y pH: 8.8 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 19. | U | R | D |
| 319-85-7 | beta-BHC | 19. | U | | |
| 319-86-8 | delta-BHC | 19. | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 19. | U | | |
| 76-44-8 | Heptachlor | 19. | U | | |
| 309-00-2 | Aldrin | 19. | U | | |
| 1024-57-3 | Heptachlor epoxide | 19. | U | | |
| 959-98-8 | Endosulfan I | 19. | U | | |
| 60-57-1 | Dieldrin | 49. | DP | R | D |
| 72-55-9 | 4,4'-DDE | 170. | D | | |
| 72-20-8 | Endrin | 38. | U | R | D |
| 33213-65-9 | Endosulfan II | 38. | U | | |
| 72-54-8 | 4,4'-DDD | 38. | U | | |
| 1031-07-8 | Endosulfan sulfate | 38. | U | R | D |
| 50-29-3 | 4,4'-DDT | 120. | DP | J | *11 |
| 72-43-5 | Methoxychlor | 190. | U | R | D |
| 53494-70-5 | Endrin ketone | 38. | U | | |
| 7421-36-3 | Endrin aldehyde | 38. | U | | |
| 5103-71-9 | alpha-Chlordane | 19. | U | | |
| 5103-74-2 | gamma-Chlordane | 19. | U | | |
| 8001-35-2 | Toxaphene | 1900. | U | | |
| 12674-11-2 | Aroclor-1016 | 380. | U | | |
| 11104-28-2 | Aroclor-1221 | 770. | U | | |
| 11141-16-5 | Aroclor-1232 | 380. | U | | |
| 53469-21-9 | Aroclor-1242 | 380. | U | | |
| 12672-29-6 | Aroclor-1248 | 380. | U | | |
| 11097-69-1 | Aroclor-1254 | 380. | U | | |
| 11096-82-5 | Aroclor-1260 | 380. | U | R | D |

OGDEN VALIDATED

LEVEL D

FORM I PEST 3/90

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC139

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5846M

Matrix: (soil/water)SOIL Lab Sample ID: 5846-07

Sample wt/vol: 30.0 (g/ml)G Lab File ID:

% Moisture: 21 decanted: (Y/N) N Date Received: 7/06/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/09/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 7/19/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N)Y pH:12.2 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 2.1 | U | u | |
| 319-85-7 | beta-BHC | 2.1 | U | | |
| 319-86-8 | delta-BHC | 2.1 | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 2.1 | U | | |
| 76-44-8 | Heptachlor | 2.1 | U | | |
| 309-00-2 | Aldrin | 2.1 | U | | |
| 1024-57-3 | Heptachlor epoxide | 2.1 | U | | |
| 959-98-8 | Endosulfan I | 2.1 | U | | |
| 60-57-1 | Dieldrin | 4.2 | U | u | |
| 72-55-9 | 4,4'-DDE | 51. | | | |
| 72-20-8 | Endrin | 4.2 | U | u | |
| 33213-65-9 | Endosulfan II | 10. | PE | NJ | *10, *11 |
| 72-54-8 | 4,4'-DDD | 4.2 | U | u | |
| 1031-07-8 | Endosulfan sulfate | 4.2 | U | u | |
| 50-29-3 | 4,4'-DDT | 30. | P | NJ | *10, *11 |
| 72-43-5 | Methoxychlor | 21. | U | u | |
| 53494-70-5 | Endrin ketone | 4.2 | U | | |
| 7421-36-3 | Endrin aldehyde | 4.2 | U | | |
| 5103-71-9 | alpha-Chlordane | 2.1 | U | | |
| 5103-74-2 | gamma-Chlordane | 2.1 | U | | |
| 8001-35-2 | Toxaphene | 210. | U | | |
| 12674-11-2 | Aroclor-1016 | 42. | U | | |
| 11104-28-2 | Aroclor-1221 | 84. | U | | |
| 11141-16-5 | Aroclor-1232 | 42. | U | | |
| 53469-21-9 | Aroclor-1242 | 42. | U | | |
| 12672-29-6 | Aroclor-1248 | 42. | U | | |
| 11097-69-1 | Aroclor-1254 | 42. | U | | |
| 11096-82-5 | Aroclor-1260 | 42. | U | u | |

OGDEN VALIDATED

LEVEL D

FORM I PEST 3/90

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC139DL

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5846M

Matrix: (soil/water)SOIL Lab Sample ID: 5846-07DL

Sample wt/vol: 30.0 (g/ml)G Lab File ID:

% Moisture: 21 decanted: (Y/N) N Date Received: 7/06/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/09/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 7/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N)Y pH:12.2 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg)UG/KG | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 21. | U | R | D |
| 319-85-7 | beta-BHC | 21. | U | | |
| 319-86-8 | delta-BHC | 21. | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 21. | U | | |
| 76-44-8 | Heptachlor | 21. | U | | |
| 309-00-2 | Aldrin | 21. | U | | |
| 1024-57-3 | Heptachlor epoxide | 21. | U | | |
| 959-98-8 | Endosulfan I | 21. | U | | |
| 60-57-1 | Dieldrin | 42. | U | | |
| 72-55-9 | 4,4'-DDE | 68. | D | | |
| 72-20-8 | Endrin | 42. | U | | |
| 33213-65-9 | Endosulfan II | 42. | U | | |
| 72-54-8 | 4,4'-DDD | 42. | U | | |
| 1031-07-8 | Endosulfan sulfate | 42. | U | | |
| 50-29-3 | 4,4'-DDT | 42. | U | | |
| 72-43-5 | Methoxychlor | 210. | U | | |
| 53494-70-5 | Endrin ketone | 42. | U | | |
| 7421-36-3 | Endrin aldehyde | 42. | U | | |
| 5103-71-9 | alpha-Chlordane | 21. | U | | |
| 5103-74-2 | gamma-Chlordane | 21. | U | | |
| 8001-35-2 | Toxaphene | 2100. | U | | |
| 12674-11-2 | Aroclor-1016 | 420. | U | | |
| 11104-28-2 | Aroclor-1221 | 840. | U | | |
| 11141-16-5 | Aroclor-1232 | 420. | U | | |
| 53469-21-9 | Aroclor-1242 | 420. | U | | |
| 12672-29-6 | Aroclor-1248 | 420. | U | | |
| 11097-69-1 | Aroclor-1254 | 420. | U | | |
| 11096-82-5 | Aroclor-1260 | 420. | U | R | D |

OGDEN VALIDATED

FORM I PEST 3/90

LEVEL D

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC140

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5846M

Matrix: (soil/water)SOIL Lab Sample ID: 5846-08

Sample wt/vol: 30.0 (g/ml)G Lab File ID:

% Moisture: 11 decanted: (Y/N) N Date Received: 7/06/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/09/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 7/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N)Y pH: 9.5 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg)UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 1.9 | U | u | |
| 319-85-7 | beta-BHC | 1.9 | U | | |
| 319-86-8 | delta-BHC | 1.9 | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 1.9 | U | | |
| 76-44-8 | Heptachlor | 1.9 | U | | |
| 309-00-2 | Aldrin | 1.9 | U | | |
| 1024-57-3 | Heptachlor epoxide | 1.9 | U | | |
| 959-98-8 | Endosulfan I | 1.9 | U | | |
| 60-57-1 | Dieldrin | 3.7 | U | u | |
| 72-55-9 | 4,4'-DDE | 8.3 | | | |
| 72-20-8 | Endrin | 3.7 | U | u | |
| 33213-65-9 | Endosulfan II | 3.7 | U | | |
| 72-54-8 | 4,4'-DDD | 3.7 | U | | |
| 1031-07-8 | Endosulfan sulfate | 3.7 | U | | |
| 50-29-3 | 4,4'-DDT | 3.7 | U | | |
| 72-43-5 | Methoxychlor | 19. | U | | |
| 53494-70-5 | Endrin ketone | 3.7 | U | | |
| 7421-36-3 | Endrin aldehyde | 3.7 | U | | |
| 5103-71-9 | alpha-Chlordane | 1.9 | U | | |
| 5103-74-2 | gamma-Chlordane | 1.9 | U | | |
| 8001-35-2 | Toxaphene | 190. | U | | |
| 12674-11-2 | Aroclor-1016 | 37. | U | | |
| 11104-28-2 | Aroclor-1221 | 75. | U | | |
| 11141-16-5 | Aroclor-1232 | 37. | U | | |
| 53469-21-9 | Aroclor-1242 | 37. | U | | |
| 12672-29-6 | Aroclor-1248 | 37. | U | | |
| 11097-69-1 | Aroclor-1254 | 37. | U | | |
| 11096-82-5 | Aroclor-1260 | 37. | U | u | |

OGDEN VALIDATED
LEVEL D

FORM I PEST 3/90

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC141

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5846M

Matrix: (soil/water)SOIL Lab Sample ID: 5846-09DL1

Sample wt/vol: 30.0 (g/ml)G Lab File ID:

% Moisture: 17 decanted: (Y/N) N Date Received: 7/06/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/09/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 7/19/96

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N)Y pH: 8.9 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg)UG/KG | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 20. | U | U | |
| 319-85-7 | beta-BHC | 20. | U | | |
| 319-86-8 | delta-BHC | 20. | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 20. | U | | |
| 76-44-8 | Heptachlor | 20. | U | | |
| 309-00-2 | Aldrin | 20. | U | | |
| 1024-57-3 | Heptachlor epoxide | 20. | U | | |
| 959-98-8 | Endosulfan I | 20. | U | | |
| 60-57-1 | Dieldrin | 40. | U | U | |
| 72-55-9 | 4,4'-DDE | 70. | P | J | *11 |
| 72-20-8 | Endrin | 40. | U | U | |
| 33213-65-9 | Endosulfan II | 100. | P | NJ | *10,*11 |
| 72-54-8 | 4,4'-DDD | 40. | U | U | |
| 1031-07-8 | Endosulfan sulfate | 40. | U | | |
| 50-29-3 | 4,4'-DDT | 40. | U | | |
| 72-43-5 | Methoxychlor | 200. | U | | |
| 53494-70-5 | Endrin ketone | 40. | U | U | |
| 7421-36-3 | Endrin aldehyde | 210. | P | NJ | *11,*10 |
| 5103-71-9 | alpha-Chlordane | 20. | U | U | |
| 5103-74-2 | gamma-Chlordane | 20. | U | | |
| 8001-35-2 | Toxaphene | 2000. | U | | |
| 12674-11-2 | Aroclor-1016 | 400. | U | | |
| 11104-28-2 | Aroclor-1221 | 800. | U | | |
| 11141-16-5 | Aroclor-1232 | 400. | U | | |
| 53469-21-9 | Aroclor-1242 | 400. | U | | |
| 12672-29-6 | Aroclor-1248 | 400. | U | | |
| 11097-69-1 | Aroclor-1254 | 400. | U | U | |
| 11096-82-5 | Aroclor-1260 | 4200. | E | R | D |

OGDEN VALIDATED

LEVEL D

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC141DL

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5846M

Matrix: (soil/water)SOIL Lab Sample ID: 5846-09DL

Sample wt/vol: 30.0 (g/ml)G Lab File ID:

% Moisture: 17 decanted: (Y/N) N Date Received: 7/06/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/09/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 7/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 100.0

GPC Cleanup: (Y/N)Y pH: 8.9 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg)UG/KG | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 200. | U | R | D |
| 319-85-7 | beta-BHC | 200. | U | | |
| 319-86-8 | delta-BHC | 200. | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 200. | U | | |
| 76-44-8 | Heptachlor | 200. | U | | |
| 309-00-2 | Aldrin | 200. | U | | |
| 1024-57-3 | Heptachlor epoxide | 200. | U | | |
| 959-98-8 | Endosulfan I | 200. | U | | |
| 60-57-1 | Dieldrin | 400. | U | | |
| 72-55-9 | 4,4'-DDE | 400. | U | | |
| 72-20-8 | Endrin | 480. | DP | | |
| 33213-65-9 | Endosulfan II | 400. | U | | |
| 72-54-8 | 4,4'-DDD | 400. | U | | |
| 1031-07-8 | Endosulfan sulfate | 400. | U | | |
| 50-29-3 | 4,4'-DDT | 400. | U | | |
| 72-43-5 | Methoxychlor | 2000. | U | | |
| 53494-70-5 | Endrin ketone | 400. | U | | |
| 7421-36-3 | Endrin aldehyde | 430. | DP | | |
| 5103-71-9 | alpha-Chlordane | 200. | U | | |
| 5103-74-2 | gamma-Chlordane | 200. | U | | |
| 8001-35-2 | Toxaphene | 20000. | U | | |
| 12674-11-2 | Aroclor-1016 | 4000. | U | | |
| 11104-28-2 | Aroclor-1221 | 8000. | U | | |
| 11141-16-5 | Aroclor-1232 | 4000. | U | | |
| 53469-21-9 | Aroclor-1242 | 4000. | U | | |
| 12672-29-6 | Aroclor-1248 | 4000. | U | | |
| 11097-69-1 | Aroclor-1254 | 4000. | U | R | D |
| 11096-82-5 | Aroclor-1260 | 7800. | D | | |

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FORM I PEST 3/90

LEVEL D

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC142

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5846M

Matrix: (soil/water)SOIL Lab Sample ID: 5846-10

Sample wt/vol: 30.0 (g/ml)G Lab File ID:

% Moisture: 12 decanted: (Y/N) N Date Received: 7/06/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/09/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 7/19/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N)Y pH: 9.0 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg)UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 1.9 | U | U | |
| 319-85-7 | beta-BHC | 1.9 | U | | |
| 319-86-8 | delta-BHC | 1.9 | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 1.9 | U | | |
| 76-44-8 | Heptachlor | 1.9 | U | U | |
| 309-00-2 | Aldrin | 1.9 | P | NJ | *10, *11 |
| 1024-57-3 | Heptachlor epoxide | 1.9 | U | U | |
| 959-98-8 | Endosulfan I | 1.9 | U | U | |
| 60-57-1 | Dieldrin | 6.2 | P | NJ | *10, *11 |
| 72-55-9 | 4,4'-DDE | 120. | E | R | D |
| 72-20-8 | Endrin | 14. | P | NJ | *10, *11 |
| 33213-65-9 | Endosulfan II | 4.6 | P | NJ | *10, *11 |
| 72-54-8 | 4,4'-DDD | 22. | P | J | *11 |
| 1031-07-8 | Endosulfan sulfate | 3.8 | U | U | |
| 50-29-3 | 4,4'-DDT | 110. | E | R | D |
| 72-43-5 | Methoxychlor | 19. | U | U | |
| 53494-70-5 | Endrin ketone | 3.8 | U | U | |
| 7421-36-3 | Endrin aldehyde | 7.8 | P | NJ | *10, *11 |
| 5103-71-9 | alpha-Chlordane | 10. | P | NJ | *10, *11 |
| 5103-74-2 | gamma-Chlordane | 8.3 | P | NJ | *10, *11 |
| 8001-35-2 | Toxaphene | 190. | U | U | |
| 12674-11-2 | Aroclor-1016 | 38. | U | | |
| 11104-28-2 | Aroclor-1221 | 76. | U | | |
| 11141-16-5 | Aroclor-1232 | 38. | U | | |
| 53469-21-9 | Aroclor-1242 | 38. | U | | |
| 12672-29-6 | Aroclor-1248 | 38. | U | U | |
| 11097-69-1 | Aroclor-1254 | 130 ~~240~~. | P | J | $, *10, *11 |
| 11096-82-5 | Aroclor-1260 | 150 ~~150~~. | | J | *10, *11 |

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FORM I PEST 3/90

LEVEL D

9/30/96

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC142DL

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5846M

Matrix: (soil/water)SOIL Lab Sample ID: 5846-10DL

Sample wt/vol: 30.0 (g/ml)G Lab File ID:

% Moisture: 12 decanted: (Y/N) N Date Received: 7/06/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/09/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 7/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N)Y pH: 9.0 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg)UG/KG | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 19. | U | R | D |
| 319-85-7 | beta-BHC | 19. | U | | |
| 319-86-8 | delta-BHC | 19. | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 19. | U | | |
| 76-44-8 | Heptachlor | 19. | U | | |
| 309-00-2 | Aldrin | 19. | U | | |
| 1024-57-3 | Heptachlor epoxide | 19. | U | | |
| 959-98-8 | Endosulfan I | 19. | U | | |
| 60-57-1 | Dieldrin | 38. | U | ~~U~~ R | D |
| 72-55-9 | 4,4'-DDE | 200. | D | | |
| 72-20-8 | Endrin | 38. | U | R | D |
| 33213-65-9 | Endosulfan II | 38. | U | | |
| 72-54-8 | 4,4'-DDD | 38. | U | | |
| 1031-07-8 | Endosulfan sulfate | 38. | U | R | D |
| 50-29-3 | 4,4'-DDT | 130. | DP | J | *11 |
| 72-43-5 | Methoxychlor | 190. | U | R | D |
| 53494-70-5 | Endrin ketone | 38. | U | | |
| 7421-36-3 | Endrin aldehyde | 38. | U | | |
| 5103-71-9 | alpha-Chlordane | 19. | U | | |
| 5103-74-2 | gamma-Chlordane | 19. | U | | |
| 8001-35-2 | Toxaphene | 1900. | U | | |
| 12674-11-2 | Aroclor-1016 | 380. | U | | |
| 11104-28-2 | Aroclor-1221 | 760. | U | | |
| 11141-16-5 | Aroclor-1232 | 380. | U | | |
| 53469-21-9 | Aroclor-1242 | 380. | U | | |
| 12672-29-6 | Aroclor-1248 | 380. | U | | |
| 11097-69-1 | Aroclor-1254 | 380. | U | | |
| 11096-82-5 | Aroclor-1260 | 380. | U | R | D |

OGDEN VALIDATED

LEVEL D

FORM I PEST 3/90

9/30/96

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1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC143

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5846M

Matrix: (soil/water)SOIL Lab Sample ID: 5846-11

Sample wt/vol: 30.0 (g/ml)G Lab File ID:

% Moisture: 11 decanted: (Y/N) N Date Received: 7/06/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/09/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 7/19/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N)Y pH: 9.0 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg)UG/KG | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 1.9 | U | U | |
| 319-85-7 | beta-BHC | 1.9 | U | | |
| 319-86-8 | delta-BHC | 1.9 | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 1.9 | U | | |
| 76-44-8 | Heptachlor | 1.9 | U | | |
| 309-00-2 | Aldrin | 1.9 | U | | |
| 1024-57-3 | Heptachlor epoxide | 1.9 | U | | |
| 959-98-8 | Endosulfan I | 1.9 | U | U | |
| 60-57-1 | Dieldrin | 5.1 | P | J | *11 |
| 72-55-9 | 4,4'-DDE | 93. | E | R | D |
| 72-20-8 | Endrin | 3.7 | U | U | |
| 33213-65-9 | Endosulfan II | 3.7 | U | U | |
| 72-54-8 | 4,4'-DDD | 10. | P | J | *11 |
| 1031-07-8 | Endosulfan sulfate | 3.7 | U | U | |
| 50-29-3 | 4,4'-DDT | 76. | E | R | D |
| 72-43-5 | Methoxychlor | 23. | P | J | *11 |
| 53494-70-5 | Endrin ketone | 3.7 | U | U | |
| 7421-36-3 | Endrin aldehyde | 3.7 | U | U | |
| 5103-71-9 | alpha-Chlordane | 5.0 | | | |
| 5103-74-2 | gamma-Chlordane | 5.2 | P | J | *11 |
| 8001-35-2 | Toxaphene | 190. | U | U | |
| 12674-11-2 | Aroclor-1016 | 37. | U | | |
| 11104-28-2 | Aroclor-1221 | 75. | U | | |
| 11141-16-5 | Aroclor-1232 | 37. | U | | |
| 53469-21-9 | Aroclor-1242 | 37. | U | | |
| 12672-29-6 | Aroclor-1248 | 37. | U | | |
| 11097-69-1 | Aroclor-1254 | 37. | U | U | |
| 11096-82-5 | Aroclor-1260 | 51. | P | NJ | *10, *11 |

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LEVEL D

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1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC143DL

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5846M

Matrix: (soil/water)SOIL Lab Sample ID: 5846-11DL

Sample wt/vol: 30.0 (g/ml)G Lab File ID:

% Moisture: 11 decanted: (Y/N) N Date Received: 7/06/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/09/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 7/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N)Y pH: 9.0 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg)UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 19. | U | R | D |
| 319-85-7 | beta-BHC | 19. | U | | |
| 319-86-8 | delta-BHC | 19. | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 19. | U | | |
| 76-44-8 | Heptachlor | 19. | U | | |
| 309-00-2 | Aldrin | 19. | U | | |
| 1024-57-3 | Heptachlor epoxide | 19. | U | | |
| 959-98-8 | Endosulfan I | 19. | U | | |
| 60-57-1 | Dieldrin | 37. | U | R | R D |
| 72-55-9 | 4,4'-DDE | 120. | D | | |
| 72-20-8 | Endrin | 37. | U | R | D |
| 33213-65-9 | Endosulfan II | 37. | U | | |
| 72-54-8 | 4,4'-DDD | 37. | U | | |
| 1031-07-8 | Endosulfan sulfate | 37. | U | R | D |
| 50-29-3 | 4,4'-DDT | 89. | DP | J | *11 |
| 72-43-5 | Methoxychlor | 190. | U | R | D |
| 53494-70-5 | Endrin ketone | 37. | U | | |
| 7421-36-3 | Endrin aldehyde | 37. | U | | |
| 5103-71-9 | alpha-Chlordane | 19. | U | | |
| 5103-74-2 | gamma-Chlordane | 19. | U | | |
| 8001-35-2 | Toxaphene | 1900. | U | | |
| 12674-11-2 | Aroclor-1016 | 370. | U | | |
| 11104-28-2 | Aroclor-1221 | 750. | U | | |
| 11141-16-5 | Aroclor-1232 | 370. | U | | |
| 53469-21-9 | Aroclor-1242 | 370. | U | | |
| 12672-29-6 | Aroclor-1248 | 370. | U | | |
| 11097-69-1 | Aroclor-1254 | 370. | U | | |
| 11096-82-5 | Aroclor-1260 | 370. | U | R | D |

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FORM I PEST 3/90

LEVEL D

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
ER
MC147

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5846M

Matrix: (soil/water)WATER Lab Sample ID: 5846-12

Sample wt/vol: 1000 (g/ml)ML Lab File ID:

% Moisture: decanted: (Y/N) Date Received: 7/06/96

Extraction: (SepF/Cont/Sonc)CONT Date Extracted: 7/08/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 7/15/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N)N pH: 0.0 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg)UG/L | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.05 | U | U | |
| 319-85-7 | beta-BHC | 0.05 | U | | |
| 319-86-8 | delta-BHC | 0.05 | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 0.05 | U | | |
| 76-44-8 | Heptachlor | 0.05 | U | | |
| 309-00-2 | Aldrin | 0.05 | U | | |
| 1024-57-3 | Heptachlor epoxide | 0.05 | U | | |
| 959-98-8 | Endosulfan I | 0.05 | U | | |
| 60-57-1 | Dieldrin | 0.10 | U | | |
| 72-55-9 | 4,4'-DDE | 0.10 | U | | |
| 72-20-8 | Endrin | 0.10 | U | | |
| 33213-65-9 | Endosulfan II | 0.10 | U | | |
| 72-54-8 | 4,4'-DDD | 0.10 | U | | |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U | | |
| 50-29-3 | 4,4'-DDT | 0.10 | U | | |
| 72-43-5 | Methoxychlor | 0.50 | U | | |
| 53494-70-5 | Endrin ketone | 0.10 | U | | |
| 7421-36-3 | Endrin aldehyde | 0.10 | U | | |
| 5103-71-9 | alpha-Chlordane | 0.05 | U | | |
| 5103-74-2 | gamma-Chlordane | 0.05 | U | | |
| 8001-35-2 | Toxaphene | 5.0 | U | | |
| 12674-11-2 | Aroclor-1016 | 1.0 | U | | |
| 11104-28-2 | Aroclor-1221 | 2.0 | U | | |
| 11141-16-5 | Aroclor-1232 | 1.0 | U | | |
| 53469-21-9 | Aroclor-1242 | 1.0 | U | | |
| 12672-29-6 | Aroclor-1248 | 1.0 | U | | |
| 11097-69-1 | Aroclor-1254 | 1.0 | U | | |
| 11096-82-5 | Aroclor-1260 | 1.0 | U | U | |

FORM I PEST

OGDEN VALIDATED
LEVEL D

200

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC148

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5846M

Matrix: (soil/water)SOIL Lab Sample ID: 5846-13DL1

Sample wt/vol: 30.0 (g/ml)G Lab File ID:

% Moisture: 10 decanted: (Y/N) N Date Received: 7/06/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/09/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 7/19/96

Injection Volume: 1.0 (uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N)Y pH: 8.7 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg)UG/KG | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 37. | U | U | |
| 319-85-7 | beta-BHC | 37. | U | | |
| 319-86-8 | delta-BHC | 37. | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 37. | U | | |
| 76-44-8 | Heptachlor | 37. | U | U | |
| 309-00-2 | Aldrin | 79. | P | NJ | *10,*11 |
| 1024-57-3 | Heptachlor epoxide | 67. | P | NJ | *10,*11 |
| 959-98-8 | Endosulfan I | 37. | U | U | |
| 60-57-1 | Dieldrin | 100. | P | NJ | *10,*11 |
| 72-55-9 | 4,4'-DDE | 170. | P | J | *11 |
| 72-20-8 | Endrin | 200. | P | NJ | *10,*11 |
| 33213-65-9 | Endosulfan II | 280. | P | NJ | *10,*11 |
| 72-54-8 | 4,4'-DDD | 74. | U | U | |
| 1031-07-8 | Endosulfan sulfate | 74. | U | | |
| 50-29-3 | 4,4'-DDT | 74. | U | | |
| 72-43-5 | Methoxychlor | 370. | U | | |
| 53494-70-5 | Endrin ketone | 74. | U | U | |
| 7421-36-3 | Endrin aldehyde | 370. | P | NJ | *10,*11 |
| 5103-71-9 | alpha-Chlordane | 100. | | | |
| 5103-74-2 | gamma-Chlordane | 38. | P | NJ | *10,*11 |
| 8001-35-2 | Toxaphene | 3700. | U | U | |
| 12674-11-2 | Aroclor-1016 | 740. | U | | |
| 11104-28-2 | Aroclor-1221 | 1500. | U | | |
| 11141-16-5 | Aroclor-1232 | 740. | U | | |
| 53469-21-9 | Aroclor-1242 | 740. | U | U | |
| 12672-29-6 | Aroclor-1248 | 1400. | P | NJ | *10,*11 |
| 11097-69-1 | Aroclor-1254 | 740. | U | U | |
| 11096-82-5 | Aroclor-1260 | 11000. | E | R | D |

OGDEN VALIDATED

FORM I PEST 3/90

LEVEL D

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC148DL

Lab Name:CEIMIC CORPORATION, SD Contract:CTO 136

Lab Code:CCSD Case No.N/A SAS No.:N/A SDG No.:5846M

Matrix: (soil/water)SOIL Lab Sample ID: 5846-13DL

Sample wt/vol: 30.0 (g/ml)G Lab File ID:

% Moisture: 10 decanted: (Y/N) N Date Received: 7/06/96

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 7/09/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 7/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 200.0

GPC Cleanup: (Y/N)Y pH: 8.7 Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| 319-84-6 | alpha-BHC | 370. | U | R | D |
| 319-85-7 | beta-BHC | 370. | U | | |
| 319-86-8 | delta-BHC | 370. | U | | |
| 58-89-9 | gamma-BHC(Lindane) | 370. | U | | |
| 76-44-8 | Heptachlor | 370. | U | | |
| 309-00-2 | Aldrin | 370. | U | | |
| 1024-57-3 | Heptachlor epoxide | 370. | U | | |
| 959-98-8 | Endosulfan I | 370. | U | | |
| 60-57-1 | Dieldrin | 740. | U | | |
| 72-55-9 | 4,4'-DDE | 740. | U | | |
| 72-20-8 | Endrin | 740. | U | | |
| 33213-65-9 | Endosulfan II | 740. | U | | |
| 72-54-8 | 4,4'-DDD | 740. | U | | |
| 1031-07-8 | Endosulfan sulfate | 740. | U | | |
| 50-29-3 | 4,4'-DDT | 740. | U | | |
| 72-43-5 | Methoxychlor | 3700. | U | | |
| 53494-70-5 | Endrin ketone | 740. | U | | |
| 7421-36-3 | Endrin aldehyde | 860. | DP | | |
| 5103-71-9 | alpha-Chlordane | 370. | U | | |
| 5103-74-2 | gamma-Chlordane | 370. | U | | |
| 8001-35-2 | Toxaphene | 37000. | U | | |
| 12674-11-2 | Aroclor-1016 | 7400. | U | | |
| 11104-28-2 | Aroclor-1221 | 15000. | U | | |
| 11141-16-5 | Aroclor-1232 | 7400. | U | | |
| 53469-21-9 | Aroclor-1242 | 7400. | U | | |
| 12672-29-6 | Aroclor-1248 | 7400. | U | | |
| 11097-69-1 | Aroclor-1254 | 7400. | U | R | D |
| 11096-82-5 | Aroclor-1260 | 15000. | DP | J | *11 |

OGDEN VALIDATED

LEVEL D

OGDEN

# DATA VALIDATION REPORT

CLEAN CONTRACT TASK ORDER #136
NAF Midway Site Investigations

ANALYSIS: SEMIVOLATILES

SAMPLE DELIVERY GROUP: OMIGW01

Prepared by

Ogden—Denver Operations
550 South Wadsworth Boulevard Suite 500
Lakewood, Colorado 80226

# CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

Ogden Environmental and Energy Services Co., Inc.
550 South Wadsworth Boulevard
Suite 500
Lakewood, CO 80226

Laboratory: AM Little
Reviewer: D. Ilczyszyn
Analysis/Method: Semivolatiles

Package ID: C136SV29
Task Order: 110190136
SDG No.: OMIGW01
No. of Analyses: 5

Date: 10/17/96
Reviewer's Signature:

| ACTION ITEMS[a] | |
|---|---|
| 1. **Case Narrative Deficiencies** | |
| 2. **Out of Scope Analyses** | |
| 3. **Analyses Not Conducted** | |
| 4. **Missing Hardcopy Deliverables** | |
| 5. **Incorrect Hardcopy Deliverables** | |
| 6. **Deviations from Analysis Protocol, e.g.,** | Qualifications due to blanks, calibrations, + MS/MSD recoveries |
| Holding Times | |
| GC/MS Tune/Inst. Perform | |
| Calibrations | |
| Blanks | |
| Surrogates | |
| Matrix Spike/Dup LCS | |
| Field QC | |
| Internal Standard Performance | |
| Compound Identification and Quantitation | |
| System Performance | |

| COMMENTS[b] |
|---|
| |

[a] Subcontracted analytical laboratory is not meeting contract and/or method requirements.
[b] Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.

# 1. INTRODUCTION

| | |
|---|---|
| Task Order Title: | NAF Midway SI/RI |
| CLEAN Contract Task Order #: | 0136 |
| SDG#: | OMIGW01 |
| CTO Manager: | J. Cotter |
| Project Contact: | M. Medeiros |
| Matrix: | Water |
| Analysis: | Semivolatiles |
| NEESA QC Level: | D |
| No. of Samples: | 5 |
| No. of Reanalyses/Dilutions: | 1 |
| Reviewer: | D. Ilczyszyn |
| Date of Review: | 10/4/96 |

The samples listed in Table 1 were validated based on the guidelines outlined in the Ogden *Project Procedures Manual, Comprehensive Long-Term Environmental Action Navy (CLEAN) Program* data validation procedure for Levels C and D semivolatile organics (DVP-3, Rev. 2), and the *National Functional Guidelines For Organic Data Review* (2/94). Any deviations from these procedures and guidelines are documented herein. These procedures and guidelines are designed to meet the data quality objectives required by the Naval Energy and Environmental Support Activity for all analyses at the requested QC levels. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

**Table 1. Sample identification**

| Client ID | EPA ID | Lab ID | Matrix | COC Method |
|---|---|---|---|---|
| M01MW01D01 | MC158 | 96B2310RE | water | STIV141A |
| M01MW02S01 | MC159 | 96B2306 | water | STIV141A |
| M01MW03S01 | MC160 | 96B2307 | water | STIV141A |
| M01MW04S01 | MC161 | 96B2308RE | water | STIV141A |
| M01MW04S01 | MC161DL | 96B2308REDL | water | STIV141A |
| M01MW05S01 | MC162 | 96B2309 | water | STIV141A |

# 2. DATA VALIDATION FINDINGS

## 2.1 SAMPLE MANAGEMENT

Following are findings associated with sample management:

### 2.1.1 Sample Preservation, Handling, and Transport

All of the samples in this SDG were outside temperature limits specified in NEESA 20.2-047B upon arrival at the laboratory; however, due to the nonvolatile nature of the target compounds qualifications were not required. No problems were noted during sample handling and transport.

### 2.1.2 Chain of Custody

The COCs were all signed by laboratory personnel upon receipt. All COCs and sample receipt checklists were complete and legible. All custody seals were intact on the coolers upon arrival at the laboratory. No qualifications were required.

### 2.1.3 Holding Times

All samples were extracted and analyzed within required holding times. Qualifications were not required.

## 2.2 GC/MS TUNING

All tunes met the criteria specified in NOAA Status and Trends and method STIV141A and were therefore acceptable. No qualifications were required. No transcription errors were found.

## 2.3 CALIBRATION

Calculations of RRFs, %Ds, and %RSDs were checked for some analytes from the raw data and no calculation errors were found. The initial calibrations from 7/23/96 had high %RSD values for hexachlorobutadiene, 2,4-dinitrophenol, and bis(2-ethylhexyl)phthalate affecting samples MC159, MC160, MC162, MC161, and MC158. The continuing calibration dated 7/26/96 (0253) had a high %D value for indeno(1,2,3-cd)pyrene affecting sample MC158. The affected samples were qualified "UJ" for the mentioned compounds. Further qualifications were not required.

## 2.4 BLANKS

There was a water method blank analyzed with the samples in this SDG with detects for phenanthrene, fluoranthene, pyrene, and bis(2-ethylhexyl)phthalate. All samples except MC161DL had bis(2-ethylhexyl)phthalate qualified as estimated nondetects. Further qualifications were not required.

## 2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

A water blank spike was analyzed with low anthracene recovery. All samples had anthracene qualified as estimated. Additional qualifications were not required.

## 2.6 SURROGATE RECOVERY

Sample MC161DL had low recovery of acenaphthene-d10 and zero recovery of phenanthrene-d10. Qualifications were not required since this sample was analyzed at a 40× dilution and surrogates were diluted out. All remaining samples had surrogate spike recoveries within control limits. No qualifications were needed based on the surrogate recoveries.

## 2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

MS/MSD analysis was performed on samples MC158 with low anthracene recovery in the MS sample. All other recoveries and all RPD values were within control limits. All samples had anthracene qualified as estimated. Qualifications were not required.

## 2.8 FIELD QC SAMPLES

Field QC samples were evaluated and, if necessary, qualified based on method blanks only (see Section 2.4). Remaining detects were then used to qualify the samples. The following are findings associated with field QC samples:

### 2.8.1 Field Blanks and Equipment Rinsates

Field blanks and equipment rinsates were not assigned to the samples in this SDG. Qualifications could not be made based on field QC results.

### 2.8.2 Duplicates

Sample MC158 was a field duplicate of sample MC157; however, comparisons could not be made between the two samples because sample MC157 was not analyzed for this method.

## 2.9 INTERNAL STANDARDS PERFORMANCE

The retention times of all the internal standards for the samples were within ±30 seconds of the retention times for the associated calibration standards. The area counts for the samples were within +100% and -50% of the associated calibration standards. No qualifications were required.

## 2.10 TARGET COMPOUND LIST IDENTIFICATION

The laboratory analyzed for the method STIV141A semivolatile target compounds and nontarget compounds 1,2,4-trichlorobenzene, 1,3,5-trichlorobenzene, hexachlorobutadiene, 2,4,6-trichlorophenol, 2,4,5-trichlorophenol, 2,4-dinitrophenol, and bis(2-ethylhexyl)phthalate. Chromatograms, retention times, and spectra were all examined and no problems were noted.

## 2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

The detection limits were evaluated and supported by an MDL study and found to be acceptable. Compound quantification was verified from detects in the samples.

## 2.12 TENTATIVELY IDENTIFIED COMPOUNDS

TICs are not generated for this method.

## 2.13 SYSTEM PERFORMANCE

A review of the chromatograms, spectral fits, and calibrations showed no identifiable problems with system performance.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC158

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CT0136 ADL Project No.: 69084 SDG No.: OMIGW01

Matrix: (soil/water) WATER Lab Sample ID: 96B2310RE

Sample wt/vol: 1.4200 L Lab File ID: >X1148

Level: (low/med) LOW Date Received: 07/08/96

% Moisture: decanted: (Y/N) Date Extracted: 07/09/96

Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 07/26/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 91203 | Naphthalene | 0.016000 | | | |
| NAPHTHALC1 | Naphthalenes, C1-alkyl-substituted- | 0.006000 | J | J | |
| NAPHTHALC2 | Naphthalenes, C2-alkyl-substituted- | 0.011000 | | | |
| NAPHTHALC3 | Naphthalenes, C3-alkyl-substituted- | 0.020000 | | | |
| NAPHTHALC4 | Naphthalenes, C4-alkyl-substituted- | 0.019000 | | | |
| 120821 | 1,2,4-Trichlorobenzene | 0.008800 | U | U | |
| 108703 | 1,3,5-Trichlorobenzene | 0.010000 | | | |
| 87683 | Hexachlorobutadiene | 0.008200 | U | U | C |
| 88062 | 2,4,6-Trichlorophenol | 14.000000 | U | U | |
| 95954 | 2,4,5-Trichlorophenol | 14.000000 | U | U | |
| 51285 | 2,4-Dinitrophenol | 70.000000 | U | U | C |
| 208968 | Acenaphthylene | 0.007300 | U | U | |
| 83329 | Acenaphthene | 0.036000 | | | |
| 92524 | Biphenyl | 0.005900 | U | U | |
| 86737 | Fluorene | 0.003800 | J | J | |
| FLUORENESC1 | Fluorenes, C1-alkyl-substituted- | 0.012000 | | | |
| FLUORENESC2 | Fluorenes, C2-alkyl-substituted- | 0.017000 | | | |
| FLUORENESC3 | Fluorenes, C3-alkyl-substituted- | 0.005500 | U | U | |
| 85018 | Phenanthrene | 0.008100 | | | |
| 120127 | Anthracene | 0.006700 | J | J | Q |
| PHENANTHC1 | Phenanthrenes+Anthracenes, C1-alkyl-sub | 0.007500 | | | |
| PHENANTHC2 | Phenanthrenes+Anthracenes, C2-alkyl-sub | 0.016000 | | | |
| PHENANTHC3 | Phenanthrenes+Anthracenes, C3-alkyl-sub | 0.012000 | | | |
| PHENANTHC4 | Phenanthrenes+Anthracenes, C4-alkyl-sub | 0.003200 | U | U | |
| 132650 | Dibenzothiophene | 0.011000 | | | |
| DIBENZC1ALK | Dibenzothiophenes, C1-alkyl-substituted | 0.011000 | | | |
| DIBENZC2ALK | Dibenzothiophenes, C2-alkyl-substituted | 0.022000 | | | |
| DIBENZC3ALK | Dibenzothiophenes, C3-alkyl-substituted | 0.015000 | | | |
| 206440 | Fluoranthene | 0.043000 | | | |
| 129000 | Pyrene | 0.047000 | | | |
| FLUORANTHC1 | Fluoranthenes+Pyrenes, C1-alkyl-sub | 0.015000 | | | |
| FLUORANTHC2 | Fluoranthenes+Pyrenes, C2-alkyl-sub | 0.004400 | U | U | |
| FLUORANTHC3 | Fluoranthenes+Pyrenes, C3-alkyl-sub | 0.004400 | U | U | |
| 56553 | Benzo(a)anthracene | 0.015000 | U | U | |
| 218019 | Chrysene | 0.002700 | J | J | |
| CHRYSC1ALK | Chrysenes, C1-alkyl-substituted- | 0.005700 | U | U | |
| CHRYSC2ALK | Chrysenes, C2-alkyl-substituted- | 0.005700 | U | U | |
| CHRYSC3ALK | Chrysenes, C3-alkyl-substituted- | 0.005700 | U | U | |
| CHRYSC4ALK | Chrysenes, C4-alkyl-substituted- | 0.005700 | U | U | |
| 117817 | bis(2-Ethylhexyl)phthalate | 0.830000 | B | J | B,C |
| 205992 | Benzo(b)fluoranthene | 0.001600 | J | J | |
| 207089 | Benzo(k)fluoranthene | 0.001800 | J | J | |
| 192972 | Benzo(e)pyrene | 0.013000 | U | U | |
| 50328 | Benzo(a)pyrene | 0.012000 | U | U | |
| 198550 | Perylene | 0.012000 | U | U | |
| 193395 | Indeno(1,2,3-cd)pyrene | 0.012000 | U | U | C |
| 53703 | Dibenzo(a,h)anthracene | 0.014000 | U | U | |
| 191242 | Benzo(g,h,i)perylene | 0.015000 | U | U | |

LEVEL D

OGDEN VALIDATED

000003

1,2,4-Trichlorobenzene, 1,3,5-Trichlorobenzene, Hexachlorobutadiene, 2,4,6-Trichlorophenol, 2,4,5-Trichlorophenol, 2,4-Dinitrophenol and bis(2-Ehthylhexyl)phthalate will be reported when quantified but are considered non-target compounds for method STIV141A.

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC159

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CT0136 **ADL Project No.:** 69084 **SDG No.:** OMIGW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2306

**Sample wt/vol:** 2.6400 L **Lab File ID:** >X1139

**Level: (low/med)** LOW **Date Received:** 07/08/96

**% Moisture:** **decanted: (Y/N)** **Date Extracted:** 07/09/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 07/25/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 91203 | Naphthalene | 0.400000 | | | |
| NAPHTHALC1 | Naphthalenes, C1-alkyl-substituted- | 0.130000 | | | |
| NAPHTHALC2 | Naphthalenes, C2-alkyl-substituted- | 0.330000 | | | |
| NAPHTHALC3 | Naphthalenes, C3-alkyl-substituted- | 0.460000 | | | |
| NAPHTHALC4 | Naphthalenes, C4-alkyl-substituted- | 0.260000 | | | |
| 120821 | 1,2,4-Trichlorobenzene | 0.004700 | U | U | |
| 108703 | 1,3,5-Trichlorobenzene | 0.004800 | U | U | |
| 87683 | Hexachlorobutadiene | 0.004400 | U | UJ | C |
| 88062 | 2,4,6-Trichlorophenol | 7.600000 | U | U | |
| 95954 | 2,4,5-Trichlorophenol | 7.600000 | U | U | |
| 51285 | 2,4-Dinitrophenol | 38.000000 | U | UJ | C |
| 208968 | Acenaphthylene | 0.003900 | U | U | |
| 83329 | Acenaphthene | 0.220000 | | | |
| 92524 | Biphenyl | 0.015000 | | | |
| 86737 | Fluorene | 0.033000 | | | |
| FLUORENESC1 | Fluorenes, C1-alkyl-substituted- | 0.076000 | | | |
| FLUORENESC2 | Fluorenes, C2-alkyl-substituted- | 0.084000 | | | |
| FLUORENESC3 | Fluorenes, C3-alkyl-substituted- | 0.079000 | | | |
| 85018 | Phenanthrene | 0.053000 | | | |
| 120127 | Anthracene | 0.045000 | | J | Q |
| PHENANTHC1 | Phenanthrenes+Anthracenes, C1-alkyl-sub | 0.054000 | | | |
| PHENANTHC2 | Phenanthrenes+Anthracenes, C2-alkyl-sub | 0.064000 | | | |
| PHENANTHC3 | Phenanthrenes+Anthracenes, C3-alkyl-sub | 0.053000 | | | |
| PHENANTHC4 | Phenanthrenes+Anthracenes, C4-alkyl-sub | 0.038000 | | | |
| 132650 | Dibenzothiophene | 0.100000 | | | |
| DIBENZC1ALK | Dibenzothiophenes, C1-alkyl-substituted | 0.130000 | | | |
| DIBENZC2ALK | Dibenzothiophenes, C2-alkyl-substituted | 0.150000 | | | |
| DIBENZC3ALK | Dibenzothiophenes, C3-alkyl-substituted | 0.120000 | | | |
| 206440 | Fluoranthene | 0.084000 | | | |
| 129000 | Pyrene | 0.073000 | | | |
| FLUORANTHC1 | Fluoranthenes+Pyrenes, C1-alkyl-sub | 0.250000 | | | |
| FLUORANTHC2 | Fluoranthenes+Pyrenes, C2-alkyl-sub | 0.079000 | | | |
| FLUORANTHC3 | Fluoranthenes+Pyrenes, C3-alkyl-sub | 0.020000 | | | |
| 56553 | Benzo(a)anthracene | 0.011000 | | | |
| 218019 | Chrysene | 0.011000 | | | |
| CHRYSC1ALK | Chrysenes, C1-alkyl-substituted- | 0.006900 | | | |
| CHRYSC2ALK | Chrysenes, C2-alkyl-substituted- | 0.015000 | | | |
| CHRYSC3ALK | Chrysenes, C3-alkyl-substituted- | 0.003000 | U | U | |
| CHRYSC4ALK | Chrysenes, C4-alkyl-substituted- | 0.003000 | U | U | |
| 117817 | bis(2-Ethylhexyl)phthalate | 2.400000 | B | UJ | B,C |
| 205992 | Benzo(b)fluoranthene | 0.008300 | J | J | |
| 207089 | Benzo(k)fluoranthene | 0.003700 | J | | |
| 192972 | Benzo(e)pyrene | 0.005600 | J | | |
| 50328 | Benzo(a)pyrene | 0.005400 | J | | |
| 198550 | Perylene | 0.002000 | J | | |
| 193395 | Indeno(1,2,3-cd)pyrene | 0.003600 | J | | |
| 53703 | Dibenzo(a,h)anthracene | 0.001500 | J | | |
| 191242 | Benzo(g,h,i)perylene | 0.003400 | J | J | |

**LEVEL D** **OGDEN VALIDATED**

1,2,4-Trichlorobenzene, 1,3,5-Trichlorobenzene, Hexachlorobutadiene, 2,4,6-Trichlorophenol, 2,4,5-Trichlorophenol, 2,4-Dinitrophenol and bis(2-Ehthylhexyl)phthalate will be reported when quantified but are considered non-target compounds for method STIV141A.

1B

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC160

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CT0136 ADL Project No.: 69084 SDG No.: OMIGW01

Matrix: (soil/water) WATER Lab Sample ID: 96B2307

Sample wt/vol: 2.6600 L Lab File ID: >X1140

Level: (low/med) LOW Date Received: 07/08/96

% Moisture: decanted: (Y/N) Date Extracted: 07/09/96

Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 07/25/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Concentration Units: (ug/L or ug/Kg) ug/L

| Cas No: | Compound | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 91203 | Naphthalene | 0.930000 | | | |
| NAPHTHALC1 | Naphthalenes, C1-alkyl-substituted- | 0.510000 | | | |
| NAPHTHALC2 | Naphthalenes, C2-alkyl-substituted- | 2.700000 | | | |
| NAPHTHALC3 | Naphthalenes, C3-alkyl-substituted- | 3.700000 | | | |
| NAPHTHALC4 | Naphthalenes, C4-alkyl-substituted- | 1.500000 | | | |
| 120821 | 1,2,4-Trichlorobenzene | 0.004700 | U | U | |
| 108703 | 1,3,5-Trichlorobenzene | 0.016000 | | | |
| 87683 | Hexachlorobutadiene | 0.004400 | U | U | c |
| 88062 | 2,4,6-Trichlorophenol | 7.500000 | U | U | |
| 95954 | 2,4,5-Trichlorophenol | 7.500000 | U | U | |
| 51285 | 2,4-Dinitrophenol | 38.000000 | U | U | c |
| 208968 | Acenaphthylene | 0.003900 | U | U | |
| 83329 | Acenaphthene | 0.680000 | | | |
| 92524 | Biphenyl | 0.026000 | | | |
| 86737 | Fluorene | 0.260000 | | | |
| FLUORENESC1 | Fluorenes, C1-alkyl-substituted- | 0.330000 | | | |
| FLUORENESC2 | Fluorenes, C2-alkyl-substituted- | 0.350000 | | | |
| FLUORENESC3 | Fluorenes, C3-alkyl-substituted- | 0.250000 | | | |
| 85018 | Phenanthrene | 0.410000 | | | |
| 120127 | Anthracene | 0.140000 | | J | Q |
| PHENANTHC1 | Phenanthrenes+Anthracenes, C1-alkyl-sub | 0.250000 | | | |
| PHENANTHC2 | Phenanthrenes+Anthracenes, C2-alkyl-sub | 0.280000 | | | |
| PHENANTHC3 | Phenanthrenes+Anthracenes, C3-alkyl-sub | 0.140000 | | | |
| PHENANTHC4 | Phenanthrenes+Anthracenes, C4-alkyl-sub | 0.085000 | | | |
| 132650 | Dibenzothiophene | 0.250000 | | | |
| DIBENZC1ALK | Dibenzothiophenes, C1-alkyl-substituted | 1.000000 | | | |
| DIBENZC2ALK | Dibenzothiophenes, C2-alkyl-substituted | 1.100000 | | | |
| DIBENZC3ALK | Dibenzothiophenes, C3-alkyl-substituted | 0.520000 | | | |
| 206440 | Fluoranthene | 0.250000 | | | |
| 129000 | Pyrene | 0.190000 | | | |
| FLUORANTHC1 | Fluoranthenes+Pyrenes, C1-alkyl-sub | 0.072000 | | | |
| FLUORANTHC2 | Fluoranthenes+Pyrenes, C2-alkyl-sub | 0.047000 | | | |
| FLUORANTHC3 | Fluoranthenes+Pyrenes, C3-alkyl-sub | 0.031000 | | | |
| 56553 | Benzo(a)anthracene | 0.012000 | | | |
| 218019 | Chrysene | 0.017000 | | | |
| CHRYSC1ALK | Chrysenes, C1-alkyl-substituted- | 0.011000 | | | |
| CHRYSC2ALK | Chrysenes, C2-alkyl-substituted- | 0.024000 | | | |
| CHRYSC3ALK | Chrysenes, C3-alkyl-substituted- | 0.013000 | | | |
| CHRYSC4ALK | Chrysenes, C4-alkyl-substituted- | 0.003000 | U | U | |
| 117817 | bis(2-Ethylhexyl)phthalate | 0.990000 | B | U | B,c |
| 205992 | Benzo(b)fluoranthene | 0.003800 | J | J | |
| 207089 | Benzo(k)fluoranthene | 0.001500 | J | | |
| 192972 | Benzo(e)pyrene | 0.004500 | J | | |
| 50328 | Benzo(a)pyrene | 0.002600 | J | | |
| 198550 | Perylene | 0.001000 | J | | |
| 193395 | Indeno(1,2,3-cd)pyrene | 0.001300 | J | | |
| 53703 | Dibenzo(a,h)anthracene | 0.000860 | J | | |
| 191242 | Benzo(g,h,i)perylene | 0.001200 | J | J | |

**LEVEL D** **OGDEN VALIDATED**

1,2,4-Trichlorobenzene, 1,3,5-Trichlorobenzene, Hexachlorobutadiene, 2,4,6-Trichlorophenol, 2,4,5-Trichlorophenol, 2,4-Dinitrophenol and bis(2-Ehthylhexyl)phthalate will be reported when quantified but are considered non-target compounds for method STIV141A.

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC161

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CT0136 **ADL Project No.:** 69084 **SDG No.:** OMIGW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2308RE

**Sample wt/vol:** 2.6000 L **Lab File ID:** >X1146

**Level: (low/med)** LOW **Date Received:** 07/08/96

**% Moisture:** **decanted: (Y/N)** **Date Extracted:** 07/09/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 07/26/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 91203 | Naphthalene | 4.400000 | E | R | D |
| NAPHTHALC1 | Naphthalenes, C1-alkyl-substituted- | 5.200000 | E | R | D |
| NAPHTHALC2 | Naphthalenes, C2-alkyl-substituted- | 7.600000 | | | |
| NAPHTHALC3 | Naphthalenes, C3-alkyl-substituted- | 1.200000 | | | |
| NAPHTHALC4 | Naphthalenes, C4-alkyl-substituted- | 0.210000 | | | |
| 120821 | 1,2,4-Trichlorobenzene | 0.004800 | U | U | |
| 108703 | 1,3,5-Trichlorobenzene | 0.550000 | | | |
| 87683 | Hexachlorobutadiene | 0.004500 | U | UJ | C |
| 88062 | 2,4,6-Trichlorophenol | 7.700000 | U | U | |
| 95954 | 2,4,5-Trichlorophenol | 7.700000 | U | U | |
| 51285 | 2,4-Dinitrophenol | 38.000000 | U | UJ | C |
| 208968 | Acenaphthylene | 0.027000 | | | |
| 83329 | Acenaphthene | 0.830000 | | | |
| 92524 | Biphenyl | 1.000000 | | | |
| 86737 | Fluorene | 0.860000 | | | |
| FLUORENESC1 | Fluorenes, C1-alkyl-substituted- | 0.140000 | | | |
| FLUORENESC2 | Fluorenes, C2-alkyl-substituted- | 0.051000 | | | |
| FLUORENESC3 | Fluorenes, C3-alkyl-substituted- | 0.003000 | U | U | |
| 85018 | Phenanthrene | 1.300000 | | | |
| 120127 | Anthracene | 0.220000 | | J | Q |
| PHENANTHC1 | Phenanthrenes+Anthracenes, C1-alkyl-sub | 0.160000 | | | |
| PHENANTHC2 | Phenanthrenes+Anthracenes, C2-alkyl-sub | 0.052000 | | | |
| PHENANTHC3 | Phenanthrenes+Anthracenes, C3-alkyl-sub | 0.022000 | | | |
| PHENANTHC4 | Phenanthrenes+Anthracenes, C4-alkyl-sub | 0.001700 | U | U | |
| 132650 | Dibenzothiophene | 0.160000 | | | |
| DIBENZC1ALK | Dibenzothiophenes, C1-alkyl-substituted | 0.057000 | | | |
| DIBENZC2ALK | Dibenzothiophenes, C2-alkyl-substituted | 0.043000 | | | |
| DIBENZC3ALK | Dibenzothiophenes, C3-alkyl-substituted | 0.022000 | | | |
| 206440 | Fluoranthene | 0.450000 | | | |
| 129000 | Pyrene | 0.310000 | | | |
| FLUORANTHC1 | Fluoranthenes+Pyrenes, C1-alkyl-sub | 0.073000 | | | |
| FLUORANTHC2 | Fluoranthenes+Pyrenes, C2-alkyl-sub | 0.026000 | | | |
| FLUORANTHC3 | Fluoranthenes+Pyrenes, C3-alkyl-sub | 0.011000 | | | |
| 56553 | Benzo(a)anthracene | 0.023000 | | | |
| 218019 | Chrysene | 0.019000 | | | |
| CHRYSC1ALK | Chrysenes, C1-alkyl-substituted- | 0.004600 | | | |
| CHRYSC2ALK | Chrysenes, C2-alkyl-substituted- | 0.003100 | U | U | |
| CHRYSC3ALK | Chrysenes, C3-alkyl-substituted- | 0.003100 | U | U | |
| CHRYSC4ALK | Chrysenes, C4-alkyl-substituted- | 0.003100 | U | U | |
| 117817 | bis(2-Ethylhexyl)phthalate | 0.260000 | B | UJ | B,C |
| 205992 | Benzo(b)fluoranthene | 0.006100 | J | J | |
| 207089 | Benzo(k)fluoranthene | 0.002300 | J | | |
| 192972 | Benzo(e)pyrene | 0.003900 | J | | |
| 50328 | Benzo(a)pyrene | 0.003400 | J | | |
| 198550 | Perylene | 0.001100 | J | | |
| 193395 | Indeno(1,2,3-cd)pyrene | 0.001900 | J | | |
| 53703 | Dibenzo(a,h)anthracene | 0.000750 | J | | |
| 191242 | Benzo(g,h,i)perylene | 0.001600 | J | J | |

LEVEL D

OGDEN VALIDATED

00000

1,2,4-Trichlorobenzene, 1,3,5-Trichlorobenzene, Hexachlorobutadiene, 2,4,6-Trichlorophenol, 2,4,5-Trichlorophenol, 2,4-Dinitrophenol and bis(2-Ehthylhexyl)phthalate will be reported when quantified but are considered non-target compounds for method STIV141A.

1B

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC161DL

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CT0136 ADL Project No.: 69084 SDG No.: OMIGW01

Matrix: (soil/water) WATER Lab Sample ID: 96B2308REDL

Sample wt/vol: 2.6000 L Lab File ID: >Y3543

Level: (low/med) LOW Date Received: 07/08/96

% Moisture: decanted: (Y/N) Date Extracted: 07/09/96

Concentrated Extract Volume: 1.0000(mL) Date Analyzed: 08/13/96

Injection Volume: 2 (uL) Dilution Factor: 40.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 20.0000

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 91203 | Naphthalene | 4.600000 | D | | |
| NAPHTHALC1 | Naphthalenes, C1-alkyl-substituted- | 1.700000 | D | | |
| NAPHTHALC2 | Naphthalenes, C2-alkyl-substituted- | 1.500000 | R | R | D |
| NAPHTHALC3 | Naphthalenes, C3-alkyl-substituted- | 0.084000 | UR | | |
| NAPHTHALC4 | Naphthalenes, C4-alkyl-substituted- | 0.084000 | UR | | |
| 120821 | 1,2,4-Trichlorobenzene | 0.096000 | UR | | |
| 108703 | 1,3,5-Trichlorobenzene | 0.098000 | UR | | |
| 87683 | Hexachlorobutadiene | 0.089000 | UR | | |
| 88062 | 2,4,6-Trichlorophenol | 150.000000 | UR | | |
| 95954 | 2,4,5-Trichlorophenol | 150.000000 | UR | | |
| 51285 | 2,4-Dinitrophenol | 770.000000 | UR | | |
| 208968 | Acenaphthylene | 0.079000 | UR | | |
| 83329 | Acenaphthene | 0.180000 | R | | |
| 92524 | Biphenyl | 0.240000 | R | | |
| 86737 | Fluorene | 0.180000 | R | | |
| FLUORENESC1 | Fluorenes, C1-alkyl-substituted- | 0.060000 | UR | | |
| FLUORENESC2 | Fluorenes, C2-alkyl-substituted- | 0.060000 | UR | | |
| FLUORENESC3 | Fluorenes, C3-alkyl-substituted- | 0.060000 | UR | | |
| 85018 | Phenanthrene | 0.220000 | R | | |
| 120127 | Anthracene | 0.045000 | JR | | |
| PHENANTHC1 | Phenanthrenes+Anthracenes, C1-alkyl-sub | 0.035000 | UR | | |
| PHENANTHC2 | Phenanthrenes+Anthracenes, C2-alkyl-sub | 0.035000 | UR | | |
| PHENANTHC3 | Phenanthrenes+Anthracenes, C3-alkyl-sub | 0.035000 | UR | | |
| PHENANTHC4 | Phenanthrenes+Anthracenes, C4-alkyl-sub | 0.035000 | UR | | |
| 132650 | Dibenzothiophene | 0.041000 | UR | | |
| DIBENZC1ALK | Dibenzothiophenes, C1-alkyl-substituted | 0.041000 | UR | | |
| DIBENZC2ALK | Dibenzothiophenes, C2-alkyl-substituted | 0.041000 | UR | | |
| DIBENZC3ALK | Dibenzothiophenes, C3-alkyl-substituted | 0.041000 | UR | | |
| 206440 | Fluoranthene | 0.100000 | R | | |
| 129000 | Pyrene | 0.069000 | JR | | |
| FLUORANTHC1 | Fluoranthenes+Pyrenes, C1-alkyl-sub | 0.048000 | UR | | |
| FLUORANTHC2 | Fluoranthenes+Pyrenes, C2-alkyl-sub | 0.048000 | UR | | |
| FLUORANTHC3 | Fluoranthenes+Pyrenes, C3-alkyl-sub | 0.048000 | UR | | |
| 56553 | Benzo(a)anthracene | 0.170000 | UR | | |
| 218019 | Chrysene | 0.062000 | UR | | |
| CHRYSC1ALK | Chrysenes, C1-alkyl-substituted- | 0.062000 | UR | | |
| CHRYSC2ALK | Chrysenes, C2-alkyl-substituted- | 0.062000 | UR | | |
| CHRYSC3ALK | Chrysenes, C3-alkyl-substituted- | 0.062000 | UR | | |
| CHRYSC4ALK | Chrysenes, C4-alkyl-substituted- | 0.062000 | UR | | |
| 117817 | bis(2-Ethylhexyl)phthalate | 2.400000 | UBR | | |
| 205992 | Benzo(b)fluoranthene | 0.170000 | UR | | |
| 207089 | Benzo(k)fluoranthene | 0.130000 | UR | | |
| 192972 | Benzo(e)pyrene | 0.140000 | UR | | |
| 50328 | Benzo(a)pyrene | 0.140000 | UR | | |
| 198550 | Perylene | 0.130000 | UR | | |
| 193395 | Indeno(1,2,3-cd)pyrene | 0.130000 | UR | | |
| 53703 | Dibenzo(a,h)anthracene | 0.160000 | UR | | |
| 191242 | Benzo(g,h,i)perylene | 0.160000 | UR | R | D |

LEVEL D

OGDEN VALIDATED

000069

1,2,4-Trichlorobenzene, 1,3,5-Trichlorobenzene, Hexachlorobutadiene, 2,4,6-Trichlorophenol, 2,4,5-Trichlorophenol, 2,4-Dinitrophenol and bis(2-Ehthylhexyl)phthalate will be reported when quantified but are considered non-target compounds for method STIV141A.

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC162

| | | | | | |
|---|---|---|---|---|---|
| Lab Name: | Arthur D. Little, Inc. | | Contract: | N62742-90-D-0019 | |
| Lab Code: | ADLMA | Case No.: CT0136 | ADL Project No.: | 69084 | SDG No.: OMIGW01 |
| Matrix: (soil/water) | WATER | | Lab Sample ID: | 96B2309 | |
| Sample wt/vol: | 2.6150 L | | Lab File ID: | >X1142 | |
| Level: (low/med) | LOW | | Date Received: | 07/08/96 | |
| % Moisture: | | decanted: (Y/N) | Date Extracted: | 07/09/96 | |
| Concentrated Extract Volume: | | 0.5000(mL) | Date Analyzed: | 07/25/96 | |
| Injection Volume: | | 2 (uL) | Dilution Factor: | 1.0000 | |
| GPC Cleanup: (Y/N) | Y | pH: | Split Factor: | 2.0000 | |

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 91203 | Naphthalene | 0.430000 | | | |
| NAPHTHALC1 | Naphthalenes, C1-alkyl-substituted- | 0.930000 | | | |
| NAPHTHALC2 | Naphthalenes, C2-alkyl-substituted- | 0.580000 | | | |
| NAPHTHALC3 | Naphthalenes, C3-alkyl-substituted- | 0.120000 | | | |
| NAPHTHALC4 | Naphthalenes, C4-alkyl-substituted- | 0.036000 | | | |
| 120821 | 1,2,4-Trichlorobenzene | 0.004800 | U | U | |
| 108703 | 1,3,5-Trichlorobenzene | 0.004900 | U | U | |
| 87683 | Hexachlorobutadiene | 0.004400 | U | UJ | c |
| 88062 | 2,4,6-Trichlorophenol | 7.600000 | U | U | |
| 95954 | 2,4,5-Trichlorophenol | 7.600000 | U | U | |
| 51285 | 2,4-Dinitrophenol | 38.000000 | U | UJ | c |
| 208968 | Acenaphthylene | 0.005200 | | | |
| 83329 | Acenaphthene | 1.500000 | | | |
| 92524 | Biphenyl | 0.270000 | | | |
| 86737 | Fluorene | 0.180000 | | | |
| FLUORENESC1 | Fluorenes, C1-alkyl-substituted- | 0.074000 | | | |
| FLUORENESC2 | Fluorenes, C2-alkyl-substituted- | 0.031000 | | | |
| FLUORENESC3 | Fluorenes, C3-alkyl-substituted- | 0.003000 | U | U | |
| 85018 | Phenanthrene | 1.100000 | | | |
| 120127 | Anthracene | 0.240000 | | J | Q |
| PHENANTHC1 | Phenanthrenes+Anthracenes, C1-alkyl-sub | 0.200000 | | | |
| PHENANTHC2 | Phenanthrenes+Anthracenes, C2-alkyl-sub | 0.045000 | | | |
| PHENANTHC3 | Phenanthrenes+Anthracenes, C3-alkyl-sub | 0.013000 | | | |
| PHENANTHC4 | Phenanthrenes+Anthracenes, C4-alkyl-sub | 0.001700 | U | U | |
| 132650 | Dibenzothiophene | 0.170000 | | | |
| DIBENZC1ALK | Dibenzothiophenes, C1-alkyl-substituted | 0.042000 | | | |
| DIBENZC2ALK | Dibenzothiophenes, C2-alkyl-substituted | 0.019000 | | | |
| DIBENZC3ALK | Dibenzothiophenes, C3-alkyl-substituted | 0.009600 | | | |
| 206440 | Fluoranthene | 1.200000 | | | |
| 129000 | Pyrene | 0.760000 | | | |
| FLUORANTHC1 | Fluoranthenes+Pyrenes, C1-alkyl-sub | 0.120000 | | | |
| FLUORANTHC2 | Fluoranthenes+Pyrenes, C2-alkyl-sub | 0.016000 | | | |
| FLUORANTHC3 | Fluoranthenes+Pyrenes, C3-alkyl-sub | 0.002400 | U | U | |
| 56553 | Benzo(a)anthracene | 0.026000 | | | |
| 218019 | Chrysene | 0.026000 | | | |
| CHRYSC1ALK | Chrysenes, C1-alkyl-substituted- | 0.003200 | | | |
| CHRYSC2ALK | Chrysenes, C2-alkyl-substituted- | 0.003100 | U | U | |
| CHRYSC3ALK | Chrysenes, C3-alkyl-substituted- | 0.003100 | U | U | |
| CHRYSC4ALK | Chrysenes, C4-alkyl-substituted- | 0.003100 | U | U | |
| 117817 | bis(2-Ethylhexyl)phthalate | 1.700000 | B | UJ | B,C |
| 205992 | Benzo(b)fluoranthene | 0.004300 | J | J | |
| 207089 | Benzo(k)fluoranthene | 0.002600 | J | | |
| 192972 | Benzo(e)pyrene | 0.002400 | J | | |
| 50328 | Benzo(a)pyrene | 0.002000 | J | | |
| 198550 | Perylene | 0.000990 | J | | |
| 193395 | Indeno(1,2,3-cd)pyrene | 0.006300 | U | U | |
| 53703 | Dibenzo(a,h)anthracene | 0.007800 | U | U | |
| 191242 | Benzo(g,h,i)perylene | 0.008000 | U | U | |

LEVEL D OGDEN VALIDATED

000010

1,2,4-Trichlorobenzene, 1,3,5-Trichlorobenzene, Hexachlorobutadiene, 2,4,6-Trichlorophenol, 2,4,5-Trichlorophenol, 2,4-Dinitrophenol and bis(2-Ehthylhexyl)phthalate will be reported when quantified but are considered non-target compounds for method STIV141A.

OGDEN

# DATA VALIDATION REPORT

CLEAN CONTRACT TASK ORDER #136
NAF Midway Site Investigations

ANALYSIS: PESTICIDES/PCB CONGENERS
SAMPLE DELIVERY GROUP: OMIGW01

Prepared by

Ogden—Denver Operations
550 South Wadsworth Boulevard, Suite 500
Lakewood, Colorado 80226

# CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

Ogden Environmental and Energy Services Co., Inc.
550 South Wadsworth Boulevard
Suite 500
Lakewood, CO 80226

Package ID C136PP55
Task Order 110190136
SDG No. OMIGW01
No. of Analyses 5

Laboratory A.D. Little
Reviewer H. White
Analysis/Method Pesticides/PCB Congeners

Date: 10-22-96
Reviewer's Signature Heidi A. White

| ACTION ITEMS[a] | |
|---|---|
| 1. Case Narrative Deficiencies | INCLUDES REVISION I |
| 2. Out of Scope Analyses | |
| 3. Analyses Not Conducted | |
| 4. Missing Hardcopy Deliverables | |
| 5. Incorrect Hardcopy Deliverables | |
| 6. Deviations from Analysis Protocol, e.g., | Qualifications assigned for calibration deficiencies |
| Holding Times | ~~Cis-Nonachlor not in calibration standards~~ |
| GC/MS Tune/Inst. Perform | ~~but reported on Form I's - rejected~~ 10-22-96 |
| Calibrations | No MDLs for endosulfan I & II |
| Blanks | |
| Surrogates | |
| Matrix Spike/Dup LCS | Laboratory tentatively identifying samples |
| Field QC | which should be deemed nondetects |
| Internal Standard Performance | |
| Compound Identification and Quantitation | Oxychlordane, oxychlorostyrene and photomirex not analyzed for this round |
| System Performance | |

**COMMENTS[b]** Sulfur cleanups were performed for all samples

[a] Subcontracted analytical laboratory is not meeting contract and/or method requirements.
[b] Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.

**OGDEN** *ENVIRONMENTAL AND ENERGY SERVICES*

550 S. Wadsworth Boulevard
Suite 500
Lakewood, CO 80226
Phone 303 935-6505
Fax 303 935-6575

November 7, 1996

Mr. Jeff Cotter
Ogden — Honolulu
680 Iwilei Road, Suite 660
Honolulu, HI 96817

Dear Mr. Cotter:

Enclosed, please find the Revision 1 data validation reports which are detailed below.

C136PP55 SDG: OMIGW01 - Form Is revised for concentration values that were changed for samples MC158, MC159, MC160, MC161, and MC162.

Please call if you have any questions.

Sincerely,

Mark A. Pokorny

# 1. INTRODUCTION

| | |
|---|---|
| Task Order Title: | NAF Midway Site Investigations |
| CLEAN Contract Task Order #: | 0136 |
| SDG#: | OMIGW01 |
| CTO Manager: | J. Cotter |
| Project Contact: | M. Medeiros |
| Matrix: | Water |
| Analysis: | Pesticides/PCB Congeners |
| NEESA QC Level: | D |
| No. of Samples: | 5 |
| No. of Reanalyses/Dilutions: | 0 |
| Reviewer: | H. White |
| Date of Review: | October 21, 1996 |

The samples listed in Table 1 were validated based on the NOAA National Status and Trends Analytical Protocols, data validation procedure for Levels C and D pesticides/PCBs (DVP-4, Rev. 2) and the *National Functional Guidelines For Organic Data Review* (2/94). These protocols vary from the CLP Protocols upon which the Navy CLEAN data validation procedures were based. Instances where quality control parameters vary from the CLP Data Validation procedures are documented in the text of this report and should be noted with respect to the overall data quality objectives of this project. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in estimated value were not denoted by a qualification code since the data had already been rejected.

**Table 1. Sample identification**

| Client ID | EPA ID | Laboratory ID | Matrix | COC Method |
|---|---|---|---|---|
| M01MW01D01 | MC158 | 96B2310RE | water | STIV141C/E |
| M01MW02S01 | MC159 | 96B2306 | water | STIV141C/E |
| M01MW03S01 | MC160 | 96B2307 | water | STIV141C/E |
| M01MW04S01 | MC161 | 96B2308RE | water | STIV141C/E |
| M01MW05S01 | MC162 | 96B2309 | water | STIV141C/E |

# 2. DATA VALIDATION FINDINGS

## 2.1 SAMPLE MANAGEMENT

The following are findings associated with sample management:

### 2.1.1 Sample Preservation, Handling, and Transport

No preservations were required for pesticide/PCB analysis. Samples in this SDG were received by the laboratory outside temperature limits established in NEESA 20.2-047B. No samples were noted to be broken upon arrival at the laboratory. No qualifications were required.

### 2.1.2 Chain of Custody

All COCs were legible and complete. All COCs were signed by laboratory and field personnel. Other questions regarding sample conditions were answered on the COCs; however, the COC form for cooler #100 containing sample MC158 was not completed by the laboratory. Samples MC159 and MC160 were noted to contain dyes. No qualifications were required based on sample receipt information.

### 2.1.3 Holding Times

All samples in this SDG were extracted and analyzed within the prescribed seven day holding time for waters; therefore, no qualifications were required.

## 2.2 PESTICIDES INSTRUMENT PERFORMANCE

No percent resolution or endrin/4,4'-DDT degradation analyses were performed by the laboratory, as required by the CLP SOW (3/90). These analyses have not been established in the Status and Trends protocols; therefore, no evaluation was given to the data based on percent resolution or breakdown degradation. PCBs 103 and 198 were used as the surrogates for this SDG, while tetrachloro-m-xylene served as the internal standard. All target analytes were quantified versus the internal standard recovery. No surrogate or internal standard retention time window was specified in the Status and Trends protocols. The laboratory established a window of $\pm$0.075 or 0.15 minutes Based on professional judgement, the reviewer considered this an acceptable range. The surrogate and internal standard compounds were within the the absolute retention time windows established with initial calibration standards. The retention time for all target compounds was established by the laboratory at $\pm$0.075 minutes, although some windows were reduced or expanded for proper peak identification. In these instances, the reviewer deemed the retention time windows to be acceptable. All continuing calibration standards had retention times within the retention time windows established with the initial calibration standards. The retention time window for 2,4'-DDE was calculated incorrectly for the initial calibration performed on 7/19/96. The reviewer recalculated the retention time window and corrected the Form VI. No qualifications of the data were required.

## 2.3 CALIBRATION

### 2.3.1 Analytical Sequence

The laboratory modified the analytical sequence from the Status and Trends protocols. The laboratory analyzed an initial five-point calibration with subsequent mid-level calibration standards analyzed for every ten field standards, and at the end of each sequence. Status and Trends protocols suggested a four-point calibration be interspersed with samples and no more than six samples be analyzed in between calibration standards. The laboratory modifications were considered acceptable by the reviewer; therefore, no qualifications were required.

### 2.3.2 Initial Calibration

The NOAA Status and Trends used a correlation coefficient ($r^2$) to determine the accuracy of initial calibrations. The laboratory deviated from the protocols by measuring the %RSDs from relative response factors for each initial calibration. The laboratory established the %RSD must be less than or equal to 25% for 90% of all compounds and less than or equal to 35% for all compounds. The reviewer used a QC criterion of 25% for all compounds for the percent RSDs.

Qualifications based on initial calibration deficiencies are assigned to the data when the %RSD from the primary column for a particular compound exceeds 25%. The %RSD for endrin exceeded 25% on the RTX-5 column for the initial calibrations performed on 7/19/96 and 7/30/96. The %RSD for delta-BHC exceeded 25% for the initial calibrations performed on 7/23/96 and 7/30/96 and the %RSD for alpha-BHC exceeded 25% on the DB-17 column for all initial calibrations. Endrin was qualified as "UJ" in samples MC158 and MC161. Delta-BHC was qualified as "UJ" in samples MC159, MC160, MC161 and MC162. Alpha-BHC detects were qualified as "J" and nondetects as "UJ" for all site samples. No further qualifications were assigned.

### 2.3.3 Continuing Calibration

No QC limits have been established for continuing calibration standards by the Status and Trends protocols. The laboratory established a %D less than or equal to 25% for 90% of the target compounds and less than or equal to 35% for all compounds. For validation purposes, the reviewer used a QC criterion of 25% for the percent Ds. All continuing calibration standard %Ds reported from the RTX-5 column and the four reported analytes from the DB-17 column were verified from the raw data. All reported %Ds were within the established QC limits; therefore, no qualifications were necessary.

## 2.4 BLANKS

### 2.4.1 Instrument Blanks

No instrument blanks were analyzed for this SDG. NOAA Status and Trends protocols do not suggest the analysis of instrument blanks; therefore, no evaluation of the data was given based on instrument blanks.

### 2.4.2 Method Blanks

NOAA Status and Trends protocols suggested method blanks were acceptable if no target compound detects were found 3X above the MDLs. The laboratory further qualified the QC limits for blanks, stating that no more than 2 target analytes could exceed 3X the MDLs. Because the reporting limits and the MDLs were the same for this SDG (see Section 2.11), the reviewer chose a more conservative QC criteria. The CLP SOW (3/90) criteria for method blanks was used to evaluate the data. Validation procedures were based on the Ogden DVP-4, Revision 2, which states no target compounds above the reporting limits.
One water method blanks was analyzed with this SDG. No target compound detects were found in the method blank above ½ the CRQL; therefore, no qualifications were assigned.

## 2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

The laboratory analyzed a laboratory control sample (LCS) in lieu of a blank spike/blank spike duplicate. Water concentrations were adjusted for surrogate recoveries in accordance with Status and Trends protocols. The QC criteria established to evaluate the matrix spike/ matrix spike duplicate was used by the laboratory for the LCS. Because the Status and Trends protocols did not address LCSs and the established limits were stricter than those in the CLP SOW (3/90), the reviewer deemed the limits acceptable. All target analytes met the QC criteria; therefore, no qualifications were required.

## 2.6 SURROGATE RECOVERY

The laboratory established surrogate recovery QC limits that were stricter than those applied in the Status and Trends protocols. Surrogate recoveries were calculated and reported for the RTX-5 column only; therefore, surrogate recovery evaluation was limited to the data from the RTX-5 column. All surrogate recoveries were within QC limits; therefore, no qualification of the data was necessary.

## 2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

MS/MSD analyses were performed on sample MC158. All target compounds were within established QC limits; therefore, no qualifications were required. The reviewer noted that the QC limits for MS/MSD results were stricter than those in the Status and Trends protocols.

## 2.8 SAMPLE CLEANUP PERFORMANCE

According to the case narrative, samples contained a distinctive sulfur smell and upon concentration produced particulates; therefore, all samples were subjected to alumina column cleanup, followed by a sulfur cleanup with activated copper. Upon analysis, all samples except MC158 were found to have interferences associated with sulfur and an additional sulfur cleanup was performed. Sample MC161 required three cleanups to remove interferences. There was no indication that the blank or LCS samples were subjected to alumina or sulfur cleanups. Review of the surrogate recoveries and the matrix spike recoveries indicated that cleanup procedures did not adversely affect data quality and no qualifications were assigned.

## 2.9 FIELD QC SAMPLES

Field QC samples are evaluated, and if necessary, qualified based only on method blanks. Any remaining detects are used to evaluate the associated samples. The following are findings associated with field QC samples:

### 2.9.1 Field Blanks and Equipment Rinsates

Field blanks and equipment rinsates were not assigned to the samples in this SDG. Qualifications could not be made based on field QC results.

### 2.9.2 Field Duplicates

Sample MC158 was identified as a field duplicate of sample MC157; however, comparisons could not be made between the two samples because MC157 was not analyzed for this method.

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## 2.10 COMPOUND IDENTIFICATION

Compound identification was performed by the reviewer. Possible false negative detects were eliminated upon examination of the chromatograms and quantitation sheets by the reviewer. All detected analytes were confirmed by second column confirmation. Some samples exhibited elevated baselines occurring after 65 minutes into the run. Based on the surrogate recovery for PCB 198 and a comparison of raw data to chromatograms from low level standards, the reviewer determined that target analyte peaks, if present, could be identified. No further qualifications were required.

For analytes that were detected on the RTX-5 column but were not confirmed on the DB-17, the laboratory reported the detected value from the RTX-5 column on the Form I and used an "N" qualifier for the data. Since dual confirmation is required for all compounds, the reviewer changed the detected value to the CRQL and qualified the data as nondetects, "U" for PCB 28, PCB 44, PCB 52, beta-BHC, gamma-BHC, trans-nonachlor, and heptachlor epoxide for sample MC158, PCB 187 and trans-nonachlor for sample MC159, PCB 44, PCB 101, heptachlor, trans-nonachlor, and endosulfan II for sample MC160, PCB 18, PCB 28, PCB 52, PCB209, beta-BHC, gamma-BHC, and trans-nonacclor for sample MC161, and PCB 18, gamma-BHC, endosulfan II, and methoxychlor for sample MC162.

## 2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantification was verified in the samples in this SDG. No %Ds were calculated or reported for target analyte detects. No dilutions were performed for samples in this SDG. The RTX-5 column served as the primary column for all target compounds, with the exception of PCB 8, PCB 138 (for all samples except MC161), PCB 170 (for samples MC160 and MC162 only), alpha-BHC, endosulfan I, and 2,4'-DDE, which were quantified from the DB-17 column. The confirmation column was used for confirmation of analytes and no quantification occurred from the column. Review of the raw data confirmed that target analytes were present on both columns and quantification was performed on the correct primary column; therefore no evaluation was given to %D information. Several compound were detected but at a level less than the reporting limits. These compounds were qualified as estimated "J."

Cis-nonachlor was in the initial calibration standard, but was not reported on the Form VIs or VIIs. The %RSDs and %Ds were calculated for the compound, and no qualifications were required.

Endosulfan I and endosulfan II were reported in this round of data, but were not reported in the initial round of data and were not supported by MDL studies. Oxychlordane, which was reported in the initial round of data, was not reported in this round due to the laboratory's inability to obtain an ASTM quality standard. In addition, photomirex and oxychlorostyrene were not reported in this round of data, but were reported in the initial round of data, and no explanation was provided.

Because no CRQL limits have been established for these methods, CRQLs were determined by an MDL study performed by the laboratory. Copies of the MDL study were included with the QAPP. Verification of the raw data confirmed the correct CRQLs were applied, with the exception of endosulfan I and endosulfan II. No qualifications were required.

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC158

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIGW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2310RE

**Sample wt/vol:** 1.4200 L **Lab File ID:** 3,0719963,15,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 07/08/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 07/09/96

**Concentrated Extract Volume:** 0.5000 (mL) **Date Analyzed:** 07/20/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup:** (Y/N) **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0719963,15,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.000610 | U | u | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.001700 | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,0719962,15,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.000820 | U | u | |
| 7012375 | PCB-28 (2,4,4') | ~~0.002800~~ 0.001700 | U N | ↓ | $, *10 |
| 35693993 | PCB-52 (2,2',5,5') | ~~0.001700~~ 0.000640 | U N | ↓ | $, *10 |
| 41464395 | PCB-44 (2,2',3,5') | ~~0.001400~~ 0.000550 | U N | u | $, *10 |
| 32598100 | PCB-66 (2,3',4,4') | 0.000840 | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.001600 | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.000940 | U | u | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.000610 | U | u | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.001100 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.000960 | U | u | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.000790 | U | ↓ | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.000990 | U | ↓ | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.000530 | U | u | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.000600 | J | J | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.004700 | U | u | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.001000 | U | ↓ | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000770 | U | ↓ | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000920 | U | u | |

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1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC158

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIGW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2310RE

**Sample wt/vol:** 1.4200 L **Lab File ID:** 3,0719963,15,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 07/08/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 07/09/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 07/20/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0719963,15,1 | | | |
| 319846 | alpha-BHC | 0.000680 | U | UJ | C |
| 3424826 | 2,4'-DDE | 0.000580 | U | U | |
| 959988 | Endosulfan I | 0.001000 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,0719962,15,1 | | | |
| 118741 | Hexachlorobenzene | 0.000610 | U | U | |
| 319857 | beta-BHC | ~~0.005100~~ 0.000450 | UN | U | $, *10 |
| 58899 | gamma-BHC (Lindane) | ~~0.004000~~ 0.000500 | UN | U | $, *10 |
| 319868 | delta-BHC | 0.000520 | U | | |
| 76448 | Heptachlor | 0.000750 | U | | |
| 309002 | Aldrin | 0.000910 | U | | |
| 5103742 | gamma-Chlordane | 0.000370 | U | U | |
| 5103719 | alpha-Chlordane | 0.000190 | J | JR ~~J~~ | *1 |
| 5103731 | cis-Nonachlor | 0.000570 | U | U | |
| 39765805 | trans-Nonachlor | ~~0.000890~~ 0.000570 | UN | U | $, *10 |
| 1024573 | Heptachlor epoxide | ~~0.000580~~ 0.001390 | UJN | U | $, *10 |
| 60571 | Dieldrin | 0.000700 | | | |
| 72559 | 4,4'-DDE | 0.000330 | U | U | |
| 53190 | 2,4'-DDD | 0.001400 | | | |
| 72208 | Endrin | 0.000950 | U | UJ | C |
| 72548 | 4,4'-DDD | 0.004500 | | | |
| 789026 | 2,4'-DDT | 0.000520 | U | U | |
| 33216659 | Endosulfan II | 0.001000 | U | | |
| 1031078 | Endosulfan sulfate | 0.001000 | U | | |
| 50293 | 4,4'-DDT | 0.001200 | U | | |
| 7421934 | Endrin aldehyde | 0.000530 | U | | |
| 53494705 | Endrin ketone | 0.000530 | U | | |
| 72435 | Methoxychlor | 0.001400 | U | | |
| 2385855 | Mirex | 0.000400 | U | U | |

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Revision I HW 10/25/96

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1D
# PCB ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC158

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIGW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2310RE

**Sample wt/vol:** 1.4200 L **Lab File ID:** 3,0719963,15,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 07/08/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 07/09/96

**Concentrated Extract Volume:** 0.5000 (mL) **Date Analyzed:** 07/20/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/L

| Cas No: | Compound | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0719963,15,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.000610 | U | u | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.001700 | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,0719962,15,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.000820 | U | u | |
| 7012375 | PCB-28 (2,4,4') | ~~0.002800~~ 0.001700 | U N | ↓ | $, *10 |
| 35693993 | PCB-52 (2,2',5,5') | ~~0.001700~~ 0.000640 | U N | | $, *10 |
| 41464395 | PCB-44 (2,2',3,5') | ~~0.001400~~ 0.000550 | U N | u | $, *10 |
| 32598100 | PCB-66 (2,3',4,4') | 0.000840 | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.001600 | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.000940 | U | u | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.000610 | U | u | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.001100 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.000960 | U | u | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.000790 | U | ↓ | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.000990 | U | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.000530 | U | u | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.000600 | J | J | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.004700 | U | u | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.001000 | U | ↓ | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000770 | U | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000920 | U | u | |

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1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC158

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIGW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2310RE

**Sample wt/vol:** 1.4200 L **Lab File ID:** 3,0719963,15,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 07/08/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 07/09/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 07/20/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/L

| Cas No: | Compound | | | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: | 3,0719963,15,1 | | | |
| 319846 | alpha-BHC | | 0.000680 | U | UJ | C |
| 3424826 | 2,4'-DDE | | 0.000580 | U | U | |
| 959988 | Endosulfan I | | 0.001000 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: | 2,0719962,15,1 | | | |
| 118741 | Hexachlorobenzene | | 0.000610 | U | U | |
| 319857 | beta-BHC | | 0.005100 0.000450 | U ~~N~~ | U | $, *10 |
| 58899 | gamma-BHC (Lindane) | | 0.004000 0.000500 | U ~~N~~ | U | $, *10 |
| 319868 | delta-BHC | | 0.000520 | U | | |
| 76448 | Heptachlor | | 0.000750 | U | | |
| 309002 | Aldrin | | 0.000910 | U | | |
| 5103742 | gamma-Chlordane | | 0.000370 | U | U | |
| 5103719 | alpha-Chlordane | | 0.000190 | J | JR ~~J~~ | *11 |
| 5103731 | cis-Nonachlor | | 0.000570 | U | U | |
| 39765805 | trans-Nonachlor | | 0.000890 0.000570 | U ~~N~~ | U | $, *10 |
| 1024573 | Heptachlor epoxide | | 0.000580 0.001390 | U ~~JN~~ | U | $, *10 |
| 60571 | Dieldrin | | 0.000700 | | | |
| 72559 | 4,4'-DDE | | 0.000330 | U | U | |
| 53190 | 2,4'-DDD | | 0.001400 | | | |
| 72208 | Endrin | | 0.000950 | U | UJ | C |
| 72548 | 4,4'-DDD | | 0.004500 | | | |
| 789026 | 2,4'-DDT | | 0.000520 | U | U | |
| 33216659 | Endosulfan II | | 0.001000 | U | | |
| 1031078 | Endosulfan sulfate | | 0.001000 | U | | |
| 50293 | 4,4'-DDT | | 0.001200 | U | | |
| 7421934 | Endrin aldehyde | | 0.000530 | U | | |
| 53494705 | Endrin ketone | | 0.000530 | U | | |
| 72435 | Methoxychlor | | 0.001400 | U | | |
| 2385855 | Mirex | | 0.000400 | U | U | |

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10-18-96

A0000006

1D
PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC159



**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIGW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2306

**Sample wt/vol:** 2.6400 L **Lab File ID:** 3,0723963,8,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 07/08/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 07/09/96

**Concentrated Extract Volume:** 0.5000 (mL) **Date Analyzed:** 07/24/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0723963,8,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.000330 | | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.002400 | | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,0723962,8,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.006000 | | | | |
| 7012375 | PCB-28 (2,4,4') | 0.000920 | | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | 0.002200 | | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.004400 | | | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.002600 | | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.002100 | | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.000510 | | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.002300 | | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.000710 | | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.000520 | | U | U | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.000430 | | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | ~~0.000550~~ | 0.000530 | ~~U~~ | U | $, *10 |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.000290 | | U | U | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.001200 | | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.002500 | | U | U | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.000230 | | J | J | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000410 | | U | U | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.002700 | | | | |

OGDEN VALIDATED

LEVEL E D

HW 10-18-96

Revision I HW 10/25/96

A 000011

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC159

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIGW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2306

**Sample wt/vol:** 2.6400 L **Lab File ID:** 3,0723963,8,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 07/08/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 07/09/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 07/24/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup:** (Y/N) **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0723963,8,1 | | | | |
| 319846 | alpha-BHC | 0.000370 | | U | UJ | C |
| 3424826 | 2,4'-DDE | 0.000310 | | U | U | |
| 959988 | Endosulfan I | 0.000370 | | J | J | |
| Compound from Column: | RTX-5 | Lab File ID: 2,0723962,8,1 | | | | |
| 118741 | Hexachlorobenzene | 0.000890 | | | | |
| 319857 | beta-BHC | 0.003200 | | | | |
| 58899 | gamma-BHC (Lindane) | 0.006300 | | | | |
| 319868 | delta-BHC | 0.000280 | | U | UJ | C |
| 76448 | Heptachlor | 0.000400 | | U | U | |
| 309002 | Aldrin | 0.000490 | | U | U | |
| 5103742 | gamma-Chlordane | 0.000200 | | U | U | |
| 5103719 | alpha-Chlordane | 0.001100 | | | | |
| 5103731 | cis-Nonachlor | 0.000310 | | U | UKU | #11 |
| 39765805 | trans-Nonachlor | ~~0.001200~~ | 0.000300 | ~~UK~~ | U | $, #10 |
| 1024573 | Heptachlor epoxide | 0.000740 | | U | U | |
| 60571 | Dieldrin | 0.001200 | | | | |
| 72559 | 4,4'-DDE | 0.003200 | | | | |
| 53190 | 2,4'-DDD | 0.002000 | | | | |
| 72208 | Endrin | 0.000510 | | U | U | |
| 72548 | 4,4'-DDD | 0.004000 | | | | |
| 789026 | 2,4'-DDT | 0.000280 | | U | U | |
| 33216659 | Endosulfan II | 0.000540 | | U | | |
| 1031078 | Endosulfan sulfate | 0.000540 | | U | | |
| 50293 | 4,4'-DDT | 0.000650 | | U | | |
| 7421934 | Endrin aldehyde | 0.000280 | | U | | |
| 53494705 | Endrin ketone | 0.000280 | | U | | |
| 72435 | Methoxychlor | 0.000730 | | U | | |
| 2385855 | Mirex | 0.000210 | | U | U | |

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A000012

1D
PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC159

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIGW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2306

**Sample wt/vol:** 2.6400 L **Lab File ID:** 3,0723963,8,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 07/08/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 07/09/96

**Concentrated Extract Volume:** 0.5000 (mL) **Date Analyzed:** 07/24/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup:** (Y/N) **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0723963,8,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.000330 | | U | u | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.002400 | | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,0723962,8,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.006000 | | | | |
| 7012375 | PCB-28 (2,4,4') | 0.000920 | | U | u | |
| 35693993 | PCB-52 (2,2',5,5') | 0.002200 | | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.004400 | | | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.002600 | | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.002100 | | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.000510 | | U | u | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.002300 | | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.000710 | | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.000520 | | U | u | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.000430 | | U | u | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.000550 | 0.000530 | U~~X~~ | u | $, *10 |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.000290 | | U | u | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.001200 | | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.002500 | | U | u | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.000230 | | J | J | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000410 | | U | u | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.002700 | | | | |

OGDEN VALIDATED

LEVEL ED

10-18-96

A000011

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC159

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIGW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2306

**Sample wt/vol:** 2.6400 L **Lab File ID:** 3,0723963,8,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 07/08/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 07/09/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 07/24/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/L

| Cas No: | Compound | | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: DB-17 | | Lab File ID: 3,0723963,8,1 | | | | |
| 319846 | alpha-BHC | 0.000370 | | U | UJ | C |
| 3424826 | 2,4'-DDE | 0.000310 | | U | U | |
| 959988 | Endosulfan I | 0.000370 | | J | J | |
| Compound from Column: RTX-5 | | Lab File ID: 2,0723962,8,1 | | | | |
| 118741 | Hexachlorobenzene | 0.000890 | | | | |
| 319857 | beta-BHC | 0.003200 | | | | |
| 58899 | gamma-BHC (Lindane) | 0.006300 | | | | |
| 319868 | delta-BHC | 0.000280 | | U | UJ | C |
| 76448 | Heptachlor | 0.000400 | | U | U | |
| 309002 | Aldrin | 0.000490 | | U | U | |
| 5103742 | gamma-Chlordane | 0.000200 | | U | U | |
| 5103719 | alpha-Chlordane | 0.001100 | | | | |
| 5103731 | cis-Nonachlor | 0.000310 | | U | RKU | #11 |
| 39765805 | trans-Nonachlor | 0.001200 | 0.000300 | UJ | U | $, #10 |
| 1024573 | Heptachlor epoxide | 0.000740 | | U | U | |
| 60571 | Dieldrin | 0.001200 | | | | |
| 72559 | 4,4'-DDE | 0.003200 | | | | |
| 53190 | 2,4'-DDD | 0.002000 | | | | |
| 72208 | Endrin | 0.000510 | | U | U | |
| 72548 | 4,4'-DDD | 0.004000 | | | | |
| 789026 | 2,4'-DDT | 0.000280 | | U | U | |
| 33216659 | Endosulfan II | 0.000540 | | U | | |
| 1031078 | Endosulfan sulfate | 0.000540 | | U | | |
| 50293 | 4,4'-DDT | 0.000650 | | U | | |
| 7421934 | Endrin aldehyde | 0.000280 | | U | | |
| 53494705 | Endrin ketone | 0.000280 | | U | | |
| 72435 | Methoxychlor | 0.000730 | | U | | |
| 2385855 | Mirex | 0.000210 | | U | U | |

OGDEN VALIDATED

LEVEL ED

10-18-96

A000012

1D
PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC160

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIGW01

Matrix: (soil/water) WATER Lab Sample ID: 96B2307

Sample wt/vol: 2.6600 L Lab File ID: 3,0723963,9,1

% Moisture: decanted: (Y/N) Date Received: 07/08/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 07/09/96

Concentrated Extract Volume: 0.5000 (mL) Date Analyzed: 07/24/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/L

| Cas No: | Compound | ug/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: DB-17 | Lab File ID: 3,0723963,9,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.007600 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.002000 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.000610 | J | J | |
| Compound from Column: RTX-5 | Lab File ID: 2,0723962,9,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.005400 | | | |
| 7012375 | PCB-28 (2,4,4') | 0.000270 | J | J | |
| 35693993 | PCB-52 (2,2',5,5') | 0.000340 | U | u | |
| 41464395 | PCB-44 (2,2',3,5') | ~~0.001200~~ 0.000290 | u ~~J~~ | ↓ | $, *10 |
| 32598100 | PCB-66 (2,3',4,4') | 0.000280 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | ~~0.000310~~ 0.000350 | UJ ~~J~~ | ↓ | $, *10 |
| 32598133 | PCB-77 (3,3',4,4') | 0.000500 | U | u | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.000530 | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.001000 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.000510 | U | u | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.000420 | U | u | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.000650 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.000280 | U | u | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.000820 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.000530 | U | u | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000410 | U | u | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000490 | U | u | |

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LEVEL ED

HW 10-18-96

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A000013

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC160



**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIGW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2307

**Sample wt/vol:** 2.6600 L **Lab File ID:** 3,0723963,9,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 07/08/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 07/09/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 07/24/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup:** (Y/N) **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/L

| Cas No: | Compound | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0723963,9,1 | | | |
| 319846 | alpha-BHC | 0.000180 | J | J | C |
| 3424826 | 2,4'-DDE | 0.000310 | U | U | |
| 959988 | Endosulfan I | 0.000730 | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,0723962,9,1 | | | |
| 118741 | Hexachlorobenzene | 0.000180 | J | J | |
| 319857 | beta-BHC | 0.000240 | U | U | |
| 58899 | gamma-BHC (Lindane) | 0.001700 | | | |
| 319868 | delta-BHC | 0.000280 | U | UJ | C |
| 76448 | Heptachlor | ~~0.001100~~ 0.000400 | UN | U | $, *10 |
| 309002 | Aldrin | 0.000490 | U | U | |
| 5103742 | gamma-Chlordane | 0.000200 | U | ↓ | |
| 5103719 | alpha-Chlordane | 0.000430 | U | ↓ | |
| 5103731 | cis-Nonachlor | 0.000300 | U | UR | *11 |
| 39765805 | trans-Nonachlor | ~~0.000670~~ 0.000300 | UN | U | $, *10 |
| 1024573 | Heptachlor epoxide | 0.000740 | U | U | |
| 60571 | Dieldrin | 0.000360 | U | U | |
| 72559 | 4,4'-DDE | 0.001800 | | | |
| 53190 | 2,4'-DDD | 0.000890 | | | |
| 72208 | Endrin | 0.000510 | U | U | |
| 72548 | 4,4'-DDD | 0.003700 | | | |
| 789026 | 2,4'-DDT | 0.000280 | U | U | |
| 33216659 | Endosulfan II | ~~0.000920~~ 0.000540 | UN | U | $, *10 |
| 1031078 | Endosulfan sulfate | 0.000540 | U | ↓ | |
| 50293 | 4,4'-DDT | 0.000650 | U | ↓ | |
| 7421934 | Endrin aldehyde | 0.000280 | U | ↓ | |
| 53494705 | Endrin ketone | 0.000280 | U | ↓ | |
| 72435 | Methoxychlor | 0.000730 | U | ↓ | |
| 2385855 | Mirex | 0.000210 | U | U | |

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LEVEL ED

10-18-96

Revision I 10/25/96

A000011

# 1D
# PCB ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC160

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIGW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2307

**Sample wt/vol:** 2.6600 L **Lab File ID:** 3,0723963,9,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 07/08/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 07/09/96

**Concentrated Extract Volume:** 0.5000 (mL) **Date Analyzed:** 07/24/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0723963,9,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.007600 | | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.002000 | | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.000610 | | J | J | |
| Compound from Column: | RTX-5 | Lab File ID: 2,0723962,9,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.005400 | | | | |
| 7012375 | PCB-28 (2,4,4') | 0.000270 | | J | J | |
| 35693993 | PCB-52 (2,2',5,5') | 0.000340 | | U | u | |
| 41464395 | PCB-44 (2,2',3,5') | 0.001200 | 0.000290 | u ~~J~~ | ↓ | $, *10 |
| 32598100 | PCB-66 (2,3',4,4') | 0.000280 | | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.000310 | 0.000350 | u ~~J~~ | ↓ | $, *10 |
| 32598133 | PCB-77 (3,3',4,4') | 0.000500 | | U | u | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.000530 | | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.001000 | | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.000510 | | U | u | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.000420 | | U | u | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.000650 | | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.000280 | | U | u | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.000820 | | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.000530 | | U | u | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000410 | | U | u | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000490 | | U | u | |

11/12/96

OGDEN VALIDATED

LEVEL ED

10-18-96

A000013

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC160

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIGW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2307

**Sample wt/vol:** 2.6600 L **Lab File ID:** 3,0723963,9,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 07/08/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 07/09/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 07/24/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/L

| Cas No: | Compound | | | Q | REV QUAL | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0723963,9,1 | | | | |
| 319846 | alpha-BHC | 0.000180 | | J | J | C |
| 3424826 | 2,4'-DDE | 0.000310 | | U | u | |
| 959988 | Endosulfan I | 0.000730 | | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,0723962,9,1 | | | | |
| 118741 | Hexachlorobenzene | 0.000180 | | J | J | |
| 319857 | beta-BHC | 0.000240 | | U | u | |
| 58899 | gamma-BHC (Lindane) | 0.001700 | | | | |
| 319868 | delta-BHC | 0.000280 | | U | uJ | C |
| 76448 | Heptachlor | 0.001100 | 0.000400 | UN | u | $, *10 |
| 309002 | Aldrin | 0.000490 | | U | u | |
| 5103742 | gamma-Chlordane | 0.000200 | | U | | |
| 5103719 | alpha-Chlordane | 0.000430 | | U | | |
| 5103731 | cis-Nonachlor | 0.000300 | | U | UR u | *11 |
| 39765805 | trans-Nonachlor | 0.000670 | 0.000300 | UN | u | $, *10 |
| 1024573 | Heptachlor epoxide | 0.000740 | | U | u | |
| 60571 | Dieldrin | 0.000360 | | U | u | |
| 72559 | 4,4'-DDE | 0.001800 | | | | |
| 53190 | 2,4'-DDD | 0.000890 | | | | |
| 72208 | Endrin | 0.000510 | | U | u | |
| 72548 | 4,4'-DDD | 0.003700 | | | | |
| 789026 | 2,4'-DDT | 0.000280 | | U | u | |
| 33216659 | Endosulfan II | 0.000920 | 0.000540 | UN | u | $, *10 |
| 1031078 | Endosulfan sulfate | 0.000540 | | U | | |
| 50293 | 4,4'-DDT | 0.000650 | | U | | |
| 7421934 | Endrin aldehyde | 0.000280 | | U | | |
| 53494705 | Endrin ketone | 0.000280 | | U | | |
| 72435 | Methoxychlor | 0.000730 | | U | | |
| 2385855 | Mirex | 0.000210 | | U | u | |

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LEVEL ~~E~~ D

10-18-96

A000011

1D
# PCB ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC161

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIGW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2308RE

**Sample wt/vol:** 2.6000 L **Lab File ID:** 3,0730963,9,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 07/08/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 07/09/96

**Concentrated Extract Volume:** 0.5000 (mL) **Date Analyzed:** 07/31/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0730963,9,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.007000 | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,0730962,9,1 | | | |
| 37680652 | PCB-18 (2,2',5) | ~~0.002500~~ 0.000450 | UN | U | $, *10 |
| 7012375 | PCB-28 (2,4,4') | ~~0.005200~~ 0.000920 | UN | U | $, *10 |
| 35693993 | PCB-52 (2,2',5,5') | ~~0.009700~~ 0.000350 | UN | U | $, *10 |
| 41464395 | PCB-44 (2,2',3,5') | 0.000300 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.012000 | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.000360 | U | U | |
| 32598133 | PCB-77 (3,3',4,4') | 0.000510 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.000330 | U | U | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.008100 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.000530 | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.022000 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.000430 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.000540 | U | U | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.000290 | U | U | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.002700 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.003800 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.000510 | J | J | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000420 | U | U | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | ~~0.000098~~ 0.000500 | UJN | U | $, *10 |

**OGDEN VALIDATED**

**LEVEL ED**

10-18-96

Revision I HW 10/25/96

A000015

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC161

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIGW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2308RE

**Sample wt/vol:** 2.6000 L **Lab File ID:** 3,0730963,9,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 07/08/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 07/09/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 07/31/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup:** (Y/N) **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/L

| Cas No: | Compound | ug/L | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: DB-17 | Lab File ID: 3,0730963,9,1 | | | | | |
| 319846 | alpha-BHC | 0.000370 | | U | UJ | C |
| 3424826 | 2,4'-DDE | 0.000320 | | U | U | |
| 959988 | Endosulfan I | 0.000550 | | U | U | |
| Compound from Column: RTX-5 | Lab File ID: 2,0730962,9,1 | | | | | |
| 118741 | Hexachlorobenzene | 0.000330 | | U | U | |
| 319857 | beta-BHC | ~~0.035000~~ | 0.000250 | UN | U | $,*10 |
| 58899 | gamma-BHC (Lindane) | ~~0.003000~~ | 0.000270 | UN | U | $,*10 |
| 319868 | delta-BHC | 0.000290 | | U | UJ | C |
| 76448 | Heptachlor | 0.000410 | | U | U | |
| 309002 | Aldrin | 0.000500 | | U | | |
| 5103742 | gamma-Chlordane | 0.000200 | | U | | |
| 5103719 | alpha-Chlordane | 0.000440 | | U | | |
| 5103731 | cis-Nonachlor | 0.000310 | | U | UR | *11 |
| 39765805 | trans-Nonachlor | ~~0.007600~~ | 0.000310 | UN | U | $,*10 |
| 1024573 | Heptachlor epoxide | 0.000760 | | U | | |
| 60571 | Dieldrin | 0.000360 | | U | | |
| 72559 | 4,4'-DDE | 0.000180 | | U | | |
| 53190 | 2,4'-DDD | 0.000680 | | U | | |
| 72208 | Endrin | 0.000520 | | U | UJ | C |
| 72548 | 4,4'-DDD | 0.000440 | | U | U | |
| 789026 | 2,4'-DDT | 0.000290 | | U | | |
| 33216659 | Endosulfan II | 0.000550 | | U | | |
| 1031078 | Endosulfan sulfate | 0.000550 | | U | | |
| 50293 | 4,4'-DDT | 0.000660 | | U | | |
| 7421934 | Endrin aldehyde | 0.000290 | | U | | |
| 53494705 | Endrin ketone | 0.000290 | | U | | |
| 72435 | Methoxychlor | 0.000740 | | U | | |
| 2385855 | Mirex | 0.000220 | | U | U | |

OGDEN VALIDATED

LEVEL ZD

10-18-96

Revision I HCW 10/25/96

A000016

1D
# PCB ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC161

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIGW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2308RE

**Sample wt/vol:** 2.6000 L **Lab File ID:** 3,0730963,9,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 07/08/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 07/09/96

**Concentrated Extract Volume:** 0.5000 (mL) **Date Analyzed:** 07/31/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup:** (Y/N) **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/L

| Cas No: | Compound | | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: | 3,0730963,9,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.007000 | | | | |
| Compound from Column: | RTX-5 | Lab File ID: | 2,0730962,9,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.002500 | 0.000450 | UN | U | $, *10 |
| 7012375 | PCB-28 (2,4,4') | 0.005200 | 0.000920 | UN | U | $, *10 |
| 35693993 | PCB-52 (2,2',5,5') | 0.009700 | 0.000350 | UN | U | $, *10 |
| 41464395 | PCB-44 (2,2',3,5') | 0.000300 | | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.012000 | | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.000360 | | U | U | |
| 32598133 | PCB-77 (3,3',4,4') | 0.000510 | | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.000330 | | U | U | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.008100 | | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.000530 | | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.022000 | | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.000430 | | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.000540 | | U | U | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.000290 | | U | U | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.002700 | | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.003800 | | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.000510 | | J | J | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000420 | | U | U | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000098 | 0.000500 | UJN | U | $, *10 |

OGDEN VALIDATED

LEVEL ~~2~~ D

10-18-96

A000015

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC161

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIGW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2308RE

**Sample wt/vol:** 2.6000 L **Lab File ID:** 3,0730963,9,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 07/08/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 07/09/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 07/31/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/L

| Cas No: | Compound | | | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: DB-17 | | Lab File ID: 3,0730963,9,1 | | | | |
| 319846 | alpha-BHC | 0.000370 | | U | UJ | C |
| 3424826 | 2,4'-DDE | 0.000320 | | U | U | |
| 959988 | Endosulfan I | 0.000550 | | U | U | |
| Compound from Column: RTX-5 | | Lab File ID: 2,0730962,9,1 | | | | |
| 118741 | Hexachlorobenzene | 0.000330 | | U | U | |
| 319857 | beta-BHC | ~~0.035000~~ | 0.000250 | UN | U | $,*10 |
| 58899 | gamma-BHC (Lindane) | ~~0.003000~~ | 0.000270 | UN | U | $,*10 |
| 319868 | delta-BHC | 0.000290 | | U | UJ | C |
| 76448 | Heptachlor | 0.000410 | | U | U | |
| 309002 | Aldrin | 0.000500 | | U | | |
| 5103742 | gamma-Chlordane | 0.000200 | | U | | |
| 5103719 | alpha-Chlordane | 0.000440 | | U | | |
| 5103731 | cis-Nonachlor | 0.000310 | | U | UR | *H |
| 39765805 | trans-Nonachlor | 0.007600 | 0.000310 | UN | U | $,*10 |
| 1024573 | Heptachlor epoxide | 0.000760 | | U | | |
| 60571 | Dieldrin | 0.000360 | | U | | |
| 72559 | 4,4'-DDE | 0.000180 | | U | | |
| 53190 | 2,4'-DDD | 0.000680 | | U | | |
| 72208 | Endrin | 0.000520 | | U | UJ | C |
| 72548 | 4,4'-DDD | 0.000440 | | U | U | |
| 789026 | 2,4'-DDT | 0.000290 | | U | | |
| 33216659 | Endosulfan II | 0.000550 | | U | | |
| 1031078 | Endosulfan sulfate | 0.000550 | | U | | |
| 50293 | 4,4'-DDT | 0.000660 | | U | | |
| 7421934 | Endrin aldehyde | 0.000290 | | U | | |
| 53494705 | Endrin ketone | 0.000290 | | U | | |
| 72435 | Methoxychlor | 0.000740 | | U | | |
| 2385855 | Mirex | 0.000220 | | U | U | |

OGDEN VALIDATED

LEVEL /D

10-18-96

A000016

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC162

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIGW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2309

**Sample wt/vol:** 2.6150 L **Lab File ID:** 3,0723963,12,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 07/08/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 07/09/96

**Concentrated Extract Volume:** 0.5000 (mL) **Date Analyzed:** 07/24/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup:** (Y/N) **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0723963,12,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.000770 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.001600 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.000290 | J | J | |
| Compound from Column: | RTX-5 | Lab File ID: 2,0723962,12,1 | | | |
| 37680652 | PCB-18 (2,2',5) | ~~0.001900~~ 0.000440 | UJ | U | 3, *ID |
| 7012375 | PCB-28 (2,4,4') | 0.000320 | J | J | |
| 35693993 | PCB-52 (2,2',5,5') | 0.003300 | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.000900 | | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.000280 | U | U | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.004600 | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.000510 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.000330 | U | U | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.002800 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.000520 | U | U | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.000430 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.000790 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.000290 | U | U | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.000480 | J | J | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.000540 | U | U | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000420 | U | U | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000500 | U | U | |

OGDEN VALIDATED

LEVEL ED

10-18-96

A000017

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC162

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIGW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2309

**Sample wt/vol:** 2.6150 L **Lab File ID:** 3,0723963,12,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 07/08/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 07/09/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 07/24/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,0723963,12,1 | | | | | |
| 319846 | alpha-BHC | 0.000370 | | U | UJ | C |
| 3424826 | 2,4'-DDE | 0.000320 | | U | U | |
| 959988 | Endosulfan I | 0.000550 | | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,0723962,12,1 | | | | | |
| 118741 | Hexachlorobenzene | 0.000170 | | J | J | |
| 319857 | beta-BHC | 0.000240 | | U | U | |
| 58899 | gamma-BHC (Lindane) | ~~0.001200~~ | 0.000270 | UN | U | $, *10 |
| 319868 | delta-BHC | 0.000280 | | U | UJ | C |
| 76448 | Heptachlor | 0.000410 | | U | U | |
| 309002 | Aldrin | 0.000500 | | U | U | |
| 5103742 | gamma-Chlordane | 0.000200 | | U | U | |
| 5103719 | alpha-Chlordane | 0.000580 | | | | |
| 5103731 | cis-Nonachlor | 0.000310 | | U | UR | *11 |
| 39765805 | trans-Nonachlor | 0.000310 | | U | U | |
| 1024573 | Heptachlor epoxide | 0.000750 | | U | U | |
| 60571 | Dieldrin | 0.002000 | | | | |
| 72559 | 4,4'-DDE | 0.002600 | | | | |
| 53190 | 2,4'-DDD | 0.033000 | | | | |
| 72208 | Endrin | 0.000510 | | U | U | |
| 72548 | 4,4'-DDD | 0.098000 | | | | |
| 789026 | 2,4'-DDT | 0.000280 | | U | U | |
| 33216659 | Endosulfan II | ~~0.002900~~ | 0.000550 | UN | U | $, *10 |
| 1031078 | Endosulfan sulfate | 0.000550 | | U | U | |
| 50293 | 4,4'-DDT | 0.000660 | | U | U | |
| 7421934 | Endrin aldehyde | 0.000290 | | U | U | |
| 53494705 | Endrin ketone | 0.000290 | | U | U | |
| 72435 | Methoxychlor | ~~0.000320~~ | 0.000740 | UN | U | $, *10 |
| 2385855 | Mirex | 0.000160 | | J | J | |

OGDEN VALIDATED

LEVEL II D

10-18-96

A000018

# 1D
# PCB ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MC162

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIGW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2309

**Sample wt/vol:** 2.6150 L **Lab File ID:** 3,0723963,12,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 07/08/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 07/09/96

**Concentrated Extract Volume:** 0.5000 (mL) **Date Analyzed:** 07/24/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/L

| Cas No: | Compound | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0723963,12,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.000770 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.001600 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.000290 | J | J | |
| Compound from Column: | RTX-5 | Lab File ID: 2,0723962,12,1 | | | |
| 37680652 | PCB-18 (2,2',5) | ~~0.001900~~ 0.000440 | UX | U | $, *ID |
| 7012375 | PCB-28 (2,4,4') | 0.000320 | J | J | |
| 35693993 | PCB-52 (2,2',5,5') | 0.003300 | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.000900 | | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.000280 | U | U | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.004600 | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.000510 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.000330 | U | U | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.002800 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.000520 | U | U | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.000430 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.000790 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.000290 | U | U | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.000480 | J | J | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.000540 | U | U | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000420 | U | U | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000500 | U | U | |

OGDEN VALIDATED

LEVEL ~~2~~ D

10-18-96

A000017

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC162

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIGW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2309

**Sample wt/vol:** 2.6150 L **Lab File ID:** 3,0723963,12,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 07/08/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 07/09/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 07/24/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/L

| Cas No: | Compound | | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: DB-17 | Lab File ID: 3,0723963,12,1 | | | | | |
| 319846 | alpha-BHC | 0.000370 | | U | UJ | C |
| 3424826 | 2,4'-DDE | 0.000320 | | U | U | |
| 959988 | Endosulfan I | 0.000550 | | U | U | |
| Compound from Column: RTX-5 | Lab File ID: 2,0723962,12,1 | | | | | |
| 118741 | Hexachlorobenzene | 0.000170 | | J | J | |
| 319857 | beta-BHC | 0.000240 | | U | U | |
| 58899 | gamma-BHC (Lindane) | ~~0.001200~~ | 0.000270 | UN | U | $, *10 |
| 319868 | delta-BHC | 0.000280 | | U | UJ | C |
| 76448 | Heptachlor | 0.000410 | | U | U | |
| 309002 | Aldrin | 0.000500 | | U | U | |
| 5103742 | gamma-Chlordane | 0.000200 | | U | U | |
| 5103719 | alpha-Chlordane | 0.000580 | | | | |
| 5103731 | cis-Nonachlor | 0.000310 | | U | UR ~~U~~ | *11 |
| 39765805 | trans-Nonachlor | 0.000310 | | U | U | |
| 1024573 | Heptachlor epoxide | 0.000750 | | U | U | |
| 60571 | Dieldrin | 0.002000 | | | | |
| 72559 | 4,4'-DDE | 0.002600 | | | | |
| 53190 | 2,4'-DDD | 0.033000 | | | | |
| 72208 | Endrin | 0.000510 | | U | U | |
| 72548 | 4,4'-DDD | 0.098000 | | | | |
| 789026 | 2,4'-DDT | 0.000280 | | U | U | |
| 33216659 | Endosulfan II | ~~0.002900~~ | 0.000550 | UN | U | $, *10 |
| 1031078 | Endosulfan sulfate | 0.000550 | | U | U | |
| 50293 | 4,4'-DDT | 0.000660 | | U | U | |
| 7421934 | Endrin aldehyde | 0.000290 | | U | U | |
| 53494705 | Endrin ketone | 0.000290 | | U | U | |
| 72435 | Methoxychlor | 0.000320 | 0.000740 | UN | U | $, *10 |
| 2385855 | Mirex | 0.000160 | | J | J | |

OGDEN VALIDATED

LEVEL 1D

10 18 96

A000018

OGDEN

# DATA VALIDATION REPORT

CLEAN CONTRACT TASK ORDER #136
NAF Midway Site Investigations

ANALYSIS: PESTICIDES/PCB CONGENERS
SAMPLE DELIVERY GROUP: OMISW01

Prepared by

Ogden—Denver Operations
550 South Wadsworth Boulevard, Suite 500
Lakewood, Colorado 80226

# CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

Ogden Environmental and Energy Services Co., Inc.
550 South Wadsworth Boulevard
Suite 500
Lakewood, CO 80226

Package ID: C136PP59
Task Order: 1101901 36
SDG No.: OMISW01
No. of Analyses: 21

Laboratory: A.D. Little
Reviewer: H. White
Analysis/Method: Pesticides/PCB Congeners

Date: 12-16-96
Reviewer's Signature: Heidi A. White

| ACTION ITEMS[a] | |
|---|---|
| 1. Case Narrative Deficiencies | |
| 2. Out of Scope Analyses | |
| 3. Analyses Not Conducted | |
| 4. Missing Hardcopy Deliverables | |
| 5. Incorrect Hardcopy Deliverables | ~~Samples~~ Target analytes reported as tentatively identified by lab w/out confirmation |
| 6. Deviations from Analysis Protocol, e.g., | - ICV / CCV % RSDs exceeded QC limits - samples qualified for endrin, 4,4'-DDT, alpha-BHC |
| Holding Times | - Blank contamination noted for PCB 138 - samples qualified |
| GC/MS Tune/Inst. Perform | |
| Calibrations | - Cis-nonachlor not evaluated - see section #10 |
| Blanks | |
| Surrogates | - PCB-44 for sample MV01S exceeded linear range - |
| Matrix Spike/Dup LCS | See section #11 |
| Field QC | |
| Internal Standard Performance | |
| Compound Identification and Quantitation | |
| System Performance | |

| COMMENTS[b] |
|---|
| |

[a] Subcontracted analytical laboratory is not meeting contract and/or method requirements.
[b] Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.

# 1. INTRODUCTION

| | |
|---|---|
| Task Order Title: | NAF Midway Site Investigations |
| CLEAN Contract Task Order #: | 0136 |
| SDG#: | OMISW01 |
| CTO Manager: | J. Cotter |
| Project Contact: | M. Medeiros |
| Matrix: | Water |
| Analysis: | Pesticides/PCB Congeners |
| NEESA QC Level: | D |
| No. of Samples: | 21 |
| No. of Reanalyses/Dilutions: | 1 |
| Reviewer: | H. White |
| Date of Review: | December 13, 1996 |

The samples listed in Table 1 were validated based on the NOAA National Status and Trends Analytical Protocols, data validation procedure for Levels C and D pesticides/PCBs (DVP-4, Rev. 2) and the *National Functional Guidelines For Organic Data Review* (2/94). These protocols vary from the CLP Protocols upon which the Navy CLEAN data validation procedures were based. Instances where quality control parameters vary from the CLP Data Validation procedures are documented in the text of this report and should be noted with respect to the overall data quality objectives of this project. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in estimated value were not denoted by a qualification code since the data had already been rejected.

**Table 1. Sample identification**

| Client ID | EPA ID | Laboratory ID | Matrix | COC Method |
|---|---|---|---|---|
| M99SW01S01 | MV005 | 96B2938 | water | STIV141C/E |
| M99SW05S01 | MV008 | 96B2939 | water | STIV141C/E |
| M01SW01S01 | MC178 | 96B2940 | water | STIV141C/E |
| M01SW03S01 | MC179 | 96B2941 | water | STIV141C/E |
| M99SW07S01 | MV009 | 96B2942 | water | STIV141C/E |
| M99QW02E01 | MV012 | 96B2943 | water | STIV141C/E |
| M99QW03E01 | MV013 | 96B2944 | water | STIV141C/E |
| M99SW03D01 | MV007 | 96B2945 | water | STIV141C/E |
| M01SW07S01 | MC181 | 96B2946 | water | STIV141C/E |
| M01SW07D01 | MC182 | 96B2947 | water | STIV141C/E |
| M01SW05S01 | MC180 | 96B2948 | water | STIV141C/E |
| M99SW03S01 | MV006 | 96B2949 | water | STIV141C/E |
| M00SW030S1 | MA706 | 96B2881 | water | STIV141C/E |
| M99QW01F01 | MV010 | 96B2883 | water | STIV141C/E |
| M99QW01E01 | MV011 | 96B2884 | water | STIV141C/E |
| M01SW09S01 | MC183 | 96B2885 | water | STIV141C/E |
| M01SW11S01 | MC184 | 96B2886 | water | STIV141C/E |
| M00SW03D01 | MA715 | 96B2887 | water | STIV141C/E |
| M00SW01S01 | MA705 | 96B2888 | water | STIV141C/E |
| M01QW01E01 | MC187 | 96B2889 | water | STIV141C/E |
| M99PW02S01 | MV015 | 96B2897 | water | STIV141C/E |
| M99PW02S01 | MV015DL | 96B2897DL | water | STIV141C/E |

# 2. DATA VALIDATION FINDINGS

## 2.1 SAMPLE MANAGEMENT

The following are findings associated with sample management:

### 2.1.1 Sample Preservation, Handling, and Transport

No preservations were required for pesticide/PCB analysis. Fifteen samples in this SDG were received by the laboratory outside temperature limits established in NEESA 20.2-047B. No samples were noted to be broken upon arrival at the laboratory. No qualifications were required.

### 2.1.2 Chain of Custody

All COCs were legible and complete. All COCs were signed by laboratory and field personnel. Other questions regarding sample conditions were answered on the COCs. Twenty one samples were assigned to this SDG. The recommended number of samples per SDG is twenty. No qualifications were required based on sample receipt information.

### 2.1.3 Holding Times

All samples in this SDG were extracted and analyzed within the prescribed seven day holding time for waters; therefore, no qualifications were required.

## 2.2 PESTICIDES INSTRUMENT PERFORMANCE

No percent resolution or endrin/4,4'-DDT degradation analyses were performed by the laboratory, as required by the CLP SOW (3/90). These analyses have not been established in the Status and Trends protocols; therefore, no evaluation was given to the data based on percent resolution or breakdown degradation. PCBs 103 and 198 were used as the surrogates for this SDG, while tetrachloro-m-xylene served as the internal standard. All target analytes were quantified versus the internal standard recovery. No surrogate or internal standard retention time window was specified in the Status and Trends protocols. The laboratory established a window of $\pm 0.075$ or 0.15 minutes Based on professional judgement, the reviewer considered this an acceptable range. The surrogate and internal standard compounds were within the absolute retention time windows established with initial calibration standards. The retention time for all target compounds was established by the laboratory at $\pm 0.075$ minutes, although some windows were reduced or expanded for proper peak identification. In these instances, the reviewer deemed the retention time windows to be acceptable. All continuing calibration standards had retention times within the retention time windows established with the initial calibration standards. No qualifications of the data were required.

## 2.3 CALIBRATION

### 2.3.1 Analytical Sequence

The laboratory modified the analytical sequence from the Status and Trends protocols. The laboratory analyzed an initial five-point calibration with subsequent mid-level calibration standards analyzed for every ten field samples, and at the end of each sequence. Status and Trends protocols suggested a four-point calibration be interspersed with samples and no more than six samples be analyzed in between calibration standards. The laboratory modifications were considered acceptable by the reviewer; therefore, no qualifications were required.

### 2.3.2 Initial Calibration

The NOAA Status and Trends used a correlation coefficient (r) to determine the accuracy of initial calibrations. The laboratory deviated from the protocols by measuring the %RSDs from relative response factors for each initial calibration. The laboratory established the %RSD must be less than or equal to 25% for 90% of all compounds and less than or equal to 35% for all compounds. The reviewer used a QC criterion of 25% for all compounds for the %RSDs.

All initial calibrations met the %RSD criterion for all analytes on the RTX-5 column. Alpha-BHC and 4,4'-DDT exceeded the QC criterion for the initial calibration performed on 9/27/96 for the DB-17 column. Alpha-BHC and 4,4'-DDT were qualified as estimate nondetects, "UJ," for all site samples except MV015DL. Endrin exceeded the QC criterion for the initial calibration initiated on 10/9/96 for the DB-17 column. The endrin detect for sample MV015DL was qualified as estimated, "J." No further qualifications were assigned to the data.

### 2.3.3 Continuing Calibration

No QC limits have been established for continuing calibration standards by the Status and Trends protocols. The laboratory established a %D less than or equal to 25% for 90% of the target compounds and less than or equal to 35% for all compounds. For validation purposes, the reviewer used a QC criterion of 25% for the %Ds. All continuing calibration standard %Ds reported from the RTX-5 column were within the QC limits. The %Ds for 4,4'-DDT from the continuing calibrations performed on 9/29/96 at 0924 and 10/10/96 at 1501 exceeded the QC criterion for the DB-17 column. Detects for 4,4'-DDT were qualified as estimated, "J" and nondetects as "UJ" for all site samples. The reviewer noted that the DB-17 Form VII for the continuing calibration performed on 10/10/96 contained an incorrect analysis date and time. The correct analysis date and time were taken from the associated raw data. No further qualifications were required.

## 2.4 BLANKS

### 2.4.1 Instrument Blanks

No instrument blanks were analyzed for this SDG. NOAA Status and Trends protocols do not suggest the analysis of instrument blanks; therefore, no evaluation of the data was given based on instrument blanks.

### 2.4.2 Method Blanks

NOAA Status and Trends protocols suggested method blanks were acceptable if no target compound detects were found 3X above the MDLs. The laboratory further qualified the QC limits for blanks, stating that no more than 2 target analytes could exceed 3X the MDLs. Because the reporting limits and the MDLs were the same for this SDG (see Section 2.11), the reviewer chose a more conservative QC criteria. The CLP SOW (3/90) criteria for method blanks was used to evaluate the data. Validation procedures were based on the Ogden DVP-4, Revision 2, which states no target compounds above the reporting limits.

Two water method blanks were analyzed with this SDG. PCB-138 was detected in both method blanks at 0.00074 $\mu$g/L and 0.00079 $\mu$g/L. PCB-138 was qualified as "UJ" in all samples except MV015 and MV015DL. In addition, PCB-8 was detected below the reporting limit but above ½ the MDL in method blank SWMBLK002. No further qualifications were deemed necessary by the reviewer.

## 2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

The laboratory analyzed two laboratory control samples (LCS) in lieu of a blank spike/blank spike duplicate. The QC criteria established to evaluate the matrix spike/ matrix spike duplicate was used by the laboratory for the LCS. Because the Status and Trends protocols did not address LCSs and the established limits were stricter than those in the CLP SOW (3/90), the reviewer deemed the limits acceptable. All target analytes met the QC criteria; therefore, no qualifications were required.

## 2.6 SURROGATE RECOVERY

The laboratory established surrogate recovery QC limits that were stricter than those applied in the Status and Trends protocols. Surrogate recoveries were calculated and reported for the RTX-5 column only; therefore, surrogate recovery evaluation was limited to the data from the RTX-5 column. All surrogate recoveries were within QC limits of 50 to 125 percent. In addition to surrogates PCB-103 and PCB-198, the laboratory identified an additional surrogate, 4,4'-dibromo-octafluoro-biphenyl (DBOFB). Percent recoveries for DBOFB were reported in the raw data, but not on the summary forms. No historical data or QC limits were provided for DBOFB; therefore, recoveries for DBOFB were not evaluated by the reviewer

## 2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

The MS/MSD analyses were performed on samples MV007 and MA715. Matrix spike recoveries were recalculated from the raw data. No transcription or calculation errors were noted. All target compounds were within established QC limits of 50 to 125 percent; therefore, no qualifications were required. The reviewer noted that the QC limits for MS/MSD results were stricter than those in the Status and Trends protocols.

## 2.8 SAMPLE CLEANUP PERFORMANCE

No cleanup procedures were performed on the samples in this SDG. Review of the raw data found no evidence to suggest cleanup procedures were necessary. Because Status and Trends protocols did not establish criteria for cleanup procedures, no evaluation of the data was given based on cleanup performance.

## 2.9 FIELD QC SAMPLES

Field QC samples are evaluated, and if necessary, qualified based only on method blanks. Any remaining detects are used to evaluate the associated samples. The following are findings associated with field QC samples:

### 2.9.1 Field Blanks and Equipment Rinsates

The CTO 136 Analytical Summary Table identify no field blanks or equipment rinsates associated with this SDG; therefore, the data was not evaluated with respect to field QC.

### 2.9.2 Field Duplicates

Samples MV006/MV007, MC181/MC182, and MA706/MA715 were the field duplicate samples associated with this SDG. A low level detect for PCB-170 was identified in MV006 but not in MV007. Hexachlorobenzene and gamma-BHC were detected in MA715, not in MA706. All additional detects had RPDs of 50% or less. No qualifications are assigned to the data based on field duplicate results.

## 2.10 COMPOUND IDENTIFICATION

Compound identification was performed by the reviewer. Possible false negative detects were eliminated upon examination of the chromatograms and quantitation sheets by the reviewer. All detected analytes were confirmed by second column confirmation. Some samples exhibited elevated baselines occurring after 65 minutes into the run. Based on the surrogate recovery for PCB 198 and a comparison of raw data to chromatograms from low level standards, the reviewer determined that target analyte peaks, if present, could be identified.

The laboratory quantitated several compounds without second column confirmation. These compounds were qualified by the laboratory as "NJ" or "N." In addition, several compounds were reported below the reporting limit and at levels less than ½ the MDL. These compounds were qualified by the laboratory as "J." Upon review of the raw data and based on professional judgement, the reviewer identified all compounds quantified from a single column and several "J" compounds reported by the laboratory as false positives. The reporting concentrations were changed to the reporting limits and the qualifiers changed to nondetects, "U."

Cis-nonachlor was reported on the Form Is for all samples; however, cis-nonachlor was not identified as a target compound. As a result, the cis-nonachlor was not validated. No qualifications were required.

## 2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantification was verified in the samples in this SDG. No %Ds between two the columns were calculated or reported for target analyte detects. The RTX-5 column served as the primary column for all target compounds, with the exception of PCB 8, alpha-BHC, endosulfan I, 2,4'-DDE and in most cases, PCB-138, which were quantified from the DB-17 column. The confirmation column was used for confirmation of analytes and no quantification occurred from the column. Review of the raw data confirmed that target analytes were present on both columns and quantification was performed on the correct primary column; therefore no evaluation was given to %D information. Several compound were detected but at a level less than the reporting limits and above the MDL. Raw data was reviewed to eliminate the potential for false positives. These compounds were qualified as estimated "J."

Due to high concentrations of target analytes, MV015 was reanalyzed at a 50-fold dilution. With the exception of PCB-44, all target compounds exceeding the linear range in sample MV015 were rejected, "R." PCB-44 exceeded the linear range in sample MV015, but was below the reporting limit in MV015DL. As a result, PCB-44 was rejected, "R" in sample MV015DL and was qualified as estimated, "J" in sample MV015. Target compounds reported below the reporting limit in sample MV015DL were rejected, "R" in favor of results reported from MV015.

Because no CRQL limits have been established for these methods, CRQLs were determined by an MDL study performed by the laboratory. Copies of the MDL study were included with the raw data. Verification of the raw data confirmed the correct CRQLs were applied. No qualifications were required.

Sample MV015 was identified as a performance evaluation sample. The results are summarized in the following table:

| Analyte | Certified Value (µg/L) | Advisory Range (µg/L) | Laboratory Result (µg/L) |
|---|---|---|---|
| Aldrin | 10 | N/A | 0.22 |
| Alpha-BHC | 10 | N/A | 3.7 |
| Beta-BHC | 10 | N/A | 2.7 |

| Analyte | Certified Value (µg/L) | Advisory Range (µg/L) | Laboratory Result (µg/L) |
|---|---|---|---|
| Delta-BHC | 10 | N/A | 3.7 * |
| Gamma-BHC | 10 | N/A | 3.6 * |
| 4,4'-DDT | 10 | N/A | 0.17 * |
| Endrin | 10 | N/A | 0.91 * |
| Heptachlor | 10 | N/A | 0.29 * |
| 4,4'-DDD | 10 | N/A | 1.2 * |
| 4,4'-DDE | 10 | N/A | 0.87 * |
| Dieldrin | 10 | N/A | 1.8 * |
| Endosulfan I | 10 | N/A | 1.7 * |
| Endosulfan II | 10 | N/A | 2.0 * |
| Endosulfan sulfate | 10 | N/A | 2.7 * |
| Endrin aldehyde | 10 | N/A | 1.8 * |
| Heptachlor epoxide | 10 | N/A | 2.1 * |
| PCB-28 | 10 | N/A | 1.8 * |
| PCB-52 | 10 | N/A | 1.8 * |
| PCB-101 | 10 | N/A | 1.7 * |
| PCB-118 | 10 | N/A | 1.9 * |
| PCB-138 | 10 | N/A | 1.8 * |
| PCB-153 | 10 | N/A | 1.9 * |
| PCB-180 | 10 | N/A | 1.8 * |

N/A - Not applicable, advisory limits were not provided

1D
PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA705

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMISW01

Matrix: (soil/water) WATER Lab Sample ID: 96B2888

Sample wt/vol: 2.6400 L Lab File ID: 3,0927963,38,1

% Moisture: decanted: (Y/N) Date Received: 09/16/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 09/16/96

Concentrated Extract Volume: 0.5000 (mL) Date Analyzed: 09/29/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/L

| Cas No: | Compound | | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: | 3,0927963,38,1 | | | |
| 34883437 | PCB-8 (2,4') | ~~0.002100~~ 0.000330 | UN | | u | + |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.000600 | | | uJ | B |
| Compound from Column: | RTX-5 | Lab File ID: | 2,0927962,38,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.000440 | | U | u | |
| 7012375 | PCB-28 (2,4,4') | 0.000920 | | U | | |
| 35693993 | PCB-52 (2,2',5,5') | 0.000340 | | U | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.000290 | | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.000280 | | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.000350 | | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.000510 | | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.000330 | | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.000230 | | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.000520 | | U | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.000430 | | U | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.000530 | | U | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.000290 | | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.000670 | | U | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.002500 | | U | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.000540 | | U | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000410 | | U | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000500 | | U | | |

OGDEN VALIDATED
LEVEL D

12/9/96

1D
# PCB ORGANICS ANALYSIS DATA SHEET



**EPA SAMPLE NO.**
MA706

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2881

**Sample wt/vol:** 2.6200 L **Lab File ID:** 3,0927963,27,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/16/96

**Concentrated Extract Volume:** 0.5000 (mL) **Date Analyzed:** 09/29/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup:** (Y/N) **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/L

| Cas No: | Compound | | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| ompound from Column: | DB-17 | Lab File ID: | 3,0927963,27,1 | | | |
| 4883437 | PCB-8 (2,4') | ~~0.002700~~ | 0.000340 | UX | U | + |
| 5065282 | PCB-138 (2,2',3,4,4',5') | 0.000850 | | | UJ | B |
| ompound from Column: | RTX-5 | Lab File ID: | 2,0927962,27,1 | | | |
| 7680652 | PCB-18 (2,2',5) | 0.000440 | | U | U | |
| 012375 | PCB-28 (2,4,4') | 0.000930 | | U | | |
| 5693993 | PCB-52 (2,2',5,5') | 0.000350 | | U | | |
| 1464395 | PCB-44 (2,2',3,5') | 0.000300 | | U | | |
| 2598100 | PCB-66 (2,3',4,4') | 0.000280 | | U | | |
| 7680732 | PCB-101 (2,2',3,5,5') | 0.000360 | | U | | |
| 2598133 | PCB-77 (3,3',4,4') | 0.000510 | | U | | |
| 1508006 | PCB-118 (2,3',4,4',5) | 0.000330 | | U | | |
| 5065271 | PCB-153 (2,2',4,4',5,5') | 0.000230 | | U | | |
| 2598144 | PCB-105 (2,3,3',4,4') | 0.000520 | | U | | |
| 7465288 | PCB-126 (3,3',4,4',5) | 0.000430 | | U | | |
| 2663680 | PCB-187 (2,2',3,4',5,5',6) | 0.000540 | | U | | |
| 8380073 | PCB-128 (2,2',3,3',4,4') | 0.000290 | | U | | |
| 6065293 | PCB-180 (2,2',3,4,4',5,5') | 0.000670 | | U | | |
| 5065306 | PCB-170 (2,2',3,3',4,4',5) | 0.002500 | | U | | |
| 2663782 | PCB-195 (2,2',3,3',4,4',5,6) | ~~0.000030~~ | 0.000540 | UX | | + |
| 0186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000420 | | U | | |
| 051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000500 | | U | | |

**OGDEN VALIDATED**

**LEVEL D**

12/9/96

1D
PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA715



**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2887

**Sample wt/vol:** 2.6400 L **Lab File ID:** 3,0927963,35,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/16/96

**Concentrated Extract Volume:** 0.5000 (mL) **Date Analyzed:** 09/29/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/L

| Cas No: | Compound | | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0927963,35,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.000330 | U | u | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.000630 | | UJ | B |
| Compound from Column: | RTX-5 | Lab File ID: 2,0927962,35,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.000440 | U | u | |
| 7012375 | PCB-28 (2,4,4') | 0.000920 | U | | |
| 35693993 | PCB-52 (2,2',5,5') | 0.000340 | U | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.000290 | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.000280 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.000350 | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.000510 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.000330 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.000230 | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.000520 | U | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.000430 | U | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.000530 | U | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.000290 | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.000670 | U | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.002500 | U | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.000540 | U | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000410 | U | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000500 | U | | |

**OGDEN VALIDATED**

**LEVEL D**

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC178

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2940

**Sample wt/vol:** 2.2400 L **Lab File ID:** 3,0927963,11,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/23/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/24/96

**Concentrated Extract Volume:** 0.5000 (mL) **Date Analyzed:** 09/28/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,0927963,11,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.000390 | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.001100 | | UJ | B |
| Compound from Column: | RTX-5 Lab File ID: 2,0927962,11,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.000520 | U | U | |
| 7012375 | PCB-28 (2,4,4') | 0.001100 | U | | |
| 35693993 | PCB-52 (2,2',5,5') | ~~0.000230~~ 0.000400 | U ~~N~~ | | + |
| 41464395 | PCB-44 (2,2',3,5') | 0.000350 | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.000330 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | ~~0.000430~~ 0.000410 | U ~~N~~ | | + |
| 32598133 | PCB-77 (3,3',4,4') | 0.000600 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.000390 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.001100 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.000610 | U | U | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.000500 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.000470 | J | UJ | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.000340 | U | U | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.000830 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | ~~0.000500~~ 0.002900 | ~~U~~ | ~~U~~ U | + |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.000630 | U | U | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000490 | U | U | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000580 | U | U | |

**OGDEN VALIDATED**

**LEVEL D**

12/3/96

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC179

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2941

**Sample wt/vol:** 2.1000 L **Lab File ID:** 3,0927963,12,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/23/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/24/96

**Concentrated Extract Volume:** 0.5000 (mL) **Date Analyzed:** 09/28/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup:** (Y/N) **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0927963,12,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.000410 | | U | u | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.000870 | | | uJ | B |
| Compound from Column: | RTX-5 | Lab File ID: 2,0927962,12,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.000550 | | U | u | |
| 7012375 | PCB-28 (2,4,4') | 0.001200 | | U | | |
| 35693993 | PCB-52 (2,2',5,5') | 0.000430 | | U | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.000370 | | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.000350 | | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.000440 | | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.000640 | | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.000410 | | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.000290 | | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | ~~0.000400~~ | 0.000640 | u ~~U~~ | | + |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.000540 | | U | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.000670 | | U | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.000360 | | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.000840 | | U | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.003200 | | U | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.000680 | | U | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000520 | | U | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000620 | | U | | |

**OGDEN VALIDATED**

**LEVEL D**

12/31/96

1D
# PCB ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC180

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2948

**Sample wt/vol:** 2.1500 L **Lab File ID:** 3,0927963,23,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/23/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/24/96

**Concentrated Extract Volume:** 0.5000 (mL) **Date Analyzed:** 09/28/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | | Concentration Units: (ug/L or ug/Kg) ug/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0927963,23,1 | | | | |
| 34883437 | PCB-8 (2,4') | | 0.000400 | U | u | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | | 0.000790 | | uJ | B |
| Compound from Column: | RTX-5 | Lab File ID: 2,0927962,23,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | | 0.000540 | U | u | |
| 7012375 | PCB-28 (2,4,4') | | 0.001100 | U | | |
| 35693993 | PCB-52 (2,2',5,5') | | ~~0.000180~~ 0.000120 | u ~~N~~ | | + |
| 41464395 | PCB-44 (2,2',3,5') | | 0.000360 | U | | |
| 32598100 | PCB-66 (2,3',4,4') | | 0.000350 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | | ~~0.000250~~ 0.000430 | u ~~N~~ | | + |
| 32598133 | PCB-77 (3,3',4,4') | | 0.000620 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | | 0.000400 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | | 0.000280 | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | | 0.000640 | U | | |
| 57465288 | PCB-126 (3,3',4,4',5) | | 0.000520 | U | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | | 0.000650 | U | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | | 0.000350 | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.000820 | ~~0.000130~~ ~~0.000330~~ | ~~U~~ | | + |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | | 0.003100 | U | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | | 0.000660 | U | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | | 0.000510 | U | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | | 0.000610 | U | | |

**OGDEN VALIDATED**
**LEVEL D**

12-3-96

1D
PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC181



Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMISW01

Matrix: (soil/water) WATER Lab Sample ID: 96B2946

Sample wt/vol: 2.1600 L Lab File ID: 3,0927963,21,1

% Moisture: decanted: (Y/N) Date Received: 09/23/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 09/24/96

Concentrated Extract Volume: 0.5000 (mL) Date Analyzed: 09/28/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/L

| Cas No: | Compound | | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| ompound from Column: | DB-17 | Lab File ID: | 3,0927963,21,1 | | | |
| 4883437 | PCB-8 (2,4') | ~~0.001100~~ | 0.000410 | U ~~X~~ | U | + |
| 5065282 | PCB-138 (2,2',3,4,4',5') | 0.000800 | | | UJ | B |
| ompound from Column: | RTX-5 | Lab File ID: | 2,0927962,21,1 | | | |
| 7680652 | PCB-18 (2,2',5) | 0.000540 | | U | U | |
| 012375 | PCB-28 (2,4,4') | 0.001100 | | U | | |
| 5693993 | PCB-52 (2,2',5,5') | ~~0.000370~~ | 0.000420 | U ~~X~~ | | + |
| 1464395 | PCB-44 (2,2',3,5') | 0.000360 | | U | | |
| 2598100 | PCB-66 (2,3',4,4') | 0.000340 | | U | | |
| 7680732 | PCB-101 (2,2',3,5,5') | 0.000430 | | U | | |
| 2598133 | PCB-77 (3,3',4,4') | 0.000620 | | U | | |
| 1508006 | PCB-118 (2,3',4,4',5) | 0.000400 | | U | | |
| 5065271 | PCB-153 (2,2',4,4',5,5') | 0.000280 | | U | | |
| 2598144 | PCB-105 (2,3,3',4,4') | 0.000630 | | U | | |
| 7465288 | PCB-126 (3,3',4,4',5) | 0.000520 | | U | | |
| 2663680 | PCB-187 (2,2',3,4',5,5',6) | 0.000650 | | U | | |
| 8380073 | PCB-128 (2,2',3,3',4,4') | 0.000350 | | U | | |
| 6065293 | PCB-180 (2,2',3,4,4',5,5') | ~~0.000160~~ | 0.000810 | ~~J~~ U | ~~J~~ U | + |
| 5065306 | PCB-170 (2,2',3,3',4,4',5) | 0.003100 | | U | U | |
| 2663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.000660 | | U | | |
| 0186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000510 | | U | | |
| 051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000610 | | U | | |

OGDEN VALIDATED

LEVEL D

12-3-96

1D
PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC182



Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMISW01

Matrix: (soil/water) WATER Lab Sample ID: 96B2947

Sample wt/vol: 2.2000 L Lab File ID: 3,0927963,22,1

% Moisture: decanted: (Y/N) Date Received: 09/23/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 09/24/96

Concentrated Extract Volume: 0.5000 (mL) Date Analyzed: 09/28/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/L

| Cas No: | Compound | | | Q | REV QUAL | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0927963,22,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.000400 | | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.000710 | | | UJ | B |
| Compound from Column: | RTX-5 | Lab File ID: 2,0927962,22,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.000530 | | U | U | |
| 7012375 | PCB-28 (2,4,4') | 0.001100 | | U | | |
| 35693993 | PCB-52 (2,2',5,5') | 0.000410 | | U | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.000350 | | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.000340 | | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | ~~0.000180~~ | 0.000420 | U ~~N~~ | | + |
| 32598133 | PCB-77 (3,3',4,4') | 0.000610 | | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.000400 | | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.000270 | | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.000620 | | U | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.000510 | | U | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.000640 | | U | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.000340 | | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | ~~0.000110~~ | 0.000800 | U ~~N~~ | ~~J~~U | + |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.003000 | | U | U | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.000650 | | U | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000500 | | U | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000590 | | U | | |

OGDEN VALIDATED
LEVEL D

12-3-96

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC183

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2885

**Sample wt/vol:** 2.6400 L **Lab File ID:** 3,0927963,33,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/16/96

**Concentrated Extract Volume:** 0.5000 (mL) **Date Analyzed:** 09/29/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup:** (Y/N) **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0927963,33,1 | | | | |
| 34883437 | PCB-8 (2,4') | | 0.000330 | U | u | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | | 0.000620 | | uJ | B |
| Compound from Column: | RTX-5 | Lab File ID: 2,0927962,33,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | | 0.001400 | | | |
| 7012375 | PCB-28 (2,4,4') | | 0.000920 | U | u | |
| 35693993 | PCB-52 (2,2',5,5') | | 0.000340 | U | | |
| 41464395 | PCB-44 (2,2',3,5') | | 0.000290 | U | | |
| 32598100 | PCB-66 (2,3',4,4') | | 0.000280 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | | 0.000350 | U | | |
| 32598133 | PCB-77 (3,3',4,4') | | 0.000510 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | | 0.000330 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | | 0.000230 | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | | 0.000520 | U | | |
| 57465288 | PCB-126 (3,3',4,4',5) | | 0.000430 | U | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | | 0.000530 | U | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | | 0.000290 | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.000670 | ~~0.000190~~ ~~0.000290~~ | ~~UN~~ | | + |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | | ~~0.000095~~ 0.002500 | ~~UN~~ | | + |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | | 0.000540 | U | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | | 0.000410 | U | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | | 0.000500 | U | | |

**OGDEN VALIDATED**
**LEVEL D**

12/9/96

1D
PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC184

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMISW01

Matrix: (soil/water) WATER Lab Sample ID: 96B2886

Sample wt/vol: 2.6400 L Lab File ID: 3,0927963,34,1

% Moisture: decanted: (Y/N) Date Received: 09/16/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 09/16/96

Concentrated Extract Volume: 0.5000 (mL) Date Analyzed: 09/29/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/L

| Cas No: | Compound | | | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: | 3,0927963,34,1 | | | | |
| 34883437 | PCB-8 (2,4') | | ~~0.001500~~ | 0.000330 | u ~~N~~ | u | + |
| 35065282 | PCB-138 (2,2',3,4,4',5') | | 0.000620 | | | uJ | B |
| Compound from Column: | RTX-5 | Lab File ID: | 2,0927962,34,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | | 0.000440 | | U | u | |
| 7012375 | PCB-28 (2,4,4') | | 0.000920 | | U | ↓ | |
| 35693993 | PCB-52 (2,2',5,5') | | 0.000340 | | U | | |
| 41464395 | PCB-44 (2,2',3,5') | | 0.000290 | | U | | |
| 32598100 | PCB-66 (2,3',4,4') | | 0.000280 | | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | | 0.000350 | | U | | |
| 32598133 | PCB-77 (3,3',4,4') | | 0.000510 | | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | | 0.000330 | | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | | 0.000230 | | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | | 0.000520 | | U | | |
| 57465288 | PCB-126 (3,3',4,4',5) | | 0.000430 | | U | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | | 0.000530 | | U | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.000670 | 0.000290 | | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | | ~~0.000220~~ | ~~0.000290~~ | u ~~N~~ | | + |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | | 0.002500 | | U | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | | 0.000540 | | U | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | | 0.000410 | | U | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | | ~~0.000061~~ | 0.000490 | u ~~N~~ | | + |

**OGDEN VALIDATED**
**LEVEL D**

12/9/96

1D
PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC187

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMISW01

Matrix: (soil/water) WATER Lab Sample ID: 96B2889

Sample wt/vol: 2.5900 L Lab File ID: 3,0927963,39,1

% Moisture: decanted: (Y/N) Date Received: 09/16/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 09/16/96

Concentrated Extract Volume: 0.5000 (mL) Date Analyzed: 09/29/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/L

| Cas No: | Compound | | | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0927963,39,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.000460 | | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.000460 | | | UJ | B |
| Compound from Column: | RTX-5 | Lab File ID: 2,0927962,39,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.000930 | | | | |
| 7012375 | PCB-28 (2,4,4') | 0.000940 | | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | ~~0.000750~~ | 0.000350 | ~~U~~ UJ | | + |
| 41464395 | PCB-44 (2,2',3,5') | 0.000300 | | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.000290 | | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.000360 | | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.000520 | | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.000340 | | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.000230 | | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.000530 | | U | | |
| 37465288 | PCB-126 (3,3',4,4',5) | 0.000440 | | U | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.000540 | | U | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.000290 | | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.000680 | | U | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.002600 | | U | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | ~~0.000170~~ | 0.000550 | ~~U~~ UJ | | + |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000420 | | U | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000510 | | U | | |

12/9/96

OGDEN VALIDATED
LEVEL D

1D
PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV005

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMISW01

Matrix: (soil/water) WATER Lab Sample ID: 96B2938

Sample wt/vol: 2.2000 L Lab File ID: 3,0927963,9,1

% Moisture: decanted: (Y/N) Date Received: 09/23/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 09/24/96

Concentrated Extract Volume: 0.5000 (mL) Date Analyzed: 09/28/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/L

| Cas No: | Compound | | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: | 3,0927963,9,1 | | | |
| 34883437 | PCB-8 (2,4') | | 0.000400 | U | u | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | | 0.000730 | | u J | B |
| Compound from Column: | RTX-5 | Lab File ID: | 2,0927962,9,1 | | | |
| 37680652 | PCB-18 (2,2',5) | | 0.000530 | U | u | |
| 7012375 | PCB-28 (2,4,4') | | 0.001100 | U | | |
| 35693993 | PCB-52 (2,2',5,5') | | 0.000410 | U | | |
| 41464395 | PCB-44 (2,2',3,5') | | 0.000350 | U | | |
| 32598100 | PCB-66 (2,3',4,4') | | 0.000340 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | | 0.000420 | U | | |
| 32598133 | PCB-77 (3,3',4,4') | | 0.000610 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | | 0.000400 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | | 0.000270 | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | | ~~0.000240~~ 0.000620 | ~~U~~ u | u | + |
| 57465288 | PCB-126 (3,3',4,4',5) | | 0.000510 | U | u | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | | 0.000640 | U | u | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | | 0.000340 | U | u | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | | ~~0.000170~~ 0.000800 | u ~~U~~ | ~~J~~ u | + |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | | 0.003000 | U | u | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | | 0.000650 | U | u | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | | 0.000500 | U | u | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | | ~~0.000230~~ 0.000590 | ~~U~~ u | u | + |

OGDEN VALIDATED

LEVEL D

TW 12/3/96

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV006

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2949

**Sample wt/vol:** 2.1600 L **Lab File ID:** 3,0927963,24,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/23/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/24/96

**Concentrated Extract Volume:** 0.5000 (mL) **Date Analyzed:** 09/28/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,0927963,24,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.000400 | U | u | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.000750 | | uJ | B |
| Compound from Column: | RTX-5 Lab File ID: 2,0927962,24,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.000540 | U | u | |
| 7012375 | PCB-28 (2,4,4') | 0.001100 | U | | |
| 35693993 | PCB-52 (2,2',5,5') | 0.000420 | U | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.000360 | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.000340 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.000430 | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.000620 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.000400 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.000280 | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.000630 | U | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.000520 | U | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.000650 | U | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.000350 | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | ~~0.000170~~ 0.000810 | UJ | ~~J~~ u | + |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | ~~0.000110~~ 0.003100 | UJ | UJ | + |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.000660 | U | u | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000510 | U | u | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000610 | U | u | |

**OGDEN VALIDATED**

**LEVEL D**

12/17/96

A000031

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV007

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2945

**Sample wt/vol:** 2.1400 L **Lab File ID:** 3,0927963,16,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/23/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/24/96

**Concentrated Extract Volume:** 0.5000 (mL) **Date Analyzed:** 09/28/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | REV QUAL | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,0927963,16,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.000410 | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.000760 | | UJ | B |
| Compound from Column: | RTX-5 Lab File ID: 2,0927962,16,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.000540 | U | U | |
| 7012375 | PCB-28 (2,4,4') | 0.001100 | U | | |
| 35693993 | PCB-52 (2,2',5,5') | 0.000420 | U | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.000360 | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.000350 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.000430 | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.000630 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.000410 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.000280 | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.000640 | U | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.000530 | U | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.000660 | U | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.000350 | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | ~~0.000170~~ 0.000820 | UJ | UJ | + |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.003100 | U | U | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.000660 | U | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000510 | U | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000610 | U | | |

**OGDEN VALIDATED**

**LEVEL D**

12/17/96

1D
# PCB ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MV008

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2939

**Sample wt/vol:** 2.2800 L **Lab File ID:** 3,0927963,10,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/23/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/24/96

**Concentrated Extract Volume:** 0.5000 (mL) **Date Analyzed:** 09/28/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) | ug/L | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0927963,10,1 | | | | |
| 34883437 | PCB-8 (2,4') | | 0.000380 | U | u | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | | 0.000660 | | uJ | B |
| Compound from Column: | RTX-5 | Lab File ID: 2,0927962,10,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | | 0.000510 | U | u | |
| 7012375 | PCB-28 (2,4,4') | | 0.001100 | U | | |
| 35693993 | PCB-52 (2,2',5,5') | | 0.000400 | U | | |
| 41464395 | PCB-44 (2,2',3,5') | | 0.000340 | U | | |
| 32598100 | PCB-66 (2,3',4,4') | | 0.000330 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | | 0.000410 | U | | |
| 32598133 | PCB-77 (3,3',4,4') | | 0.000590 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | | 0.000380 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | | 0.000260 | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | | 0.000600 | U | | |
| 57465288 | PCB-126 (3,3',4,4',5) | | 0.000490 | U | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | | 0.000620 | U | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | | 0.000330 | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.000770 | ~~0.000160~~ | UJ | ~~J~~ u | + |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.002900 ~~0.000770~~ | ~~0.000058~~ ~~0.002900~~ | UJ | ~~J~~ u | + |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | | ~~0.000020~~ 0.000620 | UJ | u | + |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | | 0.000480 | U | u | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | | 0.000051 | J | J | |

OGDEN VALIDATED

LEVEL D

12/3/96

A 000007

1D
# PCB ORGANICS ANALYSIS DATA SHEET



**EPA SAMPLE NO.**
MV009

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019
**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01
**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2942
**Sample wt/vol:** 2.2000 L **Lab File ID:** 3,0927963,13,1
**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/23/96
**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/24/96
**Concentrated Extract Volume:** 0.5000 (mL) **Date Analyzed:** 09/28/96
**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000
**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000
**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/L

| Cas No: | Compound | ug/L | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,0927963,13,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.000400 | U | u | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.000770 | | uJ | B |
| Compound from Column: | RTX-5 Lab File ID: 2,0927962,13,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.000530 | U | u | |
| 7012375 | PCB-28 (2,4,4') | 0.001100 | U | | |
| 35693993 | PCB-52 (2,2',5,5') | 0.000410 | U | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.000350 | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.000340 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.000420 | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.000610 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.000400 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.000270 | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.000620 | U | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.000510 | U | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.000640 | U | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.000340 | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | ~~0.000150~~ 0.000800 | UJ | ~~J~~ u | + |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.003000 | U | u | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.000650 | U | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000500 | U | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | ~~0.000130~~ 0.000590 | UJ | | + |

**OGDEN VALIDATED**

**LEVEL D**

12/3/96

A000013

1D
PCB ORGANICS ANAL /SIS DATA SHEET

EPA SAMPLE NO.
MV010

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMISW01

Matrix: (soil/water) WATER Lab Sample ID: 96B2883

Sample wt/vol: 2.5000 L Lab File ID: 3,0927963,31,1

% Moisture: decanted: (Y/N) Date Received: 09/16/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 09/16/96

Concentrated Extract Volume: 0.5000 (mL) Date Analyzed: 09/29/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/L

| Cas No: | Compound | | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0927963,31,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.001100 | | ~~UJ~~ | ~~B~~ |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.000570 | | UJ | B |
| Compound from Column: | RTX-5 | Lab File ID: 2,0927962,31,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.000910 | | | |
| 7012375 | PCB-28 (2,4,4') | 0.000980 | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | ~~0.000580~~ 0.000360 | ~~UJ~~ | | + |
| 41464395 | PCB-44 (2,2',3,5') | 0.000310 | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.000300 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.000370 | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.000540 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.000350 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.000240 | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | ~~0.000390~~ 0.000540 | ~~UJ~~ | | + |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.000450 | U | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.000560 | U | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.000300 | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.000700 | U | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.002700 | U | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | ~~0.000130~~ 0.000570 | ~~UJ~~ | | + |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000440 | U | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000520 | U | | |

OGDEN VALIDATED
LEVEL D

12/9/96

# 1D
# PCB ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MV011

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2884

**Sample wt/vol:** 2.6000 L **Lab File ID:** 3,0927963,32,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/16/96

**Concentrated Extract Volume:** 0.5000 (mL) **Date Analyzed:** 09/29/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,0927963,32,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.000650 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.000460 | | UJ | B |
| Compound from Column: | RTX-5 Lab File ID: 2,0927962,32,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.001100 | | | |
| 7012375 | PCB-28 (2,4,4') | 0.000940 | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | 0.000350 | U | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.000300 | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.000290 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.000360 | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.000510 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.000330 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.000230 | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.000260 | J | J | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.000430 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.000540 | U | U | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.000290 | U | U | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | ~~0.000071~~ 0.000670 | UJ | ~~J~~ U | + |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.002600 | U | U | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.000550 | U | U | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000420 | U | U | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000500 | U | U | |

**OGDEN VALIDATED**

**LEVEL D**

12/17/96

# PCB ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MV012

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2943

**Sample wt/vol:** 2.3800 L **Lab File ID:** 3,0927963,14,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/23/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/24/96

**Concentrated Extract Volume:** 0.5000 (mL) **Date Analyzed:** 09/28/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0927963,14,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.000370 | U | u | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.002700 | | uJ | B |
| Compound from Column: | RTX-5 | Lab File ID: 2,0927962,14,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.000490 | U | u | |
| 7012375 | PCB-28 (2,4,4') | ~~0.000290~~ 0.001000 | U ~~K~~ | | + |
| 35693993 | PCB-52 (2,2',5,5') | 0.000380 | U | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.000330 | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.000310 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.000390 | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.000560 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.000370 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.000250 | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.000570 | U | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.000470 | U | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.000590 | U | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.000320 | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.000740 | U | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.002800 | U | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.000600 | U | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000460 | U | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000550 | U | | |

**OGDEN VALIDATED**

**LEVEL D**

12/3/96

1D
PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV013



Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMISW01

Matrix: (soil/water) WATER Lab Sample ID: 96B2944

Sample wt/vol: 2.1400 L Lab File ID: 3,0927963,15,1

% Moisture: decanted: (Y/N) Date Received: 09/23/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 09/24/96

Concentrated Extract Volume: 0.5000 (mL) Date Analyzed: 09/28/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/L

| Cas No: | Compound | | | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: | 3,0927963,15,1 | | | |
| 34883437 | PCB-8 (2,4') | | 0.000410 | U | u | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | | 0.000810 | | uJ | B |
| Compound from Column: | RTX-5 | Lab File ID: | 2,0927962,15,1 | | | |
| 37680652 | PCB-18 (2,2',5) | | 0.000540 | U | u | |
| 7012375 | PCB-28 (2,4,4') | | ~~0.000280~~ 0.001100 | U ~~U~~ | | + |
| 35693993 | PCB-52 (2,2',5,5') | | 0.000420 | U | | |
| 41464395 | PCB-44 (2,2',3,5') | | 0.000360 | U | | |
| 32598100 | PCB-66 (2,3',4,4') | | 0.000350 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | | 0.000430 | U | | |
| 32598133 | PCB-77 (3,3',4,4') | | 0.000630 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | | 0.000410 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | | 0.000280 | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | | 0.000640 | U | | |
| 57465288 | PCB-126 (3,3',4,4',5) | | 0.000530 | U | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | | 0.000660 | U | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | | 0.000350 | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | | 0.000820 | U | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | | 0.003100 | U | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | | 0.000660 | U | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | | 0.000510 | U | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | | 0.000610 | U | | |

OGDEN VALIDATED

LEVEL D

12-3-96

1D
PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV015



Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMISW01

Matrix: (soil/water) WATER Lab Sample ID: 96B2897

Sample wt/vol: 2.0400 L Lab File ID: 3,0927963,40,1

% Moisture: decanted: (Y/N) Date Received: 09/16/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 09/16/96

Concentrated Extract Volume: 0.5000 (mL) Date Analyzed: 09/30/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/L

| Cas No: | Compound | | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| ompound from Column: | DB-17 | Lab File ID: 3,0927963,40,1 | | | | |
| 4883437 | PCB-8 (2,4') | 0.000430 | | U | U | |
| ompound from Column: | RTX-5 | Lab File ID: 2,0927962,40,1 | | | | |
| 7680652 | PCB-18 (2,2',5) | 0.000570 | | U | U | |
| 012375 | PCB-28 (2,4,4') | 0.900000 | | E | R | D |
| 5693993 | PCB-52 (2,2',5,5') | 0.940000 | | E | R | D |
| 1464395 | PCB-44 (2,2',3,5') | 0.150000 | | E | J | *11 |
| 2598100 | PCB-66 (2,3',4,4') | 0.000360 | | U | U | |
| 7680732 | PCB-101 (2,2',3,5,5') | 0.860000 | | E | R | D |
| 2598133 | PCB-77 (3,3',4,4') | 0.016000 | | | | |
| 1508006 | PCB-118 (2,3',4,4',5) | 1.000000 | | E | R | D |
| 5065271 | PCB-153 (2,2',4,4',5,5') | 0.940000 | | E | R | D |
| 2598144 | PCB-105 (2,3,3',4,4') | 0.000670 | | U | U | |
| 5065282 | PCB-138 (2,2',3,4,4',5') | 0.880000 | | E | R | D |
| 7465288 | PCB-126 (3,3',4,4',5) | 0.000550 | | U | U | |
| 2663680 | PCB-187 (2,2',3,4',5,5',6) | 0.430000 | | E | R | D |
| 8380073 | PCB-128 (2,2',3,3',4,4') | 0.000370 | | U | U | |
| 6065293 | PCB-180 (2,2',3,4,4',5,5') | 0.530000 | | E | R | D |
| 5065306 | PCB-170 (2,2',3,3',4,4',5) | ~~0.000820~~ | 0.003200 | ~~J~~ | ~~J~~ U | + |
| 2663782 | PCB-195 (2,2',3,3',4,4',5,6) | ~~0.000310~~ | 0.000700 | UJ | U | + |
| 0186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000760 | | | | |
| 051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | ~~0.000140~~ | 0.000640 | ~~J~~ | ~~J~~ U | + |

OGDEN VALIDATED

LEVEL 3

12/13/96

1D
# PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MV015DL

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019
Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMISW01
Matrix: (soil/water) WATER Lab Sample ID: 96B2897DL
Sample wt/vol: 2.0400 L Lab File ID: 3,1009963,8,1
% Moisture: decanted: (Y/N) Date Received: 09/16/96
Extraction: (SepF/Cont/Sonc) Date Extracted: 09/16/96
Concentrated Extract Volume: 25.0000 (mL) Date Analyzed: 10/10/96
Injection Volume: 2 (uL) Dilution Factor: 50.0000
GPC Cleanup: (Y/N) pH: Split Factor: 2.0000
Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/L

| Cas No: | Compound | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1009963,8,1 | | | |
| 4883437 | PCB-8 (2,4') | 0.021000 | U | R | D |
| Compound from Column: | RTX-5 | Lab File ID: 2,1009962,8,1 | | | |
| 7680652 | PCB-18 (2,2',5) | 0.028000 | U | R | D |
| 012375 | PCB-28 (2,4,4') | 1.800000 | D | | |
| 5693993 | PCB-52 (2,2',5,5') | 1.800000 | D | | |
| 1464395 | PCB-44 (2,2',3,5') | 0.019000 | U | R | D |
| 2598100 | PCB-66 (2,3',4,4') | 0.018000 | U | R | D |
| 7680732 | PCB-101 (2,2',3,5,5') | 1.700000 | D | | |
| 2598133 | PCB-77 (3,3',4,4') | 0.033000 | U | R | D |
| 1508006 | PCB-118 (2,3',4,4',5) | 1.900000 | D | | |
| 5065271 | PCB-153 (2,2',4,4',5,5') | 1.900000 | D | | |
| 2598144 | PCB-105 (2,3,3',4,4') | 0.034000 | U | R | D |
| 5065282 | PCB-138 (2,2',3,4,4',5') | 1.800000 | D | | |
| 7465288 | PCB-126 (3,3',4,4',5) | 0.028000 | U | R | D |
| 2663680 | PCB-187 (2,2',3,4',5,5',6) | 0.420000 | | | |
| 8380073 | PCB-128 (2,2',3,3',4,4') | 0.019000 | U | R | D |
| 6065293 | PCB-180 (2,2',3,4,4',5,5') | 1.800000 | D | | |
| 5065306 | PCB-170 (2,2',3,3',4,4',5) | 0.160000 | U | R | D |
| 2663782 | PCB-195 (2,2',3,3',4,4',5,6) | ~~0.003300~~ 0.035000 | UM | | ,+ |
| 0186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.027000 | U | | |
| 051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.032000 | U | | |

**OGDEN VALIDATED**

**LEVEL D**

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA705

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2888

**Sample wt/vol:** 2.6400 L **Lab File ID:** 3,0927963,38,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/16/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 09/29/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup:** (Y/N) **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,0927963,38,1 | | | | |
| 319846 | alpha-BHC | 0.000370 | U | UJ | C |
| 3424826 | 2,4'-DDE | 0.000310 | U | U | |
| 959988 | Endosulfan I | 0.000540 | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,0927962,38,1 | | | | |
| 118741 | Hexachlorobenzene | 0.000320 | J | J | |
| 319857 | beta-BHC | 0.000240 | U | U | |
| 58899 | gamma-BHC (Lindane) | 0.000260 | U | | |
| 319868 | delta-BHC | 0.000280 | U | | |
| 76448 | Heptachlor | ~~0.001100~~ 0.000400 | UM | | + |
| 309002 | Aldrin | 0.000490 | U | | |
| 5103742 | gamma-Chlordane | 0.000200 | U | U | |
| 5103719 | alpha-Chlordane | 0.000430 | U | U | |
| 5103731 | cis-Nonachlor | 0.000310 | U | * | |
| 39765805 | trans-Nonachlor | 0.000310 | U | U | |
| 1024573 | Heptachlor epoxide | 0.000740 | U | | |
| 60571 | Dieldrin | 0.000360 | U | | |
| 72559 | 4,4'-DDE | 0.000180 | U | U | |
| 53190 | 2,4'-DDD | 0.000670 | U | | |
| 72208 | Endrin | 0.000510 | U | | |
| 72548 | 4,4'-DDD | 0.000430 | U | | |
| 789026 | 2,4'-DDT | 0.000280 | U | | |
| 33216659 | Endosulfan II | 0.000540 | U | | |
| 1031078 | Endosulfan sulfate | 0.000540 | U | | |
| 50293 | 4,4'-DDT | 0.000650 | U | UJ | C |
| 7421934 | Endrin aldehyde | 0.000280 | U | U | |
| 53494705 | Endrin ketone | 0.000280 | U | | |
| 72435 | Methoxychlor | 0.000730 | U | | |
| 2385855 | Mirex | 0.000210 | U | | |

**OGDEN VALIDATED**
**LEVEL D**

12/9/96

*Analysis Not Validated

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MA706

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019
**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01
**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2881
**Sample wt/vol:** 2.6200 L **Lab File ID:** 3,0927963,27,1
**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/16/96
**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/16/96
**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 09/29/96
**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000
**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000
**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,0927963,27,1 | | | | |
| 319846 | alpha-BHC | 0.000370 | U | UJ | C |
| 3424826 | 2,4'-DDE | 0.000320 | U | u | |
| 959988 | Endosulfan I | 0.000550 | U | u | |
| Compound from Column: | RTX-5 Lab File ID: 2,0927962,27,1 | | | | |
| 118741 | Hexachlorobenzene | ~~0.000350~~ 0.000340 | U ~~N~~ | u | + |
| 319857 | beta-BHC | ~~0.001400~~ 0.000240 | U ~~N~~ | | + |
| 58899 | gamma-BHC (Lindane) | 0.000270 | U | | |
| 319868 | delta-BHC | 0.000280 | U | | |
| 76448 | Heptachlor | ~~0.000710~~ 0.000400 | U ~~N~~ | | + |
| 309002 | Aldrin | 0.000490 | U | | |
| 5103742 | gamma-Chlordane | 0.000200 | U | u | |
| 5103719 | alpha-Chlordane | 0.000430 | U | | |
| 5103731 | cis-Nonachlor | 0.000310 | U | * | |
| 39765805 | trans-Nonachlor | 0.000310 | U | | |
| 1024573 | Heptachlor epoxide | 0.000750 | U | | |
| 60571 | Dieldrin | 0.000360 | U | | |
| 72559 | 4,4'-DDE | 0.000180 | U | u | |
| 53190 | 2,4'-DDD | 0.000670 | U | | |
| 72208 | Endrin | 0.000510 | U | | |
| 72548 | 4,4'-DDD | 0.000440 | U | | |
| 789026 | 2,4'-DDT | 0.000280 | U | | |
| 33216659 | Endosulfan II | 0.000550 | U | | |
| 1031078 | Endosulfan sulfate | 0.000550 | U | | |
| 50293 | 4,4'-DDT | 0.000660 | U | UJ | C |
| 7421934 | Endrin aldehyde | 0.000290 | U | u | |
| 53494705 | Endrin ketone | 0.000290 | U | | |
| 72435 | Methoxychlor | 0.000740 | U | | |
| 2385855 | Mirex | 0.000220 | U | | |

**OGDEN VALIDATED**
**LEVEL D**

*Analysis Not Validated

12/19/96

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MA715

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2887

**Sample wt/vol:** 2.6400 L **Lab File ID:** 3,0927963,35,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/16/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 09/29/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0927963,35,1 | | | |
| 319846 | alpha-BHC | 0.000370 | U | UJ | C |
| 3424826 | 2,4'-DDE | 0.000310 | U | U | |
| 959988 | Endosulfan I | 0.000540 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,0927962,35,1 | | | |
| 118741 | Hexachlorobenzene | 0.000250 | J | J | |
| 319857 | beta-BHC | ~~0.002400~~ 0.000240 | UJ | U | + |
| 58899 | gamma-BHC (Lindane) | 0.000320 | | | |
| 319868 | delta-BHC | 0.000280 | U | U | |
| 76448 | Heptachlor | ~~0.000930~~ 0.000400 | UJ | U | + |
| 309002 | Aldrin | 0.000490 | U | U | |
| 5103742 | gamma-Chlordane | 0.000200 | U | U | |
| 5103719 | alpha-Chlordane | 0.000430 | U | U | |
| 5103731 | cis-Nonachlor | 0.000310 | U | * | |
| 39765805 | trans-Nonachlor | 0.000310 | U | U | |
| 1024573 | Heptachlor epoxide | 0.000740 | U | U | |
| 60571 | Dieldrin | 0.000360 | U | U | |
| 72559 | 4,4'-DDE | 0.000180 | U | U | |
| 53190 | 2,4'-DDD | 0.000670 | U | ↓ | |
| 72208 | Endrin | 0.000510 | U | ↓ | |
| 72548 | 4,4'-DDD | 0.000430 | U | ↓ | |
| 789026 | 2,4'-DDT | 0.000280 | U | ↓ | |
| 33216659 | Endosulfan II | 0.000540 | U | ↓ | |
| 1031078 | Endosulfan sulfate | 0.000540 | U | ↓ | |
| 50293 | 4,4'-DDT | 0.000650 | U | UJ | C |
| 7421934 | Endrin aldehyde | 0.000280 | U | U | |
| 53494705 | Endrin ketone | 0.000280 | U | ↓ | |
| 72435 | Methoxychlor | 0.000730 | U | ↓ | |
| 2385855 | Mirex | 0.000210 | U | ↓ | |

**OGDEN VALIDATED**

**LEVEL D**

12/9/96

*Analysis Not Validated

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC178

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2940

**Sample wt/vol:** 2.2400 L **Lab File ID:** 3,0927963,11,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/23/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/24/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 09/28/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/L

| Cas No: | Compound | ug/L | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,0927963,11,1 | | | | |
| 319846 | alpha-BHC | 0.000430 | U | UJ | C |
| 3424826 | 2,4'-DDE | 0.000370 | U | U | |
| 959988 | Endosulfan I | 0.000640 | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,0927962,11,1 | | | | |
| 118741 | Hexachlorobenzene | 0.000370 | J | J | |
| 319857 | beta-BHC | ~~0.000500~~ 0.000290 | U ~~X~~ | U | + |
| 58899 | gamma-BHC (Lindane) | ~~0.000120~~ 0.000310 | U ~~X~~ | ↓ | + |
| 319868 | delta-BHC | 0.000330 | U | ↓ | |
| 76448 | Heptachlor | ~~0.000420~~ 0.000470 | U ~~X~~ | ↓ | + |
| 309002 | Aldrin | 0.000580 | U | ↓ | |
| 5103742 | gamma-Chlordane | 0.000230 | U | U | |
| 5103719 | alpha-Chlordane | 0.000510 | U | ↓ | |
| 5103731 | cis-Nonachlor | 0.000360 | U | * ↓ | |
| 39765805 | trans-Nonachlor | 0.000360 | U | ↓ | |
| 1024573 | Heptachlor epoxide | 0.000880 | U | ↓ | |
| 60571 | Dieldrin | 0.000420 | U | ↓ | |
| 72559 | 4,4'-DDE | 0.000210 | U | U | |
| 53190 | 2,4'-DDD | 0.000790 | U | ↓ | |
| 72208 | Endrin | 0.000600 | U | ↓ | |
| 72548 | 4,4'-DDD | 0.000510 | U | ↓ | |
| 789026 | 2,4'-DDT | 0.000330 | U | ↓ | |
| 33216659 | Endosulfan II | 0.000640 | U | ↓ | |
| 1031078 | Endosulfan sulfate | 0.000640 | U | ↓ | |
| 50293 | 4,4'-DDT | 0.000770 | U | UJ | C |
| 7421934 | Endrin aldehyde | 0.000330 | U | U | |
| 53494705 | Endrin ketone | 0.000330 | U | ↓ | |
| 72435 | Methoxychlor | 0.000860 | U | ↓ | |
| 2385855 | Mirex | 0.000250 | U | ↓ | |

**OGDEN VALIDATED**

**LEVEL D**

*Analysis Not Validated

12/3/96

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MC179

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2941

**Sample wt/vol:** 2.1000 L **Lab File ID:** 3,0927963,12,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/23/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/24/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 09/28/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0927963,12,1 | | | |
| 319846 | alpha-BHC | 0.000460 | U | UJ | C |
| 3424826 | 2,4'-DDE | 0.000390 | U | U | |
| 959988 | Endosulfan I | 0.000680 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,0927962,12,1 | | | |
| 118741 | Hexachlorobenzene | 0.000500 | | | |
| 319857 | beta-BHC | ~~0.000630~~ 0.000300 | U ~~X~~ | U | + |
| 58899 | gamma-BHC (Lindane) | 0.000330 | U | | |
| 319868 | delta-BHC | 0.000350 | U | | |
| 76448 | Heptachlor | ~~0.000650~~ 0.000500 | U ~~X~~ | | + |
| 309002 | Aldrin | 0.000620 | U | | |
| 5103742 | gamma-Chlordane | 0.000250 | U | U | |
| 5103719 | alpha-Chlordane | 0.000540 | U | | |
| 5103731 | cis-Nonachlor | 0.000390 | U | * | |
| 39765805 | trans-Nonachlor | 0.000390 | U | | |
| 1024573 | Heptachlor epoxide | 0.000940 | U | | |
| 60571 | Dieldrin | 0.000450 | U | | |
| 72559 | 4,4'-DDE | 0.000220 | U | U | |
| 53190 | 2,4'-DDD | 0.000840 | U | | |
| 72208 | Endrin | 0.000640 | U | | |
| 72548 | 4,4'-DDD | 0.000540 | U | | |
| 789026 | 2,4'-DDT | 0.000350 | U | | |
| 33216659 | Endosulfan II | 0.000680 | U | | |
| 1031078 | Endosulfan sulfate | 0.000680 | U | | |
| 50293 | 4,4'-DDT | 0.000820 | U | UJ | C |
| 7421934 | Endrin aldehyde | 0.000360 | U | U | |
| 53494705 | Endrin ketone | 0.000360 | U | | |
| 72435 | Methoxychlor | 0.000920 | U | | |
| 2385855 | Mirex | 0.000270 | U | | |

**OGDEN VALIDATED**

**LEVEL D**

***Analysis Not Validated**

12/3/96

A000012

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC180

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2948

**Sample wt/vol:** 2.1500 L **Lab File ID:** 3,0927963,23,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/23/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/24/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 09/28/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/L

| Cas No: | Compound | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0927963,23,1 | | | |
| 319846 | alpha-BHC | ~~0.000039~~ 0.000460 | UN | UJ | C, + |
| 3424826 | 2,4'-DDE | 0.000390 | U | U | |
| 959988 | Endosulfan I | 0.000670 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,0927962,23,1 | | | |
| 118741 | Hexachlorobenzene | 0.000370 | J | J | |
| 319857 | beta-BHC | ~~0.000530~~ 0.000300 | UN | U | + |
| 58899 | gamma-BHC (Lindane) | ~~0.000090~~ 0.000330 | UN | ↓ | + |
| 319868 | delta-BHC | 0.000350 | U | | |
| 76448 | Heptachlor | ~~0.000850~~ 0.000490 | UN | ↓ | + |
| 309002 | Aldrin | 0.000600 | U | | |
| 5103742 | gamma-Chlordane | 0.000240 | U | U | |
| 5103719 | alpha-Chlordane | 0.000530 | U | ↓ | |
| 5103731 | cis-Nonachlor | 0.000380 | U | * | |
| 39765805 | trans-Nonachlor | 0.000380 | U | ↓ | |
| 1024573 | Heptachlor epoxide | 0.000910 | U | | |
| 60571 | Dieldrin | 0.000440 | U | | |
| 72559 | 4,4'-DDE | 0.000210 | U | U | |
| 53190 | 2,4'-DDD | 0.000820 | U | ↓ | |
| 72208 | Endrin | 0.000630 | U | | |
| 72548 | 4,4'-DDD | 0.000530 | U | | |
| 789026 | 2,4'-DDT | 0.000350 | U | | |
| 33216659 | Endosulfan II | 0.000670 | U | | |
| 1031078 | Endosulfan sulfate | 0.000670 | U | | |
| 50293 | 4,4'-DDT | 0.000800 | U | UJ | C |
| 7421934 | Endrin aldehyde | 0.000350 | U | U | |
| 53494705 | Endrin ketone | 0.000350 | U | ↓ | |
| 72435 | Methoxychlor | 0.000900 | U | | |
| 2385855 | Mirex | 0.000260 | U | | |

**OGDEN VALIDATED**

**LEVEL D**

*Analysis Not Validated

12-3-96

A000030

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MC181

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2946

**Sample wt/vol:** 2.1600 L **Lab File ID:** 3,0927963,21,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/23/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/24/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 09/28/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/L

| Cas No: | Compound | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0927963,21,1 | | | |
| 319846 | alpha-BHC | ~~0.000390~~ 0.000450 | UN | UJ | C, + |
| 3424826 | 2,4'-DDE | 0.000380 | U | U | |
| 959988 | Endosulfan I | 0.000660 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,0927962,21,1 | | | |
| 118741 | Hexachlorobenzene | 0.000630 | | | |
| 319857 | beta-BHC | ~~0.000790~~ 0.000300 | UN | U | + |
| 58899 | gamma-BHC (Lindane) | ~~0.000310~~ 0.000320 | UN | | + |
| 319868 | delta-BHC | 0.000340 | U | | |
| 76448 | Heptachlor | ~~0.001100~~ 0.000490 | UN | | + |
| 309002 | Aldrin | 0.000600 | U | | |
| 5103742 | gamma-Chlordane | 0.000240 | U | U | |
| 5103719 | alpha-Chlordane | 0.000530 | U | | |
| 5103731 | cis-Nonachlor | 0.000380 | U | * | |
| 39765805 | trans-Nonachlor | 0.000380 | U | | |
| 1024573 | Heptachlor epoxide | 0.000910 | U | | |
| 60571 | Dieldrin | 0.000440 | U | | |
| 72559 | 4,4'-DDE | 0.000210 | U | U | |
| 53190 | 2,4'-DDD | 0.000820 | U | U | |
| 72208 | Endrin | 0.000620 | U | UJ | C |
| 72548 | 4,4'-DDD | 0.000530 | U | | |
| 789026 | 2,4'-DDT | 0.000340 | U | | |
| 33216659 | Endosulfan II | 0.000660 | U | | |
| 1031078 | Endosulfan sulfate | 0.000660 | U | | |
| 50293 | 4,4'-DDT | 0.000800 | U | UJ | C |
| 7421934 | Endrin aldehyde | 0.000350 | U | U | |
| 53494705 | Endrin ketone | 0.000350 | U | | |
| 72435 | Methoxychlor | 0.000900 | U | | |
| 2385855 | Mirex | 0.000260 | U | | |

**OGDEN VALIDATED**
**LEVEL D**

*Analysis Not Validated

12-3-96

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC182

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2947

**Sample wt/vol:** 2.2000 L **Lab File ID:** 3,0927963,22,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/23/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/24/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 09/28/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: DB-17 | Lab File ID: 3,0927963,22,1 | | | | |
| 319846 | alpha-BHC | 0.000440 | U | UJ | C |
| 3424826 | 2,4'-DDE | 0.000380 | U | U | |
| 959988 | Endosulfan I | 0.000650 | U | U | |
| Compound from Column: RTX-5 | Lab File ID: 2,0927962,22,1 | | | | |
| 118741 | Hexachlorobenzene | 0.000380 | J | J | |
| 319857 | beta-BHC | ~~0.000550~~ 0.000290 | U ~~J~~ | U | + |
| 58899 | gamma-BHC (Lindane) | ~~0.000093~~ 0.000320 | U ~~J~~ | ↓ | + |
| 319868 | delta-BHC | 0.000340 | U | | |
| 76448 | Heptachlor | ~~0.000880~~ 0.000480 | U ~~J~~ | ↓ | + |
| 309002 | Aldrin | 0.000590 | U | | |
| 5103742 | gamma-Chlordane | 0.000240 | U | U | |
| 5103719 | alpha-Chlordane | 0.000520 | U | ↓ | |
| 5103731 | cis-Nonachlor | 0.000370 | U | *✓ | |
| 39765805 | trans-Nonachlor | 0.000370 | U | ↓ | |
| 1024573 | Heptachlor epoxide | 0.000890 | U | | |
| 60571 | Dieldrin | 0.000430 | U | ↓ | |
| 72559 | 4,4'-DDE | 0.000210 | U | U | |
| 53190 | 2,4'-DDD | 0.000800 | U | ↓ | |
| 72208 | Endrin | 0.000610 | U | | |
| 72548 | 4,4'-DDD | 0.000520 | U | | |
| 789026 | 2,4'-DDT | 0.000340 | U | | |
| 33216659 | Endosulfan II | 0.000650 | U | | |
| 1031078 | Endosulfan sulfate | 0.000650 | U | ↓ | |
| 50293 | 4,4'-DDT | 0.000780 | U | UJ | C |
| 7421934 | Endrin aldehyde | 0.000340 | U | U | |
| 53494705 | Endrin ketone | 0.000340 | U | ↓ | |
| 72435 | Methoxychlor | 0.000880 | U | | |
| 2385855 | Mirex | 0.000260 | U | ↓ | |

**OGDEN VALIDATED**

**LEVEL D**

*Analysis Not Validated

12-3-96

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC183

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2885

**Sample wt/vol:** 2.6400 L **Lab File ID:** 3,0927963,33,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/16/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 09/29/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,0927963,33,1 | | | | |
| 319846 | alpha-BHC | 0.000370 | U | UJ | C |
| 3424826 | 2,4'-DDE | 0.000310 | U | U | |
| 959988 | Endosulfan I | 0.000540 | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,0927962,33,1 | | | | |
| 118741 | Hexachlorobenzene | 0.000200 | J | J | |
| 319857 | beta-BHC | 0.000240 | U | U | |
| 58899 | gamma-BHC (Lindane) | 0.000260 | U | | |
| 319868 | delta-BHC | 0.000280 | U | | |
| 76448 | Heptachlor | ~~0.000850~~ 0.000400 | UJ | | + |
| 309002 | Aldrin | 0.000490 | U | | |
| 5103742 | gamma-Chlordane | 0.000200 | U | U | |
| 5103719 | alpha-Chlordane | 0.000430 | U | | |
| 5103731 | cis-Nonachlor | 0.000310 | U | * | |
| 39765805 | trans-Nonachlor | 0.000310 | U | | |
| 1024573 | Heptachlor epoxide | 0.000740 | U | | |
| 60571 | Dieldrin | 0.000360 | U | | |
| 72559 | 4,4'-DDE | 0.000180 | U | U | |
| 53190 | 2,4'-DDD | 0.000670 | U | | |
| 72208 | Endrin | 0.000510 | U | | |
| 72548 | 4,4'-DDD | 0.000430 | U | | |
| 789026 | 2,4'-DDT | 0.000280 | U | | |
| 33216659 | Endosulfan II | 0.000540 | U | | |
| 1031078 | Endosulfan sulfate | 0.000540 | U | | |
| 50293 | 4,4'-DDT | 0.000650 | U | UJ | C |
| 7421934 | Endrin aldehyde | 0.000280 | U | U | |
| 53494705 | Endrin ketone | 0.000280 | U | | |
| 72435 | Methoxychlor | 0.000730 | U | | |
| 2385855 | Mirex | 0.000210 | U | | |

OGDEN VALIDATED

LEVEL D

12/9/96

*Analysis Not Validated

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC184

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2886

**Sample wt/vol:** 2.6400 L **Lab File ID:** 3,0927963,34,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/16/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 09/29/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/L

| Cas No: | Compound | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0927963,34,1 | | | |
| 319846 | alpha-BHC | 0.000370 | U | UJ | C |
| 3424826 | 2,4'-DDE | 0.000310 | U | U | |
| 959988 | Endosulfan I | 0.000540 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,0927962,34,1 | | | |
| 118741 | Hexachlorobenzene | 0.000260 | J | J | |
| 319857 | beta-BHC | 0.000240 | U | U | |
| 58899 | gamma-BHC (Lindane) | 0.000260 | U | | |
| 319868 | delta-BHC | 0.000280 | U | | |
| 76448 | Heptachlor | ~~0.000990~~ 0.000400 | UJ | | + |
| 309002 | Aldrin | 0.000490 | U | | |
| 5103742 | gamma-Chlordane | 0.000200 | U | U | |
| 5103719 | alpha-Chlordane | 0.000430 | U | | |
| 5103731 | cis-Nonachlor | 0.000310 | U | * | |
| 39765805 | trans-Nonachlor | 0.000310 | U | | |
| 1024573 | Heptachlor epoxide | 0.000740 | U | | |
| 60571 | Dieldrin | 0.000360 | U | | |
| 72559 | 4,4'-DDE | 0.000180 | U | U | |
| 53190 | 2,4'-DDD | 0.000670 | U | | |
| 72208 | Endrin | 0.000510 | U | | |
| 72548 | 4,4'-DDD | 0.000430 | U | | |
| 789026 | 2,4'-DDT | 0.000280 | U | | |
| 33216659 | Endosulfan II | 0.000540 | U | | |
| 1031078 | Endosulfan sulfate | 0.000540 | U | | |
| 50293 | 4,4'-DDT | 0.000650 | U | UJ | C |
| 7421934 | Endrin aldehyde | 0.000280 | U | U | |
| 53494705 | Endrin ketone | 0.000280 | U | | |
| 72435 | Methoxychlor | 0.000730 | U | | |
| 2385855 | Mirex | 0.000210 | U | | |

**OGDEN VALIDATED**
**LEVEL D**

*Analysis Not Validated

12/9/96

10/28/96

1D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.

MC187

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2889

**Sample wt/vol:** 2.5900 L **Lab File ID:** 3,0927963,39,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/16/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 09/29/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,0927963,39,1 | | | | |
| 319846 | alpha-BHC | 0.000380 | U | u~~J~~ | ~~Q~~ |
| 3424826 | 2,4'-DDE | 0.000320 | U | u | |
| 959988 | Endosulfan I | 0.000550 | U | u | |
| Compound from Column: | RTX-5 Lab File ID: 2,0927962,39,1 | | | | |
| 118741 | Hexachlorobenzene | 0.000230 | J | J | |
| 319857 | beta-BHC | 0.000240 | U | u | |
| 58899 | gamma-BHC (Lindane) | 0.000320 | | | |
| 319868 | delta-BHC | ~~0.000150~~ 0.000290 | u~~N~~ | u | + |
| 76448 | Heptachlor | 0.000410 | U | | |
| 309002 | Aldrin | 0.000500 | U | | |
| 5103742 | gamma-Chlordane | 0.000200 | U | u | |
| 5103719 | alpha-Chlordane | 0.000440 | U | u | |
| 5103731 | cis-Nonachlor | 0.000310 | U | * | |
| 39765805 | trans-Nonachlor | 0.000310 | U | u | |
| 1024573 | Heptachlor epoxide | 0.000760 | U | u | |
| 60571 | Dieldrin | 0.000370 | U | u | |
| 72559 | 4,4'-DDE | 0.000180 | U | u | |
| 53190 | 2,4'-DDD | 0.000680 | U | | |
| 72208 | Endrin | 0.000520 | U | | |
| 72548 | 4,4'-DDD | 0.000440 | U | | |
| 789026 | 2,4'-DDT | ~~0.000350~~ 0.000290 | u~~N~~ | | + |
| 33216659 | Endosulfan II | 0.000550 | U | | |
| 1031078 | Endosulfan sulfate | 0.000550 | U | | |
| 50293 | 4,4'-DDT | 0.000660 | U | u~~J~~ | ~~Q~~ |
| 7421934 | Endrin aldehyde | 0.000290 | U | | |
| 53494705 | Endrin ketone | ~~0.000240~~ 0.000290 | u~~N~~ | | + |
| 72435 | Methoxychlor | 0.000750 | U | | |
| 2385855 | Mirex | 0.000220 | U | | |

12/9/96

*Analysis Not Validated

**OGDEN VALIDATED**

**LEVEL D**

A000056

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MV005

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMISW01

Matrix: (soil/water) WATER Lab Sample ID: 96B2938

Sample wt/vol: 2.2000 L Lab File ID: 3,0927963,9,1

% Moisture: decanted: (Y/N) Date Received: 09/23/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 09/24/96

Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 09/28/96

Injection Volume: 2 (uL) Dilution Factor: 1 0000

GPC Cleanup: (Y/N) pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/L

| Cas No: | Compound | | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: | 3,0927963,9,1 | | | |
| 319846 | alpha-BHC | | 0.000440 | U | UJ | C |
| 3424826 | 2,4'-DDE | | 0.000380 | U | U | |
| 959988 | Endosulfan I | | 0.000650 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: | 2,0927962,9,1 | | | |
| 118741 | Hexachlorobenzene | | 0.000360 | J | J | |
| 319857 | beta-BHC | | 0.000290 | U | U | |
| 58899 | gamma-BHC (Lindane) | | ~~0.000250~~ 0.000320 | U ~~N~~ | ↓ | + |
| 319868 | delta-BHC | | 0.000340 | U | | |
| 76448 | Heptachlor | | ~~0.000520~~ 0.000480 | U ~~N~~ | ↓ | + |
| 309002 | Aldrin | | 0.000590 | U | | |
| 5103742 | gamma-Chlordane | | 0.000240 | U | U | |
| 5103719 | alpha-Chlordane | | 0.000520 | U | ↓ | |
| 5103731 | cis-Nonachlor | | 0.000370 | U | * | |
| 39765805 | trans-Nonachlor | | 0.000370 | U | | |
| 1024573 | Heptachlor epoxide | | 0.000890 | U | | |
| 60571 | Dieldrin | | 0.000430 | U | ↓ | |
| 72559 | 4,4'-DDE | | 0.000210 | U | U | |
| 53190 | 2,4'-DDD | | 0.000800 | U | | |
| 72208 | Endrin | | 0.000610 | U | | |
| 72548 | 4,4'-DDD | | 0.000520 | U | | |
| 789026 | 2,4'-DDT | | 0.000340 | U | | |
| 33216659 | Endosulfan II | | 0.000650 | U | | |
| 1031078 | Endosulfan sulfate | | 0.000650 | U | ↓ | |
| 50293 | 4,4'-DDT | | 0.000780 | U | UJ | C |
| 7421934 | Endrin aldehyde | | 0.000340 | U | U | |
| 53494705 | Endrin ketone | | 0.000340 | U | | |
| 72435 | Methoxychlor | | 0.000880 | U | | |
| 2385855 | Mirex | | 0.000260 | U | ↓ | |

OGDEN VALIDATED

*Analysis Not Validated

LEVEL D

12/3/96

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MV006

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2949

**Sample wt/vol:** 2.1600 L **Lab File ID:** 3,0927963,24,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/23/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/24/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 09/28/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,0927963,24,1 | | | | |
| 319846 | alpha-BHC | 0.000450 | U | uJ | c |
| 3424826 | 2,4'-DDE | 0.000380 | U | u | |
| 959988 | Endosulfan I | 0.000660 | U | u | |
| Compound from Column: | RTX-5 Lab File ID: 2,0927962,24,1 | | | | |
| 118741 | Hexachlorobenzene | 0.000370 | J | J | |
| 319857 | beta-BHC | ~~0.000630~~ 0.000300 | uJ | u | + |
| 58899 | gamma-BHC (Lindane) | 0.000320 | U | | |
| 319868 | delta-BHC | 0.000340 | U | | |
| 76448 | Heptachlor | ~~0.000810~~ 0.000490 | uJ | | + |
| 309002 | Aldrin | 0.000600 | U | | |
| 5103742 | gamma-Chlordane | 0.000240 | U | u | |
| 5103719 | alpha-Chlordane | 0.000530 | U | | |
| 5103731 | cis-Nonachlor | 0.000380 | U | *✓ | |
| 39765805 | trans-Nonachlor | ~~0.000290~~ 0.000370 | uJ | | + |
| 1024573 | Heptachlor epoxide | 0.000910 | U | | |
| 60571 | Dieldrin | 0.000440 | U | | |
| 72559 | 4,4'-DDE | 0.000210 | U | u | |
| 53190 | 2,4'-DDD | 0.000820 | U | | |
| 72208 | Endrin | 0.000620 | U | | |
| 72548 | 4,4'-DDD | 0.000530 | U | | |
| 789026 | 2,4'-DDT | 0.000340 | U | | |
| 33216659 | Endosulfan II | 0.000660 | U | | |
| 1031078 | Endosulfan sulfate | 0.000660 | U | | |
| 50293 | 4,4'-DDT | 0.000800 | U | uJ | c |
| 7421934 | Endrin aldehyde | 0.000350 | U | u | |
| 53494705 | Endrin ketone | 0.000350 | U | | |
| 72435 | Methoxychlor | 0.000900 | U | | |
| 2385855 | Mirex | 0.000260 | U | | |

**OGDEN VALIDATED**

**LEVEL D**

*Analysis Not Validated

12/3/96

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV007

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2945

**Sample wt/vol:** 2.1400 L **Lab File ID:** 3,0927963,16,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/23/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/24/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 09/28/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,0927963,16,1 | | | | |
| 319846 | alpha-BHC | 0.000450 | U | UJ | C |
| 3424826 | 2,4'-DDE | 0.000390 | U | U | |
| 959988 | Endosulfan I | 0.000670 | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,0927962,16,1 | | | | |
| 118741 | Hexachlorobenzene | 0.000340 | J | J | |
| 319857 | beta-BHC | ~~0.000490~~ 0.000300 | U ~~J~~ | U | + |
| 58899 | gamma-BHC (Lindane) | 0.000330 | U | | |
| 319868 | delta-BHC | 0.000350 | U | | |
| 76448 | Heptachlor | ~~0.000780~~ 0.000500 | U ~~J~~ | | + |
| 309002 | Aldrin | 0.000610 | U | | |
| 5103742 | gamma-Chlordane | 0.000240 | U | U | |
| 5103719 | alpha-Chlordane | 0.000530 | U | | |
| 5103731 | cis-Nonachlor | 0.000380 | U ~~J~~ | *J | |
| 39765805 | trans-Nonachlor | 0.000380 | U | | |
| 1024573 | Heptachlor epoxide | 0.000920 | U | | |
| 60571 | Dieldrin | 0.000440 | U | | |
| 72559 | 4,4'-DDE | 0.000220 | U | U | |
| 53190 | 2,4'-DDD | 0.000820 | U | | |
| 72208 | Endrin | 0.000630 | U | | |
| 72548 | 4,4'-DDD | 0.000530 | U | | |
| 789026 | 2,4'-DDT | 0.000350 | U | | |
| 33216659 | Endosulfan II | 0.000670 | U | | |
| 1031078 | Endosulfan sulfate | 0.000670 | U | | |
| 50293 | 4,4'-DDT | 0.000800 | U | UJ | C |
| 7421934 | Endrin aldehyde | 0.000350 | U | U | |
| 53494705 | Endrin ketone | 0.000350 | U | | |
| 72435 | Methoxychlor | 0.000900 | U | | |
| 2385855 | Mirex | 0.000260 | U | | |

**OGDEN VALIDATED**

**LEVEL D**

*Analysis Not Validated

12-3-96

A000020

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MV008

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2939

**Sample wt/vol:** 2.2800 L **Lab File ID:** 3,0927963,10,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/23/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/24/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 09/28/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/L

| Cas No: | Compound | | | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: | 3,0927963,10,1 | | | |
| 319846 | alpha-BHC | ~~0.000110~~ | 0.000430 | U ~~N~~ | UJ | c,+ |
| 3424826 | 2,4'-DDE | 0.000360 | | U | U | |
| 959988 | Endosulfan I | 0.000630 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: | 2,0927962,10,1 | | | |
| 118741 | Hexachlorobenzene | 0.000410 | | | | |
| 319857 | beta-BHC | ~~0.000690~~ | 0.000280 | U ~~N~~ | U | + |
| 58899 | gamma-BHC (Lindane) | 0.000310 | | U | | |
| 319868 | delta-BHC | 0.000330 | | U | | |
| 76448 | Heptachlor | ~~0.000680~~ | 0.000460 | U ~~N~~ | | + |
| 309002 | Aldrin | 0.000570 | | U | | |
| 5103742 | gamma-Chlordane | 0.000230 | | U | U | |
| 5103719 | alpha-Chlordane | 0.000500 | | U | | |
| 5103731 | cis-Nonachlor | 0.000360 | | U | *J | |
| 39765805 | trans-Nonachlor | ~~0.000300~~ | 0.000350 | U ~~N~~ | | + |
| 1024573 | Heptachlor epoxide | 0.000860 | | U | | |
| 60571 | Dieldrin | 0.000420 | | U | | |
| 72559 | 4,4'-DDE | 0.000200 | | U | U | |
| 53190 | 2,4'-DDD | 0.000770 | | U | | |
| 72208 | Endrin | 0.000590 | | U | | |
| 72548 | 4,4'-DDD | 0.000500 | | U | | |
| 789026 | 2,4'-DDT | 0.000330 | | U | | |
| 33216659 | Endosulfan II | 0.000630 | | U | | |
| 1031078 | Endosulfan sulfate | 0.000630 | | U | | |
| 50293 | 4,4'-DDT | 0.000750 | | U | UJ | c |
| 7421934 | Endrin aldehyde | 0.000330 | | U | U | |
| 53494705 | Endrin ketone | 0.000330 | | U | | |
| 72435 | Methoxychlor | 0.000850 | | U | | |
| 2385855 | Mirex | 0.000250 | | U | | |

OGDEN VALIDATED
LEVEL D

*Analysis Not Validated

12/3/96

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV009

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2942

**Sample wt/vol:** 2.2000 L **Lab File ID:** 3,0927963,13,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/23/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/24/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 09/28/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,0927963,13,1 | | | | |
| 319846 | alpha-BHC | 0.000440 | U | UJ | C |
| 3424826 | 2,4'-DDE | 0.000380 | U | U | |
| 959988 | Endosulfan I | 0.000650 | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,0927962,13,1 | | | | |
| 118741 | Hexachlorobenzene | 0.000450 | | | |
| 319857 | beta-BHC | ~~0.000650~~ 0.000290 | UK | U | + |
| 58899 | gamma-BHC (Lindane) | 0.000320 | U | | |
| 319868 | delta-BHC | 0.000340 | U | | |
| 76448 | Heptachlor | ~~0.000710~~ 0.000480 | UK | | + |
| 309002 | Aldrin | 0.000590 | U | | |
| 5103742 | gamma-Chlordane | 0.000240 | U | U | |
| 5103719 | alpha-Chlordane | 0.000520 | U | | |
| 5103731 | cis-Nonachlor | 0.000370 | U | *1 | |
| 39765805 | trans-Nonachlor | ~~0.000300~~ 0.000360 | UK | | + |
| 1024573 | Heptachlor epoxide | 0.000890 | U | | |
| 60571 | Dieldrin | 0.000430 | U | | |
| 72559 | 4,4'-DDE | 0.000210 | U | U | |
| 53190 | 2,4'-DDD | 0.000800 | U | | |
| 72208 | Endrin | 0.000610 | U | | |
| 72548 | 4,4'-DDD | 0.000520 | U | | |
| 789026 | 2,4'-DDT | 0.000340 | U | | |
| 33216659 | Endosulfan II | 0.000650 | U | | |
| 1031078 | Endosulfan sulfate | 0.000650 | U | | |
| 50293 | 4,4'-DDT | 0.000780 | U | UJ | C |
| 7421934 | Endrin aldehyde | 0.000340 | U | U | |
| 53494705 | Endrin ketone | 0.000340 | U | | |
| 72435 | Methoxychlor | 0.000880 | U | | |
| 2385855 | Mirex | 0.000260 | U | | |

**OGDEN VALIDATED**

**LEVEL D**

*Analysis Not Validated

12/3/96

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.** MV010

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2883

**Sample wt/vol:** 2.5000 L **Lab File ID:** 3,0927963,31,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/16/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 09/29/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: DB-17 | Lab File ID: 3,0927963,31,1 | | | | |
| 319846 | alpha-BHC | 0.000390 | U | ~~uJ~~ | L |
| 3424826 | 2,4'-DDE | 0.000330 | U | u | |
| 959988 | Endosulfan I | 0.000570 | U | u | |
| Compound from Column: RTX-5 | Lab File ID: 2,0927962,31,1 | | | | |
| 118741 | Hexachlorobenzene | 0.000270 | J | J | |
| 319857 | beta-BHC | 0.000250 | U | u | |
| 58899 | gamma-BHC (Lindane) | 0.000310 | | | |
| 319868 | delta-BHC | 0.000300 | U | u | |
| 76448 | Heptachlor | 0.000420 | U | u | |
| 309002 | Aldrin | 0.000520 | U | u | |
| 5103742 | gamma-Chlordane | 0.000210 | U | u | |
| 5103719 | alpha-Chlordane | 0.000450 | U | | |
| 5103731 | cis-Nonachlor | 0.000320 | U | * | |
| 39765805 | trans-Nonachlor | 0.000320 | U | | |
| 1024573 | Heptachlor epoxide | 0.000790 | U | | |
| 60571 | Dieldrin | 0.000380 | U | | |
| 72559 | 4,4'-DDE | 0.000180 | U | u | |
| 53190 | 2,4'-DDD | 0.000700 | U | | |
| 72208 | Endrin | 0.000540 | U | | |
| 72548 | 4,4'-DDD | 0.000460 | U | | |
| 789026 | 2,4'-DDT | 0.000300 | U | | |
| 33216659 | Endosulfan II | 0.000570 | U | | |
| 1031078 | Endosulfan sulfate | 0.000570 | U | | |
| 50293 | 4,4'-DDT | 0.000690 | U | ~~uJ~~ | L |
| 7421934 | Endrin aldehyde | 0.000300 | U | | |
| 53494705 | Endrin ketone | 0.000300 | U | | |
| 72435 | Methoxychlor | 0.000770 | U | | |
| 2385855 | Mirex | 0.000230 | U | | |

**OGDEN VALIDATED**

**LEVEL D**

*Analysis Not Validated

12/11/96

A000040

0/28/96

1D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET



**EPA SAMPLE NO.**

MV011

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2884

**Sample wt/vol:** 2.6000 L **Lab File ID:** 3,0927963,32,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/16/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 09/29/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/L

| Cas No: | Compound | | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: | 3,0927963,32,1 | | | |
| 19846 | alpha-BHC | | 0.000370 | U | u* | ¢ |
| 424826 | 2,4'-DDE | | 0.000320 | U | u | |
| 59988 | Endosulfan I | | ~~0.000530~~ 0.000550 | U~~N~~ | u | + |
| Compound from Column: | RTX-5 | Lab File ID: | 2,0927962,32,1 | | | |
| 18741 | Hexachlorobenzene | | 0.000250 | J | J | |
| 19857 | beta-BHC | | 0.000240 | U | u | |
| 8899 | gamma-BHC (Lindane) | | 0.000270 | U | | |
| 19868 | delta-BHC | | 0.000290 | U | | |
| 6448 | Heptachlor | | 0.000410 | U | | |
| 09002 | Aldrin | | 0.000500 | U | | |
| 103742 | gamma-Chlordane | | 0.000200 | U | u | |
| 103719 | alpha-Chlordane | | 0.000440 | U | | |
| 103731 | cis-Nonachlor | | 0.000310 | U | *✓ | |
| 9765805 | trans-Nonachlor | | 0.000310 | U | | |
| 024573 | Heptachlor epoxide | | 0.000760 | U | | |
| 0571 | Dieldrin | | 0.000360 | U | | |
| 2559 | 4,4'-DDE | | 0.000180 | U | u | |
| 3190 | 2,4'-DDD | | 0.000680 | U | | |
| 2208 | Endrin | | 0.000520 | U | | |
| 2548 | 4,4'-DDD | | 0.000440 | U | | |
| 89026 | 2,4'-DDT | | 0.000290 | U | | |
| 3216659 | Endosulfan II | | 0.000550 | U | | |
| 031078 | Endosulfan sulfate | | 0.000550 | U | | |
| 0293 | 4,4'-DDT | | 0.000660 | U | u* | ¢ |
| 421934 | Endrin aldehyde | | 0.000290 | U | u | |
| 3494705 | Endrin ketone | | 0.000450 | | | |
| 2435 | Methoxychlor | | 0.000500 | J | J | |
| 385855 | Mirex | | 0.000220 | U | u | |

**OGDEN VALIDATED**

**LEVEL D**

*Analysis Not Validated

12/9/96

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV012

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2943

**Sample wt/vol:** 2.3800 L **Lab File ID:** 3,0927963,14,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/23/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/24/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 09/28/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,0927963,14,1 | | | | |
| 319846 | alpha-BHC | 0.000410 | U | ~~UJ~~ | α |
| 3424826 | 2,4'-DDE | 0.000350 | U | ↓ | |
| 959988 | Endosulfan I | 0.000600 | U | | |
| Compound from Column: | RTX-5 Lab File ID: 2,0927962,14,1 | | | | |
| 118741 | Hexachlorobenzene | 0.000430 | | | |
| 319857 | beta-BHC | ~~0.003300~~ 0.000270 | ~~UJ~~ | U | + |
| 58899 | gamma-BHC (Lindane) | ~~0.000047~~ 0.000290 | ~~UJ~~ | ~~J~~ U | + |
| 319868 | delta-BHC | 0.000310 | U | U | |
| 76448 | Heptachlor | 0.000450 | U | U | |
| 309002 | Aldrin | 0.000540 | U | U | |
| 5103742 | gamma-Chlordane | 0.000220 | U | U | |
| 5103719 | alpha-Chlordane | 0.000480 | U | | |
| 5103731 | cis-Nonachlor | 0.000340 | U | * | |
| 39765805 | trans-Nonachlor | 0.000340 | U | | |
| 1024573 | Heptachlor epoxide | 0.000830 | U | | |
| 60571 | Dieldrin | 0.000400 | U | | |
| 72559 | 4,4'-DDE | 0.000190 | U | | |
| 53190 | 2,4'-DDD | 0.000740 | U | | |
| 72208 | Endrin | 0.000560 | U | ↓ | |
| 72548 | 4,4'-DDD | 0.000480 | U | U | |
| 789026 | 2,4'-DDT | 0.000310 | U | ↓ | |
| 33216659 | Endosulfan II | 0.000600 | U | | |
| 1031078 | Endosulfan sulfate | 0.000320 | J | J | |
| 50293 | 4,4'-DDT | 0.000720 | U | ~~UJ~~ | α |
| 7421934 | Endrin aldehyde | 0.000320 | U | | |
| 53494705 | Endrin ketone | ~~0.000170~~ 0.000320 | ~~UJ~~ | | + |
| 72435 | Methoxychlor | 0.000810 | U | | |
| 2385855 | Mirex | 0.000240 | U | ↓ | |

**OGDEN VALIDATED**

**LEVEL D**

*Analysis Not Validated

12/3/96

A 000016

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV013

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2944

**Sample wt/vol:** 2.1400 L **Lab File ID:** 3,0927963,15,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/23/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/24/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 09/28/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/L

| Cas No: | Compound | | | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: | 3,0927963,15,1 | | | | |
| 319846 | alpha-BHC | | 0.000450 | | U | U* | α |
| 3424826 | 2,4'-DDE | | 0.000390 | | U | ↓ | |
| 959988 | Endosulfan I | | 0.000670 | | U | ↓ | |
| Compound from Column: | RTX-5 | Lab File ID: | 2,0927962,15,1 | | | | |
| 118741 | Hexachlorobenzene | | 0.000500 | | | | |
| 319857 | beta-BHC | | 0.000290 | | U | U | |
| 58899 | gamma-BHC (Lindane) | | 0.000330 | | U | ↓ | |
| 319868 | delta-BHC | | 0.000350 | | U | ↓ | |
| 76448 | Heptachlor | | 0.000500 | | U | ↓ | |
| 309002 | Aldrin | | 0.000610 | | U | ↓ | |
| 5103742 | gamma-Chlordane | | 0.000240 | | U | U | |
| 5103719 | alpha-Chlordane | | 0.000530 | | U | ↓ | |
| 5103731 | cis-Nonachlor | | 0.000380 | | U | *✓ | |
| 39765805 | trans-Nonachlor | | 0.000380 | | U | ↓ | |
| 1024573 | Heptachlor epoxide | | 0.000920 | | U | ↓ | |
| 60571 | Dieldrin | | 0.000440 | | U | ↓ | |
| 72559 | 4,4'-DDE | 0.000210 | ~~0.000200~~ ~~0.0002100~~ | | U ~~N~~ | U | + |
| 53190 | 2,4'-DDD | | 0.000820 | | U | ↓ | |
| 72208 | Endrin | | 0.000630 | | U | ↓ | |
| 72548 | 4,4'-DDD | | 0.000530 | | U | ↓ | |
| 789026 | 2,4'-DDT | | 0.000350 | | U | ↓ | |
| 33216659 | Endosulfan II | | 0.000670 | | U | ↓ | |
| 1031078 | Endosulfan sulfate | | 0.000670 | | U | ↓ | |
| 50293 | 4,4'-DDT | | 0.000800 | | U | U* | α |
| 7421934 | Endrin aldehyde | | 0.000350 | | U | ↓ | |
| 53494705 | Endrin ketone | | ~~0.000570~~ | 0.000360 | U ~~N~~ | | + |
| 72435 | Methoxychlor | | 0.000900 | | U | ↓ | |
| 2385855 | Mirex | | 0.000260 | | U | ↓ | |

**OGDEN VALIDATED**

**LEVEL D**

*Analysis Not Validated

12-3-96

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV015

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMISW01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2897

**Sample wt/vol:** 2.0400 L **Lab File ID:** 3,0927963,40,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/16/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 09/30/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup:** (Y/N) **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,0927963,40,1 | | | | |
| 319846 | alpha-BHC | 0.660000 | E | R | D |
| 3424826 | 2,4'-DDE | 0.012000 | | | |
| 959988 | Endosulfan I | 0.890000 | E | R | D |
| Compound from Column: | RTX-5 Lab File ID: 2,0927962,40,1 | | | | |
| 118741 | Hexachlorobenzene | 0.000430 | U | U | |
| 319857 | beta-BHC | 0.930000 | E | R | D |
| 58899 | gamma-BHC (Lindane) | 0.690000 | E | ↓ | ↓ |
| 319868 | delta-BHC | 0.860000 | E | ↓ | ↓ |
| 76448 | Heptachlor | 0.500000 | E | ↓ | ↓ |
| 309002 | Aldrin | 0.330000 | E | ↓ | ↓ |
| 5103742 | gamma-Chlordane | 0.000870 | | | |
| 5103719 | alpha-Chlordane | 0.000560 | U | U | |
| 5103731 | cis-Nonachlor | 0.000840 | | * | |
| 39765805 | trans-Nonachlor | 0.000400 | U | U | |
| 1024573 | Heptachlor epoxide | 0.970000 | E | R | D |
| 60571 | Dieldrin | 1.200000 | E | R | D |
| 72559 | 4,4'-DDE | 0.860000 | E | R | D |
| 53190 | 2,4'-DDD | 0.006700 | | | |
| 72208 | Endrin | 1.300000 | E | R | D |
| 72548 | 4,4'-DDD | 1.300000 | E | R | D |
| 789026 | 2,4'-DDT | 0.000360 | U | | |
| 33216659 | Endosulfan II | 1.000000 | E | R | D |
| 1031078 | Endosulfan sulfate | 1.300000 | E | R | D |
| 50293 | 4,4'-DDT | 0.220000 | E | R | D |
| 7421934 | Endrin aldehyde | 1.100000 | E | ↓ | ↓ |
| 53494705 | Endrin ketone | 0.210000 | E | ↓ | ↓ |
| 72435 | Methoxychlor | 0.000560 | J | J | |
| 2385855 | Mirex | 0.000280 | U | U | |

OGDEN VALIDATED

*Analysis Not Validated

LEVEL D

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MV015DL

Lab Name: Arthur D. Little, Inc.
Contract: N62742-90-D-0019
Lab Code: ADLMA
Case No.: CTO136
ADL Project No.: 69084
SDG No.: OMISW01
Matrix: (soil/water) WATER
Lab Sample ID: 96B2897DL
Sample wt/vol: 2.0400 L
Lab File ID: 3,1009963,8,1
% Moisture:
decanted: (Y/N)
Date Received: 09/16/96
Extraction: (SepF/Cont/Sonc)
Date Extracted: 09/16/96
Concentrated Extract Volume: 25.0000(mL)
Date Analyzed: 10/10/96
Injection Volume: 2 (uL)
Dilution Factor: 50.0000
GPC Cleanup: (Y/N)
pH:
Split Factor: 2.0000
Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/L

| Cas No: | Compound | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: DB-17 | Lab File ID: 3,1009963,8,1 | | | | |
| 319846 | alpha-BHC | 3.700000 | D | | |
| 3424826 | 2,4'-DDE | 0.020000 | U | R | D |
| 959988 | Endosulfan I | 1.700000 | D | | |
| Compound from Column: RTX-5 | Lab File ID: 2,1009962,8,1 | | | | |
| 118741 | Hexachlorobenzene | 0.021000 | U | R | D |
| 319857 | beta-BHC | 2.700000 | D | | |
| 58899 | gamma-BHC (Lindane) | 3.600000 | D | | |
| 319868 | delta-BHC | 3.700000 | D | | |
| 76448 | Heptachlor | 0.290000 | D | | |
| 309002 | Aldrin | 0.220000 | D | | |
| 5103742 | gamma-Chlordane | 0.013000 | U | R | D |
| 5103719 | alpha-Chlordane | 0.028000 | U | R | D |
| 5103731 | cis-Nonachlor | 0.020000 | U | * | |
| 39765805 | trans-Nonachlor | 0.020000 | U | R | D |
| 1024573 | Heptachlor epoxide | 2.100000 | D | | |
| 60571 | Dieldrin | 1.800000 | D | | |
| 72559 | 4,4'-DDE | 0.870000 | D | | |
| 53190 | 2,4'-DDD | 0.043000 | U | R | D |
| 72208 | Endrin | 0.910000 | D | J | C |
| 72548 | 4,4'-DDD | 1.200000 | D | | |
| 789026 | 2,4'-DDT | 0.018000 | U | R | D |
| 33216659 | Endosulfan II | 2.000000 | D | | |
| 1031078 | Endosulfan sulfate | 2.700000 | D | | |
| 50293 | 4,4'-DDT | 0.170000 | D | J | C |
| 7421934 | Endrin aldehyde | 1.800000 | D | | |
| 53494705 | Endrin ketone | 0.210000 | D | | |
| 72435 | Methoxychlor | 0.047000 | U | R | D |
| 2385855 | Mirex | 0.014000 | U | R | D |

**OGDEN VALIDATED**

*Analysis Not Validated

**LEVEL D**

OGDEN

# DATA VALIDATION REPORT

CLEAN CONTRACT TASK ORDER #0136
NAF Midway Site Investigations

ANALYSIS: PESTICIDES/PCBs

SAMPLE DELIVERY GROUP: OMIS01

Prepared by

Ogden—Denver Operations
550 South Wadsworth Boulevard, Suite 500
Lakewood, Colorado 80226

# CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

Ogden Environmental and Energy Services Co., Inc.
550 South Wadsworth Boulevard
Suite 500
Lakewood, CO 80226

Package ID C136PP60
Task Order 110190136
SDG No. OMIS01
No. of Analyses 20

Laboratory A.D. LITTLE
Reviewer M. Pokorny
Analysis/Method Pesticides/PCBs

Date: 12·17·96
Reviewer's Signature

| ACTION ITEMS[a] | |
|---|---|
| 1. Case Narrative Deficiencies | |
| 2. Out of Scope Analyses | |
| 3. Analyses Not Conducted | |
| 4. Missing Hardcopy Deliverables | |
| 5. Incorrect Hardcopy Deliverables | |
| 6. Deviations from Analysis Protocol, e.g., | QUALIFICATIONS GIVEN FOR CALIBRATION DEFICIENCIES, BLANK CONTAMINATION, AND UNCONFIRMED DETECTS. |
| Holding Times | |
| GC/MS Tune/Inst. Perform | ANALYTES WERE REJECTED ABOVE INSTRUMENT LINEAR RANGE. |
| Calibrations | |
| Blanks | |
| Surrogates | 3 SAMPLE WERE ANALYZED AT DILUTIONS. |
| Matrix Spike/Dup LCS | |
| Field QC | |
| Internal Standard Performance | |
| Compound Identification and Quantitation | |
| System Performance | |

| COMMENTS[b] |
|---|
| |

[a] Subcontracted analytical laboratory is not meeting contract and/or method requirements.
[b] Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.

# 1. INTRODUCTION

| | |
|---|---|
| Task Order Title: | NAF Midway Site Investigations |
| CLEAN Contract Task Order #: | 0136 |
| SDG#: | OMIS01 |
| CTO Manager: | J. Cotter |
| Project Contact: | M. Medeiros |
| Matrix: | Sediment/Water |
| Analysis: | Pesticides/PCBs |
| NEESA QC Level: | D |
| No. of Samples: | 20 |
| No. of Reanalyses/Dilutions: | 4 |
| Reviewer: | M. Pokorny |
| Date of Review: | December 17, 1996 |

The samples listed in Table 1 were validated based on the NOAA National Status and Trends Analytical Protocols, data validation procedure for Levels C and D pesticides/PCBs (DVP-4, Rev. 2) and the *National Functional Guidelines For Organic Data Review* (2/94). These protocols vary from the CLP Protocols upon which the Navy CLEAN data validation procedures were based. Instances where quality control parameters vary from the CLP Data Validation procedures are documented in the text of this report and should be noted with respect to the overall data quality objectives of this project. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in estimated value were not denoted by a qualification code since the data had already been rejected.

## Table 1. Sample identification

| Client ID | EPA ID | Laboratory ID | Matrix | COC Method |
|---|---|---|---|---|
| M00MS01S01 | MA700 | 96B2890 | sediment | STIV141C/E |
| M00MS02S01 | MA701 | 96B2891 | sediment | STIV141C/E |
| M00MS02D01 | MA702 | 96B2892 | sediment | STIV141C/E |
| M00MS03S01 | MA703 | 96B2893 | sediment | STIV141C/E |
| M00MS04S01 | MA704 | 96B2894 | sediment | STIV141C/E |
| M01MS01S01 | MC165 | 96B2898 | sediment | STIV141C/E |
| M01MS01S01 | MC165DL | 96B2898DL | sediment | STIV141C/E |
| M01MS01D01 | MC166 | 96B2899 | sediment | STIV141C/E |
| M01MS01D01 | MC166DL | 96B2899DL | sediment | STIV141C/E |
| M01MS01D01 | MC166DL2 | 96B2899DL | sediment | STIV141C/E |
| M01MS02S01 | MC167 | 96B2900 | sediment | STIV141C/E |
| M01MS02S01 | MC167DL | 96B2900DL | sediment | STIV141C/E |
| M01MS03S01 | MC168 | 96B2901 | sediment | STIV141C/E |
| M01MS04S01 | MC169 | 96B2902 | sediment | STIV141C/E |
| M01MS05S01 | MC170 | 96B2903 | sediment | STIV141C/E |
| M01MS06S01 | MC171 | 96B2904 | sediment | STIV141C/E |
| M01MS07S01 | MC172 | 96B2905 | sediment | STIV141C/E |
| M01MS08S01 | MC173 | 96B2906 | sediment | STIV141C/E |
| M01MS09S01 | MC174 | 96B2907 | sediment | STIV141C/E |
| M01MS10S01 | MC175 | 96B2908 | sediment | STIV141C/E |
| M01MS11S01 | MC176 | 96B2895 | sediment | STIV141C/E |
| M01MS12S01 | MC177 | 96B2896 | sediment | STIV141C/E |
| M01EW01S01 | MC185 | 96B2950 | water | STIV141C/E |
| M01EW01D01 | MC186 | 96B2951 | water | STIV141C/E |

# 2. DATA VALIDATION FINDINGS

## 2.1 SAMPLE MANAGEMENT

The following are findings associated with sample management:

### 2.1.1 Sample Preservation, Handling, and Transport

No preservation was required for pesticide/PCB analysis. Two of the samples in this SDG were received by the laboratory outside temperature limits established in NEESA 20.2-047B. Since this is an extractable method, quality of the data should not be affected. No sample containers were noted to be damaged. No qualifications were required.

### 2.1.2 Chain of Custody

All COCs were legible and complete. All COCs were signed by laboratory and field personnel. Questions regarding sample management were answered on the COCs. No discrepancies were noted and qualifications were not assigned.

### 2.1.3 Holding Times

All samples in this SDG were extracted and analyzed within the prescribed seven day holding time for waters and fourteen days for sediments; therefore, no qualifications were required.

## 2.2 PESTICIDES INSTRUMENT PERFORMANCE

No percent resolution or endrin/4,4'-DDT degradation analyses were performed by the laboratory, as required by the CLP SOW (3/90). These analyses have not been established in the Status and Trends protocols; therefore, no evaluation was given to the data based on percent resolution or breakdown degradation. PCBs 103 and 198 were used as the surrogates for this SDG, while tetrachloro-m-xylene served as the internal standard. All target analytes were quantified versus the internal standard recovery. No surrogate or internal standard retention time window was specified in the Status and Trends protocols. The laboratory established a window of $\pm 0.075$ or 0.15 minutes. Based on professional judgement, the reviewer considered this an acceptable range. All surrogate retention times were within the retention time windows established by the initial calibration. The retention time window for all target compounds was established by the laboratory at $\pm 0.075$ minutes, although some windows were reduced or expanded for proper peak identification. In these instances, the reviewer deemed the retention time windows to be acceptable. All continuing calibration standards had retention times within the retention time windows established with the initial calibration standards. No qualifications of the data were required.

## 2.3 CALIBRATION

The following are the findings associated with calibration:

### 2.3.1 Analytical Sequence

The laboratory modified the analytical sequence from the Status and Trends protocols. The laboratory analyzed an initial five-point calibration with subsequent mid-level calibration standards analyzed for every ten field samples and at the end of each sequence. Status and Trends protocols suggested a four-point calibration be interspersed with samples and no more than six samples be analyzed in between calibration standards. The laboratory modifications were considered acceptable by the reviewer; therefore, no qualifications were required.

### 2.3.2 Initial Calibration

The NOAA Status and Trends used a correlation coefficient to determine the accuracy of initial calibrations. The laboratory deviated from the protocols by measuring the %RSDs from relative response factors for each initial calibration. The laboratory established %RSDs must be less than or equal to 25% for 90% of all compounds and less than or equal to 35% for all compounds. A percent RSD of 25 percent or less was used to evaluate the initial calibration. All target compounds from the RTX-5 column were within the QC limits for the initial calibration dated 10/02/96. The %RSD for heptachlor was above the QC limits on the DB-17 column for the initial calibration performed on 10/02/96; samples MA700, MA701, MA702, MA703, MA704, MC165, MC166, MC167, MC168, MC169, MC170, MC171, MC172, MC173, MC174, MC175, MC176, and MC177 all had heptachlor nondetects qualified as estimated, "UJ." All target compounds from the RTX-5 column were within the QC limits for the initial calibration dated 10/09/96. The %RSD for endrin was above the QC limits on the DB-17 column for the initial calibration performed on 10/09/96; samples MC185 and MC186 had endrin qualified as an estimated nondetect, "UJ." The %RSDs for delta-BHC, PCB-18, PCB-52, and PCB-101 were above the QC limits on the RTX-5 column for the initial calibration performed on 10/24/96; sample MC166DL2 had PCB-101 qualified as an estimated nondetect, "UJ." No other qualifications were assigned.

### 2.3.3 Continuing Calibration

No QC limits have been established for continuing calibration standards by the Status and Trends protocols. The laboratory established a %D less than or equal to 25% for 90% of the target compounds and less than or equal to 35% for all compounds. For continuing calibration standards, a %D of 25 percent was used to evaluate the data. All target compound %Ds for the DB-17 column were within QC limits for the continuing calibration dated 10/05/96. The %Ds from the RTX-5 column for 2,4´-DDD and 4,4´-DDD were above QC limits for the continuing calibration from 10/05/96; samples MC177, MC167, MC168, MC169, MC170, MC171, MC172, MC173, MC174, and MC175 had 2,4´-DDD and 4,4´-DDD detects qualified "J" and nondetects qualified "UJ." The %D for the DB-17 column for 4,4´-DDT was above QC limits for the continuing calibration from 10/10/96; samples MC185 and MC186 had 4,4´-DDT nondetects qualified "UJ." No other qualifications were required.

## 2.4 BLANKS

The following are the findings associated with blanks:

### 2.4.1 Instrument Blanks

No instrument blanks were analyzed for this SDG. NOAA Status and Trends protocols do not suggest the analysis of instrument blanks; therefore, no evaluation of the data was given based on instrument blanks.

### 2.4.2 Method Blanks

NOAA Status and Trends protocols suggested method blanks were acceptable if no target compound detects were found above 3× the MDLs. The laboratory further defined the QC limits for blanks by stating no more than 2 analytes to exceed 3× the MDLs. Because the reporting limits and the MDLs were the same for this SDG, the reviewer chose a more conservative QC criterion. Validation was based on the Ogden DVP-4, Rev. 2, which states that blanks not have target compounds above the reporting limits.

One water method blank was analyzed with this SDG. PCB-138 was detected in the water method blank at 0.00089 µg/L. PCB-138 was qualified as "UJ" in samples MC185 and MC186. The laboratory analyzed one sediment method blank with this SDG; however, according to the laboratory narrative, a portion of this sample was spilled during concentration. No target compounds were detected in the sediment blank and surrogate recoveries were 11% for both surrogates. No further qualifications were deemed necessary by the reviewer.

## 2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

The laboratory analyzed two laboratory control samples (LCS) in lieu of a blank spike/blank spike duplicate; one sediment matrix and one water matrix LCS. The QC criteria established to evaluate the matrix spike/ matrix spike duplicate was used by the laboratory for the LCS. Because the Status and Trends protocols did not address LCSs and the established limits were stricter than those in the CLP SOW (3/90), the reviewer deemed the limits acceptable. All target analytes met the QC criteria; therefore, no qualifications were required.

## 2.6 SURROGATE RECOVERY

The laboratory established surrogate recovery QC limits that were stricter than those applied in the Status and Trends protocols. Surrogate recoveries were calculated and reported for the RTX-5 column only; therefore, surrogate recovery evaluation was limited to the data from the RTX-5 column. All surrogate recoveries were within QC limits of 50 to 125 percent. In addition to surrogates PCB-103 and PCB-198, the laboratory identified an additional surrogate, 4,4'-dibromooctafluorobiphenyl (DBOFB). Percent recoveries for DBOFB were reported in the raw data, but not on the summary forms. No historical data or QC limits were provided for DBOFB; therefore, recoveries for DBOFB were not evaluated by the reviewer. No qualifications were required.

## 2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

The MS/MSD was performed on sample MA702 of this SDG. All percent recoveries and RPDs were within control limits. No calculation or transcription errors were noted in the raw data. No qualifications were required.

## 2.8 SAMPLE CLEANUP PERFORMANCE

According to the Form Is, GPC cleanups were performed on all samples in this SDG except MC185 and MC186. The Form Is also indicated that none of the samples were sulfur cleaned. Because no performance raw data was provided by the laboratory, sample cleanup performance was evaluated on surrogate recoveries and blank spike results. Review of the raw data indicated no target analyte loss due to cleanup procedures; therefore, qualifications were not required.

## 2.9 FIELD QC SAMPLES

Field QC samples are evaluated, and if necessary, qualified based only on method blanks. Any remaining detects are used to evaluate the associated samples. The following are findings associated with field QC samples:

### 2.9.1 Field Blanks and Equipment Rinsates

Sample MC187 (SDG:OMISW01) was identified as the equipment rinsate associated with this SDG. Sample MV010 (SDG:OMISW01) was identified as the field blank associated with this SDG. The equipment rinsate and field blank both had detects for PCB-8, PCB-18, hexachlorobenzene, and gamma-BHC. Sample MC170 had PCB-8 qualified "J." Sample MC177 had gamma-BHC qualified "J." No other qualifications were required.

### 2.9.2 Field Duplicates

Two duplicate pairs were identified with this SDG, MA701/MA702 and MC165/MC166. The duplicate pair MC165/MC166 had many common detects between the samples, all of which had RPDs of less than 100%. Sample MC165 had detects for PCB-18, PCB-209, and hexachlorobenzene; sample MC166 had nondetects for these compounds. Sample MC166 had a detect for PCB-105; sample MC165 did not have a PCB-105 detect. The duplicate pair MA701/MA702 had one common detect, PCB-138, with an RPD of 5.4%. Qualifications are not assigned to the data based on field duplicate analysis.

## 2.10 COMPOUND IDENTIFICATION

Compound identification was performed by the reviewer. Possible false negative detects were eliminated upon examination of the chromatograms and quantitation sheets by the reviewer. All detected analytes were confirmed by second column confirmation. Some samples exhibited elevated baselines occurring after 65 minutes into the run. Based on the surrogate recovery for PCB 198 and a comparison of raw data to chromatograms from low level standards, the reviewer determined that target analyte peaks, if present, could be identified.
The laboratory quantitated several compounds without second column confirmation. These compounds were qualified by the laboratory as "NJ" or "N." In addition, several compounds were reported below the reporting limit and at levels less than ½ the MDL. These compounds were qualified by the laboratory as "J." Upon review of the raw data and based on professional judgement, the reviewer identified all compounds quantified from a single column and several "J" compounds reported by the laboratory as false positives. The reporting concentrations were changed to the reporting limits and the qualifiers changed to nondetects, "U."

Cis-nonachlor was reported on the Form Is for all samples; however, cis-nonachlor was not identified as a target compound. As a result, the cis-nonachlor was not validated. No qualifications were required.

## 2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantification was verified in the samples in this SDG. Due to high concentrations of PCB congeners, samples MC165, MC166 and MC167 were analyzed at dilutions. Target compounds not requiring dilutions were rejected, "R" in the diluted samples, while target compounds that exceeded the linear range were rejected in the least diluted samples. Samples MC165DL, MC166DL, MC166DL2, and MC167DL were analyzed at 20, 5, 20, and 10 fold dilutions respectively. All analytes from sample MC166DL were rejected, "R."

No %Ds were calculated or reported for target analyte detects. The RTX-5 column served as the primary column for all target compounds, with the exception of PCB 8, alpha-BHC, endosulfan I, 2,4'-DDE, and in most cases, PCB-138, which were quantified from the DB-17 column. The confirmation column was used for confirmation of analytes and no quantification occurred from the column. Review of the raw data confirmed that target analytes were present on both columns and quantification was performed on the correct primary column; therefore no evaluation was given to %D information. No other qualifications were required.

1D
PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MA700

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2890

**Sample wt/vol:** 0.0246 Kg **Lab File ID:** 3,1001963,10,1

**% Moisture:** 19.20 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/02/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1001963,10,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.043 | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.045 | | ~~UJ~~ | ~~B~~ |
| Compound from Column: | RTX-5 Lab File ID: 2,1001962,10,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.090 | U | U | |
| 7012375 | PCB-28 (2,4,4') | 0.061 | U | | |
| 35693993 | PCB-52 (2,2',5,5') | 0.026 | U | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.030 | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.033 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.025 | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.049 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.039 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.032 | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.028 | U | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.077 | U | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.058 | U | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.033 | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.037 | U | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.130 | U | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.026 | U | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.023 | U | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.027 | U | | |

MP 12.18.96

**OGDEN VALIDATED**

**LEVEL D**

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MA700

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2890

**Sample wt/vol:** 0.0246 Kg **Lab File ID:** 3,1001963,10,1

**% Moisture:** 19.20 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/02/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1001963,10,1 | | | | |
| 319846 | alpha-BHC | ~~0.008~~ 0.027 | U ~~J~~ | U ~~J~~ | ~~*~~T + |
| 3424826 | 2,4'-DDE | 0.130 | | | |
| 959988 | Endosulfan I | 0.052 | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,1001962,10,1 | | | | |
| 118741 | Hexachlorobenzene | ~~0.006~~ 0.041 | U ~~J~~ | U ~~J~~ | ~~*~~T + |
| 31 | beta-BHC | 0.050 | U | U | |
| 5 | gamma-BHC (Lindane) | 0.035 | U | | |
| 31 | delta-BHC | ~~0.003~~ .028 | U ~~J~~ | | + |
| 76448 | Heptachlor | 0.039 | U | J | C |
| 309002 | Aldrin | 0.036 | U | | |
| 5103742 | gamma-Chlordane | 0.037 | U | | |
| 5103719 | alpha-Chlordane | 0.034 | U | | |
| 5103731 | cis-Nonachlor | 0.021 | U | | |
| 39765805 | trans-Nonachlor | 0.021 | U | U | |
| 1024573 | Heptachlor epoxide | 0.047 | U | | |
| 60571 | Dieldrin | 0.045 | U | | |
| 72559 | 4,4'-DDE | 0.033 | U | | |
| 53190 | 2,4'-DDD | 0.035 | U | | |
| 72208 | Endrin | 0.013 | U | | |
| 72548 | 4,4'-DDD | 0.060 | U | | |
| 789026 | 2,4'-DDT | 0.054 | U | | |
| 33216659 | Endosulfan II | ~~0.055~~ 0.053 | U ~~J~~ | | + |
| 1031078 | Endosulfan sulfate | 0.052 | U | | |
| 50293 | 4,4'-DDT | 0.048 | U | | |
| 7421934 | Endrin aldehyde | 0.030 | U | | |
| 53494705 | Endrin ketone | 0.030 | U | | |
| 72435 | Methoxychlor | 0.180 | U | | |
| 2385855 | Mirex | 0.041 | U | | |

MP 12.16.96

**OGDEN VALIDATED**

*Analysis Not Validated

**LEVEL D**

1D
# PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MA701

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2891

**Sample wt/vol:** 0.0223 Kg **Lab File ID:** 3,1001963,11,1

**% Moisture:** 25.90 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/02/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1001963,11,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.048 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1001962,11,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.099 | U | U | |
| 7012375 | PCB-28 (2,4,4') | 0.067 | U | | |
| 35693993 | PCB-52 (2,2',5,5') | 0.029 | U | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.033 | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.036 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.028 | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.054 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.043 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.036 | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.031 | U | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.076 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.085 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.064 | U | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.037 | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.041 | U | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.140 | U | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.029 | U | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.025 | U | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.030 | U | | |

OGDEN VALIDATED

LEVEL D

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MA701

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2891

**Sample wt/vol:** 0.0223 Kg **Lab File ID:** 3,1001963,11,1

**% Moisture:** 25.90 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/02/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1001963,11,1 | | | |
| 319846 | alpha-BHC | 0.030 | U | U | |
| 3424826 | 2,4'-DDE | 0.045 | U | U | |
| 959988 | Endosulfan I | 0.058 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1001962,11,1 | | | |
| 118741 | Hexachlorobenzene | 0.045 | U | U | |
| 319857 | beta-BHC | 0.055 | U | | |
| 58[illegible] | gamma-BHC (Lindane) | 0.039 | U | | |
| 3[illegible] | delta-BHC | ~~0.039~~ 0.031 | U ~~X~~ | | + |
| 764[illegible] | Heptachlor | 0.043 | U | J | C |
| 309002 | Aldrin | 0.040 | U | | |
| 5103742 | gamma-Chlordane | 0.041 | U | | |
| 5103719 | alpha-Chlordane | 0.038 | U | | |
| 5103731 | cis-Nonachlor | 0.023 | U | | |
| 39765805 | trans-Nonachlor | 0.023 | U | U | |
| 1024573 | Heptachlor epoxide | 0.052 | U | | |
| 60571 | Dieldrin | 0.050 | U | | |
| 72559 | 4,4'-DDE | 0.037 | U | | |
| 53190 | 2,4'-DDD | 0.038 | U | | |
| 72208 | Endrin | 0.014 | U | | |
| 72548 | 4,4'-DDD | 0.066 | U | | |
| 789026 | 2,4'-DDT | 0.060 | U | | |
| 33216659 | Endosulfan II | 0.058 | U | | |
| 1031078 | Endosulfan sulfate | 0.058 | U | | |
| 50293 | 4,4'-DDT | 0.052 | U | | |
| 7421934 | Endrin aldehyde | 0.033 | U | | |
| 53494705 | Endrin ketone | 0.033 | U | | |
| 72435 | Methoxychlor | 0.200 | U | | |
| 2385855 | Mirex | 0.045 | U | | |

MP
12-16-96

OGDEN VALIDATED

LEVEL D

*Analysis Not Validated

1D
PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MA702

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2892

**Sample wt/vol:** 0.0237 Kg **Lab File ID:** 3,1001963,12,1

**% Moisture:** 23.90 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/02/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1001963,12,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.045 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1001962,12,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.093 | U | U | |
| 7012375 | PCB-28 (2,4,4') | 0.063 | U | | |
| 35693993 | PCB-52 (2,2',5,5') | 0.027 | U | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.031 | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.034 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.026 | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.051 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.040 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.034 | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.029 | U | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.072 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.080 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.060 | U | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.035 | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.039 | U | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.130 | U | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.027 | U | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.024 | U | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.028 | U | | |

OGDEN VALIDATED

LEVEL D

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA702

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2892

**Sample wt/vol:** 0.0237 Kg **Lab File ID:** 3,1001963,12,1

**% Moisture:** 23.90 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/02/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV GUAL | GUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: DB-17 | Lab File ID: 3,1001963,12,1 | | | | |
| 319846 | alpha-BHC | ~~0.007~~ 0.028 | ~~J~~ U | U ~~J~~ | ~~*~~ ~~II~~ + |
| 3424826 | 2,4'-DDE | 0.043 | U | U | |
| 959988 | Endosulfan I | 0.054 | U | U | |
| Compound from Column: RTX-5 | Lab File ID: 2,1001962,12,1 | | | | |
| 118741 | Hexachlorobenzene | 0.043 | U | U | |
| 319857 | beta-BHC | 0.052 | U | | |
| 5[illegible] | gamma-BHC (Lindane) | 0.037 | U | | |
| 3[illegible] | delta-BHC | ~~0.180~~ .030 | ~~N~~ U | | + |
| 76[illegible] | Heptachlor | 0.041 | U | J | C |
| 309002 | Aldrin | 0.038 | U | | |
| 5103742 | gamma-Chlordane | 0.038 | U | | |
| 5103719 | alpha-Chlordane | 0.035 | U | | |
| 5103731 | cis-Nonachlor | 0.021 | U | * | |
| 39765805 | trans-Nonachlor | 0.021 | U | U | |
| 1024573 | Heptachlor epoxide | 0.049 | U | | |
| 60571 | Dieldrin | 0.047 | U | | |
| 72559 | 4,4'-DDE | 0.035 | U | | |
| 53190 | 2,4'-DDD | ~~0.100~~ 0.036 | ~~N~~ U | | + |
| 72208 | Endrin | 0.013 | U | | |
| 72548 | 4,4'-DDD | 0.062 | U | | |
| 789026 | 2,4'-DDT | 0.056 | U | | |
| 33216659 | Endosulfan II | ~~0.120~~ 0.055 | ~~N~~ U | | + |
| 1031078 | Endosulfan sulfate | 0.054 | U | | |
| 50293 | 4,4'-DDT | 0.049 | U | | |
| 7421934 | Endrin aldehyde | 0.031 | U | | |
| 53494705 | Endrin ketone | 0.031 | U | | |
| 72435 | Methoxychlor | 0.180 | U | | |
| 2385855 | Mirex | 0.043 | U | | |

MP 12-16-96

OGDEN VALIDATED

LEVEL D

*Analysis Not Validated

1D
PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA703



**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2893

**Sample wt/vol:** 0.0239 Kg **Lab File ID:** 3,1001963,15,1

**% Moisture:** 20.50 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/03/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1001963,15,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.044 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1001962,15,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.092 | | U | U | |
| 7012375 | PCB-28 (2,4,4') | 0.062 | | U | | |
| 35693993 | PCB-52 (2,2',5,5') | 0.027 | | U | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.031 | | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.034 | | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.026 | | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.050 | | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.040 | | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.033 | | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.029 | | U | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.073 | | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.079 | | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.060 | | U | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.034 | | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.038 | | U | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.130 | | U | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | ~~0.020~~ | 0.027 | ~~U~~ U | | + |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.024 | | U | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.028 | | U | | |

MP 12.16.96

**OGDEN VALIDATED**

**LEVEL D**

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET



**EPA SAMPLE NO.**
MA703

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2893

**Sample wt/vol:** 0.0239 Kg **Lab File ID:** 3,1001963,15,1

**% Moisture:** 20.50 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/03/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1001963,15,1 | | | |
| 319846 | alpha-BHC | ~~0.006~~ 0.028 | ~~J~~ U | U ~~J~~ | *II + |
| 3424826 | 2,4'-DDE | 0.042 | U | U | |
| 959988 | Endosulfan I | 0.054 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1001962,15,1 | | | |
| 118741 | Hexachlorobenzene | ~~0.001~~ 0.042 | ~~J~~ U | U | + |
| 319857 | beta-BHC | 0.051 | U | | |
| 58[illegible] | gamma-BHC (Lindane) | 0.037 | U | | |
| 3[illegible] | delta-BHC | 0.029 | U | | |
| 76448 | Heptachlor | 0.040 | U | J | C |
| 309002 | Aldrin | 0.037 | U | | |
| 5103742 | gamma-Chlordane | 0.038 | U | | |
| 5103719 | alpha-Chlordane | 0.035 | U | | |
| 5103731 | cis-Nonachlor | 0.021 | U | * | |
| 39765805 | trans-Nonachlor | 0.021 | U | U | |
| 1024573 | Heptachlor epoxide | 0.048 | U | | |
| 60571 | Dieldrin | 0.046 | U | | |
| 72559 | 4,4'-DDE | 0.034 | U | | |
| 53190 | 2,4'-DDD | 0.036 | U | | |
| 72208 | Endrin | 0.013 | U | | |
| 72548 | 4,4'-DDD | 0.061 | U | | |
| 789026 | 2,4'-DDT | 0.056 | U | | |
| 33216659 | Endosulfan II | 0.054 | U | | |
| 1031078 | Endosulfan sulfate | 0.054 | U | | |
| 50293 | 4,4'-DDT | 0.049 | U | | |
| 7421934 | Endrin aldehyde | 0.030 | U | | |
| 53494705 | Endrin ketone | 0.030 | U | | |
| 72435 | Methoxychlor | 0.180 | U | | |
| 2385855 | Mirex | 0.042 | U | | |

MP
12.12.96

**OGDEN VALIDATED**

**LEVEL D**

***Analysis Not Validated**

1D
# PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MA704

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2894

**Sample wt/vol:** 0.0237 Kg **Lab File ID:** 3,1001963,16,1

**% Moisture:** 18.80 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/03/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | RBV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1001963,16,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.045 | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,1001962,16,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.093 | U | U | |
| 7012375 | PCB-28 (2,4,4') | 0.063 | U | | |
| 35693993 | PCB-52 (2,2',5,5') | 0.027 | U | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.031 | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.034 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.026 | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.051 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.040 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.034 | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.029 | U | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.056 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.080 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.060 | U | U | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.035 | U | U | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | ~~0.097~~ 0.039 | ~~X~~ U | ~~X~~ U | ~~NJ~~ + |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.130 | U | U | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | ~~0.021~~ 0.027 | ~~NJ~~ U | U | + |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.024 | U | U | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.028 | U | U | |

NP
12.16.96

**OGDEN VALIDATED**

**LEVEL D**

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA704



**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2894

**Sample wt/vol:** 0.0237 Kg **Lab File ID:** 3,1001963,16,1

**% Moisture:** 18.80 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/03/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1001963,16,1 | | | |
| 319846 | alpha-BHC | ~~0.007~~ 0.028 | ~~NJ~~ U | U | + |
| 3424826 | 2,4'-DDE | 0.043 | U | U | |
| 959988 | Endosulfan I | 0.054 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1001962,16,1 | | | |
| 118741 | Hexachlorobenzene | 0.043 | U | U | |
| 319857 | beta-BHC | 0.052 | U | | |
| 5[illegible] | gamma-BHC (Lindane) | 0.037 | U | | |
| 3[illegible] | delta-BHC | ~~0.024~~ 0.030 | ~~X~~ U | | + |
| 76[illegible] | Heptachlor | 0.041 | U | J | C |
| 309002 | Aldrin | 0.038 | U | | |
| 5103742 | gamma-Chlordane | 0.038 | U | | |
| 5103719 | alpha-Chlordane | 0.035 | U | | |
| 5103731 | cis-Nonachlor | 0.021 | U | * | |
| 39765805 | trans-Nonachlor | 0.021 | U | U | |
| 1024573 | Heptachlor epoxide | 0.049 | U | | |
| 60571 | Dieldrin | 0.047 | U | | |
| 72559 | 4,4'-DDE | 0.035 | U | | |
| 53190 | 2,4'-DDD | 0.036 | U | | |
| 72208 | Endrin | 0.013 | U | | |
| 72548 | 4,4'-DDD | 0.062 | U | | |
| 789026 | 2,4'-DDT | 0.056 | U | | |
| 33216659 | Endosulfan II | 0.054 | U | | |
| 1031078 | Endosulfan sulfate | 0.054 | U | | |
| 50293 | 4,4'-DDT | 0.049 | U | | |
| 7421934 | Endrin aldehyde | 0.031 | U | | |
| 53494705 | Endrin ketone | 0.031 | U | | |
| 72435 | Methoxychlor | 0.180 | U | | |
| 2385855 | Mirex | 0.043 | U | | |

**OGDEN VALIDATED**

**LEVEL D**

***Analysis Not Validated**

1D
PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC165

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2898

**Sample wt/vol:** 0.0248 Kg **Lab File ID:** 3,1001963,21,1

**% Moisture:** 16.30 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/03/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1001963,21,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.200 | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1001962,21,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.540 | | | |
| 7012375 | PCB-28 (2,4,4') | 0.810 | | | |
| 35693993 | PCB-52 (2,2',5,5') | 2.000 | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.790 | | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.970 | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 15.000 | E | R | D |
| 32598133 | PCB-77 (3,3',4,4') | 0.049 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 5.400 | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 75.000 | E | R | D |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.028 | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 55.000 | E | R | D |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.076 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 45.000 | E | R | D |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 4.300 | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 35.000 | E | R | D |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 30.000 | E | R | D |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 12.000 | E | R | D |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 5.700 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.120 | | | |

**OGDEN VALIDATED**

**LEVEL D**

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC165

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2898

**Sample wt/vol:** 0.0248 Kg **Lab File ID:** 3,1001963,21,1

**% Moisture:** 16.30 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/03/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: DB-17 | Lab File ID: 3,1001963,21,1 | | | | |
| 319846 | alpha-BHC | 0.027 | U | U | |
| 3424826 | 2,4'-DDE | 2.300 | | | |
| 5103731 | cis-Nonachlor | 0.130 | | * | |
| 959988 | Endosulfan I | 0.052 | U | U | |
| Compound from Column: RTX-5 | Lab File ID: 2,1001962,21,1 | | | | |
| 1[illegible] | Hexachlorobenzene | ~~0.005~~ 0.040 | ~~J~~ U | U ~~J~~ | ~~F~~ ~~H~~ + |
| 3[illegible] | beta-BHC | 0.049 | U | U | |
| 5[illegible] | gamma-BHC (Lindane) | ~~0.010~~ 0.035 | ~~NJ~~ U | U | + |
| 319868 | delta-BHC | ~~0.055~~ 0.028 | ~~N~~ U | U | + |
| 76448 | Heptachlor | ~~0.045~~ 0.039 | ~~N~~ U | U J | C, + |
| 309002 | Aldrin | 0.036 | U | U | |
| 5103742 | gamma-Chlordane | 0.840 | | | |
| 5103719 | alpha-Chlordane | 0.860 | | | |
| 39765805 | trans-Nonachlor | 0.650 | | | |
| 1024573 | Heptachlor epoxide | 0.046 | U | U | |
| 60571 | Dieldrin | 1.200 | | | |
| 72559 | 4,4'-DDE | 9.000 | | | |
| 53190 | 2,4'-DDD | 8.500 | E | R | D |
| 72208 | Endrin | 0.013 | U | U | |
| 72548 | 4,4'-DDD | 20.000 | E | R | D |
| 789026 | 2,4'-DDT | 3.300 | | | |
| 33216659 | Endosulfan II | 0.052 | U | U | |
| 1031078 | Endosulfan sulfate | 0.052 | U | U | |
| 50293 | 4,4'-DDT | 4.700 | | | |
| 7421934 | Endrin aldehyde | 0.029 | U | U | |
| 53494705 | Endrin ketone | 0.029 | U | | |
| 72435 | Methoxychlor | 0.180 | U | | |
| 2385855 | Mirex | 0.041 | U | | |

MAP 12-16-96

**OGDEN VALIDATED**

*Analysis Not Validated

**LEVEL D**

A 000035

1D
# PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC165DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2898DL

**Sample wt/vol:** 0.0248 Kg **Lab File ID:** 3,1009963,9,1

**% Moisture:** 16.30 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 10.0000(mL) **Date Analyzed:** 10/10/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 20.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1009963,9,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.850 | UR | R | D |
| Compound from Column: | RTX-5 | Lab File ID: 2,1009962,9,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.610 | JR | R | D |
| 7012375 | PCB-28 (2,4,4') | 0.340 | JR | | |
| 35693993 | PCB-52 (2,2',5,5') | 2.700 | R | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.800 | R | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.650 | UR | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 28.000 | D | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.970 | UR | R | B |
| 31508006 | PCB-118 (2,3',4,4',5) | 9.100 | R | R | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 110.000 | D | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.560 | UR | R | D |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 84.000 | D | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 1.500 | UR | R | D |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 69.000 | D | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 5.400 | R | R | D |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 120.000 | D | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 63.000 | D | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 14.000 | D | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 7.300 | R | R | D |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.250 | JR | R | D |

**OGDEN VALIDATED**

**LEVEL D**

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC165DL



**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2898DL

**Sample wt/vol:** 0.0248 Kg **Lab File ID:** 3,1009963,9,1

**% Moisture:** 16.30 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 10.0000(mL) **Date Analyzed:** 10/10/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 20.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: DB-17 | Lab File ID: 3,1009963,9,1 | | | | |
| 319846 | alpha-BHC | 0.540 | UR | R | D |
| 3424826 | 2,4'-DDE | 1.400 | R | | |
| 959988 | Endosulfan I | 1.000 | UR | | |
| Compound from Column: RTX-5 | Lab File ID: 2,1009962,9,1 | | | | |
| 118741 | Hexachlorobenzene | 0.810 | UR | R | D |
| 319857 | beta-BHC | 0.980 | UR | | |
| 58[illegible] | gamma-BHC (Lindane) | 0.700 | UR | | |
| 3[illegible] | delta-BHC | 0.570 | UR | | |
| 76448 | Heptachlor | 0.780 | UR | | |
| 309002 | Aldrin | 0.720 | UR | | |
| 5103742 | gamma-Chlordane | 1.300 | R | | |
| 5103719 | alpha-Chlordane | 1.200 | R | | |
| 5103731 | cis-Nonachlor | 4.800 | R | * | |
| 39765805 | trans-Nonachlor | 0.830 | R | R | D |
| 1024573 | Heptachlor epoxide | 0.930 | UR | | D |
| 60571 | Dieldrin | 1.300 | R | | D |
| 72559 | 4,4'-DDE | 7.200 | R | | |
| 53190 | 2,4'-DDD | 11.000 | D | | |
| 72208 | Endrin | 0.250 | UR | R | D |
| 72548 | 4,4'-DDD | 17.000 | D | | |
| 789026 | 2,4'-DDT | 5.000 | R | R | D |
| 33216659 | Endosulfan II | 1.000 | UR | | |
| 1031078 | Endosulfan sulfate | 1.000 | UR | | |
| 50293 | 4,4'-DDT | 4.600 | R | | |
| 7421934 | Endrin aldehyde | 0.590 | UR | | |
| 53494705 | Endrin ketone | 0.590 | UR | | |
| 72435 | Methoxychlor | 3.500 | UR | | |
| 2385855 | Mirex | 0.810 | UR | | |

OGDEN VALIDATED

LEVEL D

*Analysis Not Validated

1D
PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC166

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2899

**Sample wt/vol:** 0.0252 Kg **Lab File ID:** 3,1001963,22,1

**% Moisture:** 15.90 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/03/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1001963,22,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.220 | | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1001962,22,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | ~~0.400~~ | 0.089 | ~~N~~ U | U | + |
| 7012375 | PCB-28 (2,4,4') | 0.720 | | | | |
| 35693993 | PCB-52 (2,2',5,5') | 2.000 | | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.990 | | | | |
| 32598100 | PCB-66 (2,3',4,4') | 1.400 | | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 13.000 | | E | R | D |
| 32598133 | PCB-77 (3,3',4,4') | 0.048 | | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 4.600 | | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 66.000 | | E | R | D |
| 32598144 | PCB-105 (2,3,3',4,4') | 1.700 | | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 48.000 | | E | R | D |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.075 | | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 40.000 | | E | R | D |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 3.200 | | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 34.000 | | E | R | D |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 28.000 | | E | R | D |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 10.000 | | E | R | D |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 5.400 | | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | ~~0.120~~ | 0.027 | ~~N~~ U | U | + |

MP
12.16.96

OGDEN VALIDATED

LEVEL D

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC166

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2899

**Sample wt/vol:** 0.0252 Kg **Lab File ID:** 3,1001963,22,1

**% Moisture:** 15.90 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/03/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1001963,22,1 | | | |
| 319846 | alpha-BHC | 0.027 | U | U | |
| 3424826 | 2,4'-DDE | 0.850 | | | |
| 5103731 | cis-Nonachlor | 0.100 | | * | |
| 959988 | Endosulfan I | 0.051 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1001962,22,1 | | | |
| 118741 | Hexachlorobenzene | 0.040 | U | U | |
| 3[illegible] | beta-BHC | 0.048 | U | | |
| 5[illegible] | gamma-BHC (Lindane) | 0.035 | U | | |
| 31[illegible] | delta-BHC | 0.028 | U | | |
| 76448 | Heptachlor | 0.038 | U | J | C |
| 309002 | Aldrin | 0.035 | U | U | |
| 5103742 | gamma-Chlordane | 1.200 | | | |
| 5103719 | alpha-Chlordane | 1.000 | | | |
| 39765805 | trans-Nonachlor | 0.850 | | | |
| 1024573 | Heptachlor epoxide | 0.046 | U | U | |
| 60571 | Dieldrin | 2.100 | | | |
| 72559 | 4,4'-DDE | 9.700 | E | R | D |
| 53190 | 2,4'-DDD | 8.600 | E | R | D |
| 72208 | Endrin | 0.012 | U | U | |
| 72548 | 4,4'-DDD | 23.000 | E | R | D |
| 789026 | 2,4'-DDT | 3.000 | | | |
| 33216659 | Endosulfan II | 0.051 | U | U | |
| 1031078 | Endosulfan sulfate | 0.051 | U | U | |
| 50293 | 4,4'-DDT | 5.400 | | | |
| 7421934 | Endrin aldehyde | 0.029 | U | U | |
| 53494705 | Endrin ketone | 0.029 | U | | |
| 72435 | Methoxychlor | 0.170 | U | | |
| 2385855 | Mirex | 0.040 | U | | |

OGDEN VALIDATED

*Analysis Not Validated

LEVEL D

1D
PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC166DL

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIS01

Matrix: (soil/water) SOIL Lab Sample ID: 96B2899DL

Sample wt/vol: 0.0252 Kg Lab File ID: 3,1009963,10,1

% Moisture: 15.90 decanted: (Y/N) Date Received: 09/16/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 09/17/96

Concentrated Extract Volume: 5.0000(mL) Date Analyzed: 10/10/96

Injection Volume: 2 (uL) Dilution Factor: 5.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1009963,10,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.420 | UR | R | D |
| Compound from Column: | RTX-5 | Lab File ID: 2,1009962,10,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.390 | JR | R | D |
| 7012375 | PCB-28 (2,4,4') | 0.820 | R | | |
| 35693993 | PCB-52 (2,2',5,5') | 2.500 | R | | |
| 41464395 | PCB-44 (2,2',3,5') | 1.100 | R | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.320 | UR | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 19.000 | R | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.480 | UR | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 6.400 | R | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 77.000 | R | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.280 | UR | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 60.000 | R | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.750 | UR | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 54.000 | R | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 3.700 | R | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 88.000 | R | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 45.000 | R | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 11.000 | R | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 5.600 | R | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.280 | R | | |

OGDEN VALIDATED

LEVEL D

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC166DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2899DL

**Sample wt/vol:** 0.0252 Kg **Lab File ID:** 3,1009963,10,1

**% Moisture:** 15.90 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 5.0000(mL) **Date Analyzed:** 10/10/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 5.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1009963,10,1 | | | |
| 319846 | alpha-BHC | 0.270 | UR | R | D |
| 3424826 | 2,4'-DDE | 0.890 | R | ↓ | ↓ |
| 959988 | Endosulfan I | 0.510 | UR | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1009962,10,1 | | | |
| 118741 | Hexachlorobenzene | 0.400 | UR | R | D |
| 319857 | beta-BHC | 0.480 | UR | | |
| 58[illegible] | gamma-BHC (Lindane) | 0.350 | UR | | |
| 31[illegible] | delta-BHC | 0.280 | UR | | |
| 76[illegible] | Heptachlor | 0.380 | UR | | |
| 309002 | Aldrin | 0.350 | UR | | |
| 5103742 | gamma-Chlordane | 1.200 | R | | |
| 5103719 | alpha-Chlordane | 1.100 | R | | |
| 5103731 | cis-Nonachlor | 1.200 | R | ✓* | |
| 39765805 | trans-Nonachlor | 0.850 | R | | |
| 1024573 | Heptachlor epoxide | 0.460 | UR | | |
| 60571 | Dieldrin | 2.100 | R | | |
| 72559 | 4,4'-DDE | 7.300 | R | | |
| 53190 | 2,4'-DDD | 9.800 | R | | |
| 72208 | Endrin | 0.120 | UR | | |
| 72548 | 4,4'-DDD | 16.000 | R | | |
| 789026 | 2,4'-DDT | 3.500 | R | | |
| 33216659 | Endosulfan II | 0.510 | UR | | |
| 1031078 | Endosulfan sulfate | 0.510 | UR | | |
| 50293 | 4,4'-DDT | 4.600 | R | | |
| 7421934 | Endrin aldehyde | 0.290 | UR | | |
| 53494705 | Endrin ketone | 0.290 | UR | | |
| 72435 | Methoxychlor | 0.098 | JR | | |
| 2385855 | Mirex | 0.400 | UR | | |

OGDEN VALIDATED

LEVEL D

*Analysis Not Validated

1D
PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC166DL Z

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIS01

Matrix: (soil/water) SOIL Lab Sample ID: 96B2899DL Z

Sample wt/vol: 0.0252 Kg Lab File ID: 3,1024963A,12,1

% Moisture: 15.90 decanted: (Y/N) Date Received: 09/16/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 09/17/96

Concentrated Extract Volume: 10.0000(mL) Date Analyzed: 10/24/96

Injection Volume: 2 (uL) Dilution Factor: 20.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,12,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.840 | UR | R | D |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,12,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.460 | JR | R | D |
| 7012375 | PCB-28 (2,4,4') | 1.300 | R | | |
| 35693993 | PCB-52 (2,2',5,5') | 2.700 | R | | |
| 41464395 | PCB-44 (2,2',3,5') | 1.000 | R | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.640 | UR | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 21.000 | D | J | C |
| 32598133 | PCB-77 (3,3',4,4') | 19.000 | R | R | D |
| 31508006 | PCB-118 (2,3',4,4',5) | 7.000 | R | R | D |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 100.000 | D | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.550 | UR | R | D |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 64.000 | D | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 1.500 | UR | R | D |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 60.000 | D | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 3.900 | R | R | D |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 93.000 | D | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 48.000 | D | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 13.000 | D | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 6.500 | R | R | D |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.140 | JR | R | D |

OGDEN VALIDATED

LEVEL D

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC166DL 2

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIS01

Matrix: (soil/water) SOIL Lab Sample ID: 96B2899DL 2

Sample wt/vol: 0.0252 Kg Lab File ID: 3,1024963A,12,1

% Moisture: 15.90 decanted: (Y/N) Date Received: 09/16/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 09/17/96

Concentrated Extract Volume: 10.0000(mL) Date Analyzed: 10/24/96

Injection Volume: 2 (uL) Dilution Factor: 20.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,12,1 | | | |
| 319846 | alpha-BHC | 0.530 | UR | R | D |
| 3424826 | 2,4'-DDE | 1.000 | R | | |
| 959988 | Endosulfan I | 1.000 | UR | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,12,1 | | | |
| 118741 | Hexachlorobenzene | 0.800 | UR | R | D |
| 319857 | beta-BHC | 0.970 | UR | | |
| 58899 | gamma-BHC (Lindane) | 0.690 | UR | | |
| 319868 | delta-BHC | 0.560 | UR | | |
| 76448 | Heptachlor | 0.760 | UR | | |
| 309002 | Aldrin | 0.710 | UR | | |
| 5103742 | gamma-Chlordane | 1.200 | R | | |
| 5103719 | alpha-Chlordane | 1.100 | R | | |
| 5103731 | cis-Nonachlor | 1.200 | R | R* | |
| 39765805 | trans-Nonachlor | 0.860 | R | R | |
| 1024573 | Heptachlor epoxide | 0.910 | UR | | |
| 60571 | Dieldrin | 1.800 | R | | |
| 72559 | 4,4'-DDE | 6.700 | D | | |
| 53190 | 2,4'-DDD | 7.700 | D | | |
| 72208 | Endrin | 0.250 | UR | R | D |
| 72548 | 4,4'-DDD | 15.000 | D | | |
| 789026 | 2,4'-DDT | 3.100 | R | R | D |
| 33216659 | Endosulfan II | 1.000 | UR | | |
| 1031078 | Endosulfan sulfate | 1.000 | UR | | |
| 50293 | 4,4'-DDT | 4.300 | R | | |
| 7421934 | Endrin aldehyde | 0.580 | UR | | |
| 53494705 | Endrin ketone | 0.580 | UR | | |
| 72435 | Methoxychlor | 3.500 | UR | | |
| 2385855 | Mirex | 0.800 | UR | | |

MP 12.18.96

OGDEN VALIDATED

*Analysis Not Validated

LEVEL D

1D
# PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC167

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2900

**Sample wt/vol:** 0.0251 Kg **Lab File ID:** 3,1001963,23,1

**% Moisture:** 17.80 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/03/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1001963,23,1 | | | |
| 34883437 | PCB-8 (2,4') | ~~0.047~~ 0.042 | ~~N~~U | U | + |
| Compound from Column: | RTX-5 | Lab File ID: 2,1001962,23,1 | | | |
| 37680652 | PCB-18 (2,2',5) | ~~0.190~~ 0.088 | ~~N~~U | U | + |
| 7012375 | PCB-28 (2,4,4') | 0.320 | | | |
| 35693993 | PCB-52 (2,2',5,5') | 1.100 | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.460 | | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.880 | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 5.800 | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.048 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 2.600 | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 28.000 | E | R | D |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.880 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 22.000 | E | R | D |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.075 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 16.000 | E | R | D |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 1.600 | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 24.000 | E | R | D |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 15.000 | E | R | D |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 3.400 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 1.500 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.045 | | | |

MR
12.16.96

OGDEN VALIDATED

LEVEL D

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC167

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2900

**Sample wt/vol:** 0.0251 Kg **Lab File ID:** 3,1001963,23,1

**% Moisture:** 17.80 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/03/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1001963,23,1 | | | | |
| 319846 | alpha-BHC | 0.027 | | U | U | |
| 3424826 | 2,4'-DDE | 0.040 | | U | U | |
| 5103731 | cis-Nonachlor | 0.039 | | | * | |
| 959988 | Endosulfan I | 0.051 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1001962,23,1 | | | | |
| 11[illegible] | Hexachlorobenzene | 0.040 | | U | U | |
| 3[illegible] | beta-BHC | 0.049 | | U | | |
| 5[illegible] | gamma-BHC (Lindane) | 0.035 | | U | | |
| 319[illegible]8 | delta-BHC | ~~0.022~~ | 0.028 | ~~NJ~~ U | | + |
| 76448 | Heptachlor | ~~0.029~~ | 0.039 | ~~NJ~~ U | J | C,+ |
| 309002 | Aldrin | 0.036 | | U | | |
| 5103742 | gamma-Chlordane | 0.300 | | | | |
| 5103719 | alpha-Chlordane | 0.300 | | | | |
| 39765805 | trans-Nonachlor | 0.250 | | | | |
| 1024573 | Heptachlor epoxide | 0.046 | | U | U | |
| 60571 | Dieldrin | ~~0.210~~ | 0.044 | ~~X~~ U | U | + |
| 72559 | 4,4'-DDE | 6.000 | | | | |
| 53190 | 2,4'-DDD | 2.200 | | | ~~U~~ J | C, |
| 72208 | Endrin | 0.012 | | U | U | |
| 72548 | 4,4'-DDD | 5.600 | | | J | C |
| 789026 | 2,4'-DDT | 2.500 | | | | |
| 33216659 | Endosulfan II | 0.051 | | U | U | |
| 1031078 | Endosulfan sulfate | 0.051 | | U | U | |
| 50293 | 4,4'-DDT | 7.500 | | | | |
| 7421934 | Endrin aldehyde | 0.029 | | U | U | |
| 53494705 | Endrin ketone | 0.029 | | U | | |
| 72435 | Methoxychlor | 0.170 | | U | | |
| 2385855 | Mirex | 0.040 | | U | | |

MP 12-16-96

OGDEN VALIDATED

* = ANALYSIS NOT VALIDATED

LEVEL D

1D
PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC167DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2900DL

**Sample wt/vol:** 0.0251 Kg **Lab File ID:** 3,1009963,11,1

**% Moisture:** 17.80 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 5.0000(mL) **Date Analyzed:** 10/10/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 10.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1009963,11,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.420 | UR | R | D |
| Compound from Column: | RTX-5 Lab File ID: 2,1009962,11,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.140 | JR | R | D |
| 7012375 | PCB-28 (2,4,4') | 0.100 | JR | ↓ | ↓ |
| 35693993 | PCB-52 (2,2',5,5') | 1.200 | R | ↓ | ↓ |
| 41464395 | PCB-44 (2,2',3,5') | 0.480 | R | ↓ | ↓ |
| 32598100 | PCB-66 (2,3',4,4') | 0.320 | UR | ↓ | ↓ |
| 37680732 | PCB-101 (2,2',3,5,5') | 7.800 | R | ↓ | ↓ |
| 32598133 | PCB-77 (3,3',4,4') | 0.480 | UR | ↓ | ↓ |
| 31508006 | PCB-118 (2,3',4,4',5) | 3.500 | R | ↓ | ↓ |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 40.000 | D | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 1.900 | R | R | D |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 27.000 | D | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.750 | UR | R | D |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 22.000 | D | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 1.900 | R | R | D |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 35.000 | D | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 18.000 | D | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 3.900 | R | R | D |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 1.800 | R | ↓ | ↓ |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.150 | JR | ↓ | ↓ |

OGDEN VALIDATED

LEVEL D

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC167DL

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIS01

Matrix: (soil/water) SOIL Lab Sample ID: 96B2900DL

Sample wt/vol: 0.0251 Kg Lab File ID: 3,1009963,11,1

% Moisture: 17.80 decanted: (Y/N) Date Received: 09/16/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 09/17/96

Concentrated Extract Volume: 5.0000(mL) Date Analyzed: 10/10/96

Injection Volume: 2 (uL) Dilution Factor: 10.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1009963,11,1 | | | |
| 319846 | alpha-BHC | 0.270 | UR | R | D |
| 3424826 | 2,4'-DDE | 0.400 | UR | | |
| 959988 | Endosulfan I | 0.510 | UR | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1009962,11,1 | | | |
| 118741 | Hexachlorobenzene | 0.400 | UR | R | D |
| 31[illegible] | beta-BHC | 0.490 | UR | | |
| 5[illegible] | gamma-BHC (Lindane) | 0.350 | UR | | |
| 31[illegible] | delta-BHC | 0.280 | UR | | |
| 76448 | Heptachlor | 0.380 | UR | | |
| 309002 | Aldrin | 0.360 | UR | | |
| 5103742 | gamma-Chlordane | 0.300 | JR | | |
| 5103719 | alpha-Chlordane | 0.220 | JR | | |
| 5103731 | cis-Nonachlor | 1.200 | R | * | |
| 39765805 | trans-Nonachlor | 0.200 | UR | | |
| 1024573 | Heptachlor epoxide | 0.460 | UR | | |
| 60571 | Dieldrin | 0.440 | UR | | |
| 72559 | 4,4'-DDE | 4.600 | R | | |
| 53190 | 2,4'-DDD | 2.300 | R | | |
| 72208 | Endrin | 0.120 | UR | | |
| 72548 | 4,4'-DDD | 4.600 | R | | |
| 789026 | 2,4'-DDT | 2.700 | R | | |
| 33216659 | Endosulfan II | 0.510 | UR | | |
| 1031078 | Endosulfan sulfate | 0.510 | UR | | |
| 50293 | 4,4'-DDT | 6.100 | R | | |
| 7421934 | Endrin aldehyde | 0.290 | UR | | |
| 53494705 | Endrin ketone | 0.290 | UR | | |
| 72435 | Methoxychlor | 1.700 | UR | | |
| 2385855 | Mirex | 0.400 | UR | | |

OGDEN VALIDATED

LEVEL D

1D
PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC168

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIS01

Matrix: (soil/water) SOIL Lab Sample ID: 96B2901

Sample wt/vol: 0.0243 Kg Lab File ID: 3,1001963,24,1

% Moisture: 16.30 decanted: (Y/N) Date Received: 09/16/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 09/17/96

Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 10/03/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1001963,24,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.044 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1001962,24,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | ~~0.061~~ | 0.090 | ~~NJ~~ U | U | + |
| 7012375 | PCB-28 (2,4,4') | 0.110 | | | | |
| 35693993 | PCB-52 (2,2',5,5') | 0.370 | | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.140 | | | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.140 | | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 1.600 | | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.050 | | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.960 | | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 6.400 | | ~~E~~ JL ATR 11/7/96 | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.250 | | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 4.600 | | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.078 | | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 3.400 | | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.380 | | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 4.800 | | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 2.500 | | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.540 | | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.260 | | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.072 | | | | |

JP 12-16-96

OGDEN VALIDATED

LEVEL D

A 000048

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC168

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2901

**Sample wt/vol:** 0.0243 Kg **Lab File ID:** 3,1001963,24,1

**% Moisture:** 16.30 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/03/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1001963,24,1 | | | | |
| 319846 | alpha-BHC | ~~0.006~~ | 0.028 | ~~U~~ | U ~~J~~ | *11+ |
| 3424826 | 2,4'-DDE | 0.100 | | | | |
| 959988 | Endosulfan I | 0.053 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1001962,24,1 | | | | |
| 118741 | Hexachlorobenzene | 0.042 | | U | | |
| 31[illegible]7 | beta-BHC | 0.050 | | U | U | |
| 5[illegible] | gamma-BHC (Lindane) | ~~0.011~~ | 0.036 | ~~N~~ U | | + |
| 3[illegible] | delta-BHC | ~~0.046~~ | 0.024 | ~~N~~ U | | + |
| 76448 | Heptachlor | 0.040 | | U | J | C |
| 309002 | Aldrin | 0.037 | | U | | |
| 5103742 | gamma-Chlordane | 0.043 | | | | |
| 5103719 | alpha-Chlordane | 0.055 | | | | |
| 5103731 | cis-Nonachlor | 0.160 | | ~~N~~ | * | |
| 39765805 | trans-Nonachlor | ~~0.054~~ | 0.021 | ~~N~~ U | U | + |
| 1024573 | Heptachlor epoxide | 0.047 | | U | U | |
| 60571 | Dieldrin | 0.046 | | U | U | |
| 72559 | 4,4'-DDE | 0.770 | | | J | C |
| 53190 | 2,4'-DDD | 0.410 | | | | |
| 72208 | Endrin | 0.013 | | U | U | |
| 72548 | 4,4'-DDD | 0.490 | | | J | C |
| 789026 | 2,4'-DDT | 0.230 | | | | |
| 33216659 | Endosulfan II | 0.053 | | U | U | |
| 1031078 | Endosulfan sulfate | 0.053 | | U | | |
| 50293 | 4,4'-DDT | ~~0.230~~ | 0.054 | ~~N~~ U | | + |
| 7421934 | Endrin aldehyde | 0.030 | | U | | |
| 53494705 | Endrin ketone | 0.030 | | U | | |
| 72435 | Methoxychlor | 0.180 | | U | | |
| 2385855 | Mirex | 0.042 | | U | | |

MP 12.16.96

OGDEN VALIDATED

LEVEL D

*Analysis Not Validated

A 000049

1D
PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC169



Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIS01

Matrix: (soil/water) SOIL Lab Sample ID: 96B2902

Sample wt/vol: 0.0248 Kg Lab File ID: 3,1001963,25,1

% Moisture: 16.10 decanted: (Y/N) Date Received: 09/16/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 09/17/96

Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 10/03/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | RQV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1001963,25,1 | | | | |
| 34883437 | PCB-8 (2,4') | ~~0.027~~ | 0.042 | ~~NL~~ U | U | + |
| Compound from Column: | RTX-5 | Lab File ID: 2,1001962,25,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.089 | | U | | |
| 7012375 | PCB-28 (2,4,4') | ~~0.031~~ | 0.060 | ~~NL~~ U | U | + |
| 35693993 | PCB-52 (2,2',5,5') | 0.110 | | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.038 | | | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.120 | | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 1.000 | | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.049 | | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.420 | | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 6.300 | | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.220 | | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 4.800 | | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.076 | | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 3.200 | | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.360 | | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 5.900 | | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 3.800 | | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.710 | | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.320 | | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.520 | | | | |

MP
12-16-96

OGDEN VALIDATE

LEVEL D

A000050

# PESTICIDE ORGANICS ANALYSIS DATA SHEET



**EPA SAMPLE NO.**

MC169

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2902

**Sample wt/vol:** 0.0248 Kg **Lab File ID:** 3,1001963,25,1

**% Moisture:** 16.10 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/03/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1001963,25,1 | | | | |
| 319846 | alpha-BHC | 0.003 | 0.027 | ~~N~~ U | U | + |
| 3424826 | 2,4'-DDE | 0.041 | | U | | |
| 959988 | Endosulfan I | 0.052 | | U | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1001962,25,1 | | | | |
| 118741 | Hexachlorobenzene | 0.001 | 0.040 | ~~N~~ U | U | + |
| 319857 | beta-BHC | 0.049 | | U | | |
| 5[illegible] | gamma-BHC (Lindane) | 0.035 | | U | | |
| 3[illegible] | delta-BHC | 0.015 | 0.028 | ~~N~~ U | | + |
| 76[illegible] | Heptachlor | 0.039 | | U | J | C |
| 309002 | Aldrin | 0.036 | | U | | |
| 5103742 | gamma-Chlordane | 0.027 | | J | J | |
| 5103719 | alpha-Chlordane | 0.034 | | U | U | |
| 5103731 | cis-Nonachlor | 0.200 | | ~~N~~ | U | |
| 39765805 | trans-Nonachlor | 0.020 | | U | U | |
| 1024573 | Heptachlor epoxide | 0.046 | | U | U | |
| 60571 | Dieldrin | 0.045 | | U | U | |
| 72559 | 4,4'-DDE | 0.580 | | | | |
| 53190 | 2,4'-DDD | 0.200 | | | J | C |
| 72208 | Endrin | 0.013 | | U | U | |
| 72548 | 4,4'-DDD | 0.280 | | | J | C |
| 789026 | 2,4'-DDT | 0.220 | | | | |
| 33216659 | Endosulfan II | 0.052 | | U | U | |
| 1031078 | Endosulfan sulfate | 0.052 | | U | | |
| 50293 | 4,4'-DDT | 0.130 | 0.047 | ~~N~~ U | | + |
| 7421934 | Endrin aldehyde | 0.029 | | U | | |
| 53494705 | Endrin ketone | 0.029 | | U | | |
| 72435 | Methoxychlor | 0.180 | | U | | |
| 2385855 | Mirex | 0.041 | | U | | |

MP 12-16-96

OGDEN VALIDATED

LEVEL D

*Analysis Not Validated

1D
PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC170

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIS01

Matrix: (soil/water) SOIL Lab Sample ID: 96B2903

Sample wt/vol: 0.0226 Kg Lab File ID: 3,1001963,26,1

% Moisture: 21.50 decanted: (Y/N) Date Received: 09/16/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 09/17/96

Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 10/03/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1001963,26,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.061 | | J | F |
| Compound from Column: | RTX-5 | Lab File ID: 2,1001962,26,1 | | | |
| 37680652 | PCB-18 (2,2',5) | ~~0.120~~ 0.097 | ~~U~~ | U | + |
| 7012375 | PCB-28 (2,4,4') | 0.180 | | | |
| 35693993 | PCB-52 (2,2',5,5') | 0.190 | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.110 | | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.150 | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.790 | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.053 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.690 | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 3.600 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.300 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 2.600 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.083 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 1.800 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.230 | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 2.600 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 1.400 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.420 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.120 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.006 | J | J | |

MR 12-16-96

OGDEN VALIDATED

LEVEL D

A 000052

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC170

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2903

**Sample wt/vol:** 0.0226 Kg **Lab File ID:** 3,1001963,26,1

**% Moisture:** 21.50 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/03/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: DB-17 | Lab File ID: 3,1001963,26,1 | | | | |
| 319846 | alpha-BHC | 0.030 | U | U | |
| 3424826 | 2,4'-DDE | 0.045 | U | ↓ | |
| 959988 | Endosulfan I | 0.057 | U | | |
| Compound from Column: RTX-5 | Lab File ID: 2,1001962,26,1 | | | | |
| 118741 | Hexachlorobenzene | 0.045 | U | U | |
| 319857 | beta-BHC | 0.054 | U | ↓ | |
| 58[illegible] | gamma-BHC (Lindane) | 0.039 | U | | |
| 3[illegible] | delta-BHC | 0.031 | U | | |
| 76448 | Heptachlor | 0.043 | U | J | C |
| 309002 | Aldrin | 0.040 | U | ↓ | |
| 5103742 | gamma-Chlordane | 0.026 | J | J | |
| 5103719 | alpha-Chlordane | 0.037 | U | * | |
| 5103731 | cis-Nonachlor | 0.089 | N | | |
| 39765805 | trans-Nonachlor | 0.034 | | | |
| 1024573 | Heptachlor epoxide | 0.051 | U | U | |
| 60571 | Dieldrin | 0.027 | J | J | |
| 72559 | 4,4'-DDE | 0.930 | | J | C |
| 53190 | 2,4'-DDD | 0.750 | | | |
| 72208 | Endrin | 0.014 | U | U | |
| 72548 | 4,4'-DDD | 1.400 | | J | C |
| 789026 | 2,4'-DDT | 0.170 | | | |
| 33216659 | Endosulfan II | 0.057 | U | U | |
| 1031078 | Endosulfan sulfate | 0.057 | U | U | |
| 50293 | 4,4'-DDT | 0.370 | | | |
| 7421934 | Endrin aldehyde | 0.032 | U | U | |
| 53494705 | Endrin ketone | 0.032 | U | ↓ | |
| 72435 | Methoxychlor | 0.190 | U | | |
| 2385855 | Mirex | 0.045 | U | | |

MP 12.16.96

OGDEN VALIDATED

LEVEL D

*Analysis Not Validated

1D
# PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC171

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2904

**Sample wt/vol:** 0.0232 Kg **Lab File ID:** 3,1001963,27,1

**% Moisture:** 19.60 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/03/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1001963,27,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.046 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1001962,27,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.095 | | U | U | |
| 7012375 | PCB-28 (2,4,4') | 0.064 | | U | | |
| 35693993 | PCB-52 (2,2',5,5') | 0.027 | | U | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.032 | | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.035 | | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.027 | | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.052 | | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.041 | | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.045 | | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.030 | | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.140 | | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.081 | | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.033 | | J | UJ | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.035 | | U | U | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.066 | | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.014 | | J | J | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.030 | | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.035 | 0.625 | ~~U~~ U | U | + |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.029 | | U | U | |

OGDEN VALIDATED

LEVEL D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MC171

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2904

**Sample wt/vol:** 0.0232 Kg **Lab File ID:** 3,1001963,27,1

**% Moisture:** 19.60 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/03/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) | ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1001963,27,1 | | | | | |
| 319846 | alpha-BHC | 0.036 | | | | |
| 3424826 | 2,4'-DDE | 0.043 | | U | U | |
| 959988 | Endosulfan I | 0.056 | | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,1001962,27,1 | | | | | |
| 118741 | Hexachlorobenzene | ~~0.006~~ | 0.043 | ~~X~~ U | U ~~J~~ | ~~K~~ *N + |
| 31[illegible] | beta-BHC | ~~0.014~~ | .053 | ~~N~~ U | U | + |
| 5[illegible] | gamma-BHC (Lindane) | ~~0.006~~ | .038 | ~~N~~ U | U | + |
| 3[illegible] | delta-BHC | ~~0.030~~ | .030 | ~~N~~ U | U | + |
| 76448 | Heptachlor | 0.042 | | U | U J | C |
| 309002 | Aldrin | 0.039 | | U | U | |
| 5103742 | gamma-Chlordane | 0.039 | | U | | |
| 5103719 | alpha-Chlordane | 0.036 | | U | | |
| 5103731 | cis-Nonachlor | 0.022 | | U | * | |
| 39765805 | trans-Nonachlor | 0.022 | | U | U | |
| 1024573 | Heptachlor epoxide | 0.050 | | U | | |
| 60571 | Dieldrin | 0.048 | | U | | |
| 72559 | 4,4'-DDE | 0.035 | | U | | |
| 53190 | 2,4'-DDD | 0.037 | | U | J | C |
| 72208 | Endrin | 0.013 | | U | | |
| 72548 | 4,4'-DDD | 0.063 | | U | J | C |
| 789026 | 2,4'-DDT | 0.058 | | U | | |
| 33216659 | Endosulfan II | ~~0.180~~ | .056 | ~~N~~ U | | + |
| 1031078 | Endosulfan sulfate | 0.056 | | U | | |
| 50293 | 4,4'-DDT | 0.050 | | U | | |
| 7421934 | Endrin aldehyde | 0.031 | | U | | |
| 53494705 | Endrin ketone | 0.031 | | U | | |
| 72435 | Methoxychlor | 0.190 | | U | | |
| 2385855 | Mirex | 0.043 | | U | | |

MP
12-17-96

**OGDEN VALIDATED**

**LEVEL D**

*Analysis Not Validated

A000055

1D
# PCB ORGANICS ANALYSIS DATA SHEET



**EPA SAMPLE NO.**
MC172

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2905

**Sample wt/vol:** 0.0217 Kg **Lab File ID:** 3,1001963,28,1

**% Moisture:** 26.90 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/04/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1001963,28,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.049 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1001962,28,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.100 | | U | U | |
| 7012375 | PCB-28 (2,4,4') | 0.069 | | U | | |
| 35693993 | PCB-52 (2,2',5,5') | 0.029 | | U | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.034 | | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.037 | | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | ~~0.029~~ | 0.029 | ~~U~~ U | | + |
| 32598133 | PCB-77 (3,3',4,4') | ~~0.200~~ | 0.055 | ~~U~~ U | | + |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.044 | | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.110 | | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.032 | | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.130 | | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.087 | | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.089 | | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.038 | | U | U | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.190 | | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.047 | | J | UJ | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.019 | | J | UJ | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | ~~0.017~~ | 0.026 | ~~U~~ U | | + |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.031 | | U | U | |

MP 12.16.96

OGDEN VALIDATED

LEVEL D

11/07/96

1D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

Page 1

**EPA SAMPLE NO.**

MC172

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2905

**Sample wt/vol:** 0.0217 Kg **Lab File ID:** 3,1001963,28,1

**% Moisture:** 26.90 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/04/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1001963,28,1 | | | | |
| 319846 | alpha-BHC | ~~0.009~~ 0.031 | ~~N~~ U | U | + |
| 3424826 | 2,4'-DDE | 0.047 | U | U | |
| 959988 | Endosulfan I | 0.060 | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,1001962,28,1 | | | | |
| 118741 | Hexachlorobenzene | ~~0.006~~ 0.046 | ~~N~~ U | U ~~J~~ | ~~F~~ *H+ |
| 31[illegible]57 | beta-BHC | ~~0.026~~ 0.056 | ~~N~~ U | U | + |
| [illegible] | gamma-BHC (Lindane) | ~~0.032~~ 0.040 | ~~N~~ U | U | + |
| [illegible] | delta-BHC | ~~0.170~~ 0.032 | ~~N~~ U | U | + |
| 76[illegible]8 | Heptachlor | 0.044 | U | U J | C |
| 309002 | Aldrin | 0.041 | U | U | |
| 5103742 | gamma-Chlordane | 0.042 | U | | |
| 5103719 | alpha-Chlordane | 0.039 | U | | |
| 5103731 | cis-Nonachlor | 0.023 | U | * | |
| 39765805 | trans-Nonachlor | 0.023 | U | | |
| 1024573 | Heptachlor epoxide | 0.053 | U | | |
| 60571 | Dieldrin | ~~0.016~~ 0.051 | ~~N~~ U | | + |
| 72559 | 4,4'-DDE | 0.220 | | | |
| 53190 | 2,4'-DDD | 0.040 | U | U J | C |
| 72208 | Endrin | 0.014 | U | U | |
| 72548 | 4,4'-DDD | 0.064 | J | J | C |
| 789026 | 2,4'-DDT | ~~0.027~~ 0.061 | ~~N~~ U | U | + |
| 33216659 | Endosulfan II | ~~0.220~~ 0.060 | ~~N~~ U | U | + |
| 1031078 | Endosulfan sulfate | 0.060 | U | U | |
| 50293 | 4,4'-DDT | 0.110 | | | |
| 7421934 | Endrin aldehyde | 0.033 | U | U | |
| 53494705 | Endrin ketone | 0.033 | U | | |
| 72435 | Methoxychlor | ~~0.061~~ 0.196 | ~~N~~ U | | + |
| 2385855 | Mirex | 0.047 | U | | |

KP
12-16-96

OGDEN VALIDATED

LEVEL D

*Analysis Not Validated

A000057

1D
PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC173



Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIS01

Matrix: (soil/water) SOIL Lab Sample ID: 96B2906

Sample wt/vol: 0.0227 Kg Lab File ID: 3,1001963,29,1

% Moisture: 23.10 decanted: (Y/N) Date Received: 09/16/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 09/17/96

Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 10/04/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1001963,29,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.420 | | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1001962,29,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.560 | | | | |
| 7012375 | PCB-28 (2,4,4') | 0.960 | | | | |
| 35693993 | PCB-52 (2,2',5,5') | 1.900 | | | | |
| 41464395 | PCB-44 (2,2',3,5') | 1.200 | | | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.790 | | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 5.000 | | | | |
| 32598133 | PCB-77 (3,3',4,4') | ~~6.500~~ | 0.055 | ~~U~~ | U | + |
| 31508006 | PCB-118 (2,3',4,4',5) | 1.900 | | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 12.000 | | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.610 | | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 7.300 | | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.083 | | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 5.400 | | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.590 | | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 7.200 | | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 3.400 | | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.720 | | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.360 | | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.077 | | | | |

MR
12.16.96

OGDEN VALIDATED

LEVEL D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MC173

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2906

**Sample wt/vol:** 0.0227 Kg **Lab File ID:** 3,1001963,29,1

**% Moisture:** 23.10 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/04/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: DB-17 | Lab File ID: 3,1001963,29,1 | | | | | |
| 319846 | alpha-BHC | 0.030 | | U | U | |
| 3424826 | 2,4'-DDE | 0.044 | | U | U | |
| 5103731 | cis-Nonachlor | 0.090 | | | U | |
| 959988 | Endosulfan I | 0.057 | | U | U | |
| Compound from Column: RTX-5 | Lab File ID: 2,1001962,29,1 | | | | | |
| 1[illegible] | Hexachlorobenzene | ~~0.048~~ | 0.044 | ~~U~~ | U | * + |
| 3[illegible] | beta-BHC | 0.054 | | U | U | |
| 58[illegible] | gamma-BHC (Lindane) | 0.038 | | U | U | |
| 319868 | delta-BHC | ~~0.810~~ | 0.031 | ~~U~~ | U | + |
| 76448 | Heptachlor | 0.042 | | U | U | J C |
| 309002 | Aldrin | 0.039 | | U | U | |
| 5103742 | gamma-Chlordane | 0.640 | | | | |
| 5103719 | alpha-Chlordane | 0.740 | | | | |
| 39765805 | trans-Nonachlor | 0.420 | | | | |
| 1024573 | Heptachlor epoxide | 0.051 | | U | U | |
| 60571 | Dieldrin | ~~0.260~~ | 0.048 | ~~U~~ | U | + |
| 72559 | 4,4'-DDE | 4.900 | | | | |
| 53190 | 2,4'-DDD | 2.200 | | | | J C |
| 72208 | Endrin | 0.014 | | U | U | |
| 72548 | 4,4'-DDD | 3.900 | | | U | C |
| 789026 | 2,4'-DDT | 0.570 | | | | |
| 33216659 | Endosulfan II | ~~1.100~~ | 0.057 | ~~U~~ | U | + |
| 1031078 | Endosulfan sulfate | 0.057 | | U | U | |
| 50293 | 4,4'-DDT | 1.400 | | | | |
| 7421934 | Endrin aldehyde | 0.032 | | U | U | |
| 53494705 | Endrin ketone | 0.032 | | U | | |
| 72435 | Methoxychlor | 0.190 | | U | | |
| 2385855 | Mirex | 0.044 | | U | | |

WD 12-16-96

* ANALYSIS NOT VALIDATED.

**OGDEN VALIDATED**

**LEVEL D**

1D
# PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC174

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2907

**Sample wt/vol:** 0.0179 Kg **Lab File ID:** 3,1001963,32,1

**% Moisture:** 39.10 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/04/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1001963,32,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.059 | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,1001962,32,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | ~~0.100~~ 0.123 | ~~NU~~ | U | + |
| 7012375 | PCB-28 (2,4,4') | ~~0.061~~ 0.084 | ~~NU~~ | | + |
| 35693993 | PCB-52 (2,2',5,5') | ~~0.033~~ 0.035 | ~~NU~~ | | + |
| 41464395 | PCB-44 (2,2',3,5') | 0.041 | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.045 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.082 | | | |
| 32598133 | PCB-77 (3,3',4,4') | ~~0.160~~ 0.067 | ~~NU~~ | U | + |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.050 | J | J | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.320 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.039 | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.290 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.110 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.220 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.046 | U | U | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.260 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.140 | J | J | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.052 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.027 | J | J | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.007 | J | J | |

MD
12.16.96

OGDEN VALIDATED

LEVEL D

11/06/96

1D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.** MC174



**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2907

**Sample wt/vol:** 0.0179 Kg **Lab File ID:** 3,1001963,32,1

**% Moisture:** 39.10 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/04/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1001963,32,1 | | | | |
| 319846 | alpha-BHC | ~~0.009~~ 0.038 | ~~N~~ U | U | + |
| 3424826 | 2,4'-DDE | 0.056 | U | U | |
| 959988 | Endosulfan I | 0.072 | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,1001962,32,1 | | | | |
| 118741 | Hexachlorobenzene | ~~0.008~~ 0.056 | ~~J~~ U | U ~~J~~ | ~~X~~ ~~N~~ ~~N~~ + |
| 31[illegible] | beta-BHC | 0.068 | U | U | |
| 5[illegible] | gamma-BHC (Lindane) | ~~0.021~~ 0.049 | ~~N~~ U | | + |
| 3[illegible] | delta-BHC | ~~0.100~~ 0.039 | ~~N~~ U | | + |
| 76448 | Heptachlor | 0.054 | U | J | C |
| 309002 | Aldrin | 0.050 | U | J | |
| 5103742 | gamma-Chlordane | 0.048 | J | | |
| 5103719 | alpha-Chlordane | 0.053 | | | |
| 5103731 | cis-Nonachlor | 0.028 | U | * | |
| 39765805 | trans-Nonachlor | 0.045 | | | |
| 1024573 | Heptachlor epoxide | 0.064 | U | U | |
| 60571 | Dieldrin | 0.062 | U | U | |
| 72559 | 4,4'-DDE | 0.170 | | | |
| 53190 | 2,4'-DDD | 0.048 | U | U J | C |
| 72208 | Endrin | 0.017 | U | U | |
| 72548 | 4,4'-DDD | 0.100 | | J | C |
| 789026 | 2,4'-DDT | 0.030 | J | J | |
| 33216659 | Endosulfan II | 0.072 | U | U | |
| 1031078 | Endosulfan sulfate | 0.072 | U | U | |
| 50293 | 4,4'-DDT | 0.130 | | | |
| 7421934 | Endrin aldehyde | 0.041 | U | U | |
| 53494705 | Endrin ketone | 0.041 | U | | |
| 72435 | Methoxychlor | 0.240 | U | | |
| 2385855 | Mirex | 0.056 | U | | |

MP 12.16.96

OGDEN VALIDATED

LEVEL D

*Analysis Not Validated

A000061

1D
PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC175

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2908

**Sample wt/vol:** 0.0220 Kg **Lab File ID:** 3,1001963,33,1

**% Moisture:** 25.30 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/04/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1001963,33,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.048 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1001962,33,1 | | | |
| 37680652 | PCB-18 (2,2',5) | ~~0.140~~ 0.100 | ~~N~~ U | U | + |
| 7012375 | PCB-28 (2,4,4') | ~~0.180~~ 0.068 | ~~N~~ U | U | + |
| 35693993 | PCB-52 (2,2',5,5') | 0.099 | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.046 | | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.037 | U | U | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.170 | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.055 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.071 | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.530 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.019 | J | J | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.400 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.086 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.210 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.020 | J | J | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.270 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.120 | J | J | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.045 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.036 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.031 | U | U | |

WP
12.16.96

OGDEN VALIDATE

LEVEL D

A000062

11/06/96

1D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET



**EPA SAMPLE NO.**

MC175

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2908

**Sample wt/vol:** 0.0220 Kg **Lab File ID:** 3,1001963,33,1

**% Moisture:** 25.30 **decanted: (Y/N)** **Date Received:** 09/16/96

**Fxtraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/04/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1001963,33,1 | | | | |
| 319846 | alpha-BHC | ~~0.012~~ 0.031 | ~~N~~ U | U | + |
| 3424826 | 2,4'-DDE | 0.066 | | | |
| 959988 | Endosulfan I | 0.059 | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,1001962,33,1 | | | | |
| 118741 | Hexachlorobenzene | 0.046 | U | U | |
| 31[illegible] | beta-BHC | 0.055 | U | | |
| 58[illegible] | gamma-BHC (Lindane) | ~~0.010~~ 0.040 | ~~N~~ U | | + |
| 319[illegible] | delta-BHC | ~~0.140~~ 0.032 | ~~N~~ U | | + |
| 76448 | Heptachlor | 0.044 | U | J | C |
| 309002 | Aldrin | 0.041 | U | | |
| 5103742 | gamma-Chlordane | 0.041 | U | | |
| 5103719 | alpha-Chlordane | 0.110 | | | |
| 5103731 | cis-Nonachlor | 0.023 | U | * | |
| 39765805 | trans-Nonachlor | 0.023 | U | U | |
| 1024573 | Heptachlor epoxide | 0.052 | U | U | |
| 60571 | Dieldrin | 0.050 | U | U | |
| 72559 | 4,4'-DDE | 0.160 | | | |
| 53190 | 2,4'-DDD | 0.039 | U | U J | C |
| 72208 | Endrin | 0.014 | U | U | |
| 72548 | 4,4'-DDD | 0.140 | | J | C |
| 789026 | 2,4'-DDT | 0.061 | U | U | |
| 33216659 | Endosulfan II | 0.059 | U | | |
| 1031078 | Endosulfan sulfate | 0.059 | U | | |
| 50293 | 4,4'-DDT | 0.053 | U | | |
| 7421934 | Endrin aldehyde | 0.033 | U | | |
| 53494705 | Endrin ketone | 0.033 | U | | |
| 72435 | Methoxychlor | 0.200 | U | | |
| 2385855 | Mirex | 0.046 | U | | |

MP
12.16.96

OGDEN VALIDATED

LEVEL D

*Analysis Not Validated

A000063

1D
# PCB ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC176

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2895

**Sample wt/vol:** 0.0239 Kg **Lab File ID:** 3,1001963,17,1

**% Moisture:** 15.80 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/03/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1001963,17,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.044 | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,1001962,17,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.092 | U | U | |
| 7012375 | PCB-28 (2,4,4') | 0.062 | U | | |
| 35693993 | PCB-52 (2,2',5,5') | 0.027 | U | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.031 | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.034 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.026 | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.050 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.040 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.033 | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.029 | U | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.110 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.079 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.060 | U | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.034 | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.038 | U | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.130 | U | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | ~~0.001~~ 0.027 | ~~NJ~~ U | | + |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.024 | U | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.028 | U | | |

OGDEN VALIDATED

LEVEL D

A000064

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET



**EPA SAMPLE NO.**
MC176

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2895

**Sample wt/vol:** 0.0239 Kg **Lab File ID:** 3,1001963,17,1

**% Moisture:** 15.80 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/03/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1001963,17,1 | | | | |
| 319846 | alpha-BHC | ~~0.062~~ | 0.028 | ~~NU~~ | U | + |
| 3424826 | 2,4'-DDE | 0.042 | | U | U | |
| 959988 | Endosulfan I | 0.054 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1001962,17,1 | | | | |
| 118741 | Hexachlorobenzene | 0.042 | | U | U | |
| 3[illegible] | beta-BHC | 0.051 | | U | | |
| 5[illegible] | gamma-BHC (Lindane) | 0.037 | | U | | |
| 319868 | delta-BHC | ~~0.035~~ | 0.029 | ~~NU~~ | | + |
| 76448 | Heptachlor | 0.040 | | U | J | C |
| 309002 | Aldrin | 0.037 | | U | | |
| 5103742 | gamma-Chlordane | 0.038 | | U | | |
| 5103719 | alpha-Chlordane | 0.035 | | U | | |
| 5103731 | cis-Nonachlor | 0.021 | | U | * | |
| 39765805 | trans-Nonachlor | 0.021 | | U | U | |
| 1024573 | Heptachlor epoxide | 0.048 | | U | | |
| 60571 | Dieldrin | 0.046 | | U | | |
| 72559 | 4,4'-DDE | 0.052 | | | | |
| 53190 | 2,4'-DDD | ~~0.048~~ | 0.036 | ~~NU~~ | U J | α + |
| 72208 | Endrin | 0.013 | | U | U | |
| 72548 | 4,4'-DDD | 0.080 | | | J | α |
| 789026 | 2,4'-DDT | 0.056 | | U | U | |
| 33216659 | Endosulfan II | 0.054 | | U | | |
| 1031078 | Endosulfan sulfate | 0.054 | | U | | |
| 50293 | 4,4'-DDT | 0.049 | | U | | |
| 7421934 | Endrin aldehyde | 0.030 | | U | | |
| 53494705 | Endrin ketone | 0.030 | | U | | |
| 72435 | Methoxychlor | 0.180 | | U | | |
| 2385855 | Mirex | 0.042 | | U | | |

MP
12.16.96

OGDEN VALIDATED

LEVEL D

*Analysis Not Validated

1D
# PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC177

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2896

**Sample wt/vol:** 0.0226 Kg **Lab File ID:** 3,1001963,20,1

**% Moisture:** 22.40 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/03/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1001963,20,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.047 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1001962,20,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.098 | U | U | |
| 7012375 | PCB-28 (2,4,4') | 0.066 | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | 0.020 | J | J | |
| 41464395 | PCB-44 (2,2',3,5') | 0.033 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.036 | U | U | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.075 | | | |
| 32598133 | PCB-77 (3,3',4,4') | ~~0.160~~ 0.053 | ~~J~~ U | U | + |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.042 | U | U | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 1.200 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.027 | J | J | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.480 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.083 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.820 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.036 | U | U | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 1.200 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.380 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.210 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.160 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.030 | U | U | |

WR 12.16.96

OGDEN VALIDATED

LEVEL D

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET



**EPA SAMPLE NO.**
MC177

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** SOIL **Lab Sample ID:** 96B2896

**Sample wt/vol:** 0.0226 Kg **Lab File ID:** 3,1001963,20,1

**% Moisture:** 22.40 **decanted: (Y/N)** **Date Received:** 09/16/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/17/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/03/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/Kg

| Cas No: | Compound | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: DB-17 | Lab File ID: 3,1001963,20,1 | | | | |
| 319846 | alpha-BHC | 0.030 | U | U | |
| 3424826 | 2,4'-DDE | 0.045 | U | U | |
| 959988 | Endosulfan I | 0.057 | U | U | |
| Compound from Column: RTX-5 | Lab File ID: 2,1001962,20,1 | | | | |
| 118741 | Hexachlorobenzene | ~~0.006~~ 0.044 | ~~N~~U | U | + |
| 3[illegible] | beta-BHC | ~~0.037~~ 0.054 | ~~N~~U | U | + |
| [illegible] | gamma-BHC (Lindane) | 0.023 | J | U | |
| 3[illegible] | delta-BHC | ~~0.300~~ 0.031 | ~~N~~U | U | + |
| 76448 | Heptachlor | 0.043 | U | U J | C |
| 309002 | Aldrin | 0.040 | U | U | |
| 5103742 | gamma-Chlordane | 0.020 | J | U | |
| 5103719 | alpha-Chlordane | ~~0.029~~ 0.038 | ~~N~~U | U | + |
| 5103731 | cis-Nonachlor | 0.022 | U | * | |
| 39765805 | trans-Nonachlor | 0.022 | U | U | |
| 1024573 | Heptachlor epoxide | 0.051 | U | | |
| 60571 | Dieldrin | 0.049 | U | | |
| 72559 | 4,4'-DDE | 0.036 | U | | |
| 53190 | 2,4'-DDD | ~~0.049~~ 0.038 | ~~N~~U | U J | C, + |
| 72208 | Endrin | 0.014 | U | U | |
| 72548 | 4,4'-DDD | 0.065 | U | U J | C |
| 789026 | 2,4'-DDT | 0.059 | U | U | |
| 33216659 | Endosulfan II | ~~0.210~~ 0.058 | ~~N~~U | U | + |
| 1031078 | Endosulfan sulfate | 0.057 | U | U | |
| 50293 | 4,4'-DDT | ~~0.043~~ 0.052 | ~~N~~U | U | + |
| 7421934 | Endrin aldehyde | 0.032 | U | U | |
| 53494705 | Endrin ketone | 0.032 | U | | |
| 72435 | Methoxychlor | 0.190 | U | | |
| 2385855 | Mirex | 0.045 | U | | |

MP 12.16.96

**OGDEN VALIDATED**

**LEVEL D**

*Analysis Not Validated

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC185

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2950

**Sample wt/vol:** 2.0300 L **Lab File ID:** 3,1009963,14,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/25/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/27/96

**Concentrated Extract Volume:** 0.5000 (mL) **Date Analyzed:** 10/10/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1009963,14,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.001600 | | | |
| Compound from Column: | RTX-5 Lab File ID: 2,1009962,14,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.000570 | U | U | |
| 7012375 | PCB-28 (2,4,4') | 0.000250 | J | U | |
| 35693993 | PCB-52 (2,2',5,5') | 0.000450 | U | U | |
| 41464395 | PCB-44 (2,2',3,5') | 0.000380 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.000370 | U | U | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.000400 | J | U | |
| 32598133 | PCB-77 (3,3',4,4') | 0.000660 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.000430 | U | U | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.003400 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.000670 | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.014000 | | J | B |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.000560 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.002400 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.000370 | U | U | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.003400 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.005100 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.000700 | U | U | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000540 | U | U | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000640 | U | U | |

OGDEN VALIDATED

LEVEL D

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC185

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2950

**Sample wt/vol:** 2.0300 L **Lab File ID:** 3,1009963,14,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/25/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/27/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/10/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup:** (Y/N) **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1009963,14,1 | | | | |
| 319846 | alpha-BHC | 0.000200 | J | J | |
| 3424826 | 2,4'-DDE | 0.000410 | U | U | |
| 959988 | Endosulfan I | 0.000710 | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,1009962,14,1 | | | | |
| 118741 | Hexachlorobenzene | ~~0.000520~~ 0.000440 | ~~NU~~ | U | + |
| 31 | beta-BHC | ~~0.002100~~ 0.000320 | ~~NU~~ | U | + |
| 58 | gamma-BHC (Lindane) | ~~0.001900~~ 0.000350 | ~~NU~~ | U | + |
| 319 | delta-BHC | 0.000800 | | | |
| 76448 | Heptachlor | 0.000520 | U | U | |
| 309002 | Aldrin | 0.000640 | U | | |
| 5103742 | gamma-Chlordane | 0.000260 | U | | |
| 5103719 | alpha-Chlordane | 0.000560 | U | | |
| 5103731 | cis-Nonachlor | 0.000400 | U | | * |
| 39765805 | trans-Nonachlor | 0.000400 | U | U | |
| 1024573 | Heptachlor epoxide | 0.000970 | U | | |
| 60571 | Dieldrin | 0.000470 | U | | |
| 72559 | 4,4'-DDE | 0.000230 | U | | |
| 53190 | 2,4'-DDD | 0.000870 | U | | J C |
| 72208 | Endrin | 0.000660 | U | | |
| 72548 | 4,4'-DDD | 0.000560 | U | | |
| 789026 | 2,4'-DDT | 0.000370 | U | | |
| 33216659 | Endosulfan II | 0.000710 | U | | |
| 1031078 | Endosulfan sulfate | 0.000710 | U | | |
| 50293 | 4,4'-DDT | 0.000850 | U | J | C |
| 7421934 | Endrin aldehyde | 0.000370 | U | | |
| 53494705 | Endrin ketone | 0.000370 | U | | |
| 72435 | Methoxychlor | 0.000950 | U | | |
| 2385855 | Mirex | 0.000740 | | | |

MP 12.16.96

OGDEN VALIDATED

LEVEL D

*Analysis Not Validated

A000069

1D
PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC186

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIS01

Matrix: (soil/water) WATER Lab Sample ID: 96B2951

Sample wt/vol: 2.4300 L Lab File ID: 3,1009963,15,1

% Moisture: decanted: (Y/N) Date Received: 09/25/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 09/27/96

Concentrated Extract Volume: 0.5000 (mL) Date Analyzed: 10/10/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/L

| Cas No: | Compound | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1009963,15,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.000360 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1009962,15,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.000480 | U | U | |
| 7012375 | PCB-28 (2,4,4') | ~~0.000320~~ 0.00120* | ~~U~~ U | U | + |
| 35693993 | PCB-52 (2,2',5,5') | 0.000370 | U | U | |
| 41464395 | PCB-44 (2,2',3,5') | 0.000320 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.000310 | U | U | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.000360 | J | J | |
| 32598133 | PCB-77 (3,3',4,4') | 0.000550 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.000360 | U | U | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.002800 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.000560 | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.012000 | | J | B |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.000460 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.002000 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.000310 | U | U | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.002500 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.002600 | J | J | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.000590 | U | U | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.000450 | U | U | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.000540 | U | U | |

MD 12.16.96

OGDEN VALIDATED

LEVEL D

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC186

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2951

**Sample wt/vol:** 2.4300 L **Lab File ID:** 3,1009963,15,1

**% Moisture:** **decanted: (Y/N)** **Date Received:** 09/25/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 09/27/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/10/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1009963,15,1 | | | | |
| 319846 | alpha-BHC | 0.001400 | | | |
| 3424826 | 2,4'-DDE | 0.000340 | U | U | |
| 959988 | Endosulfan I | 0.000590 | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,1009962,15,1 | | | | |
| 118741 | Hexachlorobenzene | ~~0.000490~~ 0.000440 | ~~N~~ U | U | + |
| 3[illegible] | beta-BHC | ~~0.001900~~ 0.000320 | ~~N~~ U | U | + |
| 5[illegible] | gamma-BHC (Lindane) | ~~0.001100~~ 0.000350 | ~~N~~ U | U | + |
| 319[illegible] | delta-BHC | 0.001100 | | | |
| 76448 | Heptachlor | ~~0.001100~~ 0.000530 | ~~N~~ U | U | + |
| 309002 | Aldrin | 0.000530 | U | U | |
| 5103742 | gamma-Chlordane | 0.000210 | U | U | |
| 5103719 | alpha-Chlordane | 0.000470 | U | U | |
| 5103731 | cis-Nonachlor | 0.000330 | U | U * | |
| 39765805 | trans-Nonachlor | 0.000330 | U | U | |
| 1024573 | Heptachlor epoxide | 0.000810 | U | | |
| 60571 | Dieldrin | 0.000390 | U | | |
| 72559 | 4,4'-DDE | 0.000190 | U | | |
| 53190 | 2,4'-DDD | 0.000730 | U | J | C |
| 72208 | Endrin | 0.000550 | U | | |
| 72548 | 4,4'-DDD | 0.000470 | U | | |
| 789026 | 2,4'-DDT | 0.000310 | U | | |
| 33216659 | Endosulfan II | 0.000590 | U | | |
| 1031078 | Endosulfan sulfate | 0.000590 | U | J | C |
| 50293 | 4,4'-DDT | 0.000710 | U | | |
| 7421934 | Endrin aldehyde | 0.000310 | U | | |
| 53494705 | Endrin ketone | 0.000310 | U | | |
| 72435 | Methoxychlor | 0.000800 | U | | |
| 2385855 | Mirex | 0.000860 | | | |

MP 12.16.96

OGDEN VALIDATED

LEVEL D

*Analysis Not Validated

OGDEN

# DATA VALIDATION REPORT

CLEAN CONTRACT TASK ORDER #136
NAF Midway Site Investigations

ANALYSIS: METALS

SAMPLE DELIVERY GROUP: 61542

Prepared by

Ogden—Denver Operations
550 South Wadsworth Boulevard, Suite 500
Lakewood, Colorado 80226

# CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

Ogden Environmental and Energy Services Co., Inc.
550 South Wadsworth Boulevard
Suite 500
Lakewood, CO 80226

Package ID: C136MT47
Task Order: 110190136
SDG No.: 61542
No. of Analyses: 2

Laboratory: Inchcape
Reviewer: K. Chapman
Analysis/Method: Metals

Date: 12-19-96
Reviewer's Signature: Kristine E. Chapman

| ACTION ITEMS[a] | |
|---|---|
| 1. **Case Narrative Deficiencies** | |
| 2. **Out of Scope Analyses** | |
| 3. **Analyses Not Conducted** | |
| 4. **Missing Hardcopy Deliverables** | |
| 5. **Incorrect Hardcopy Deliverables** | |
| 6. **Deviations from Analysis Protocol, e.g.,** | Some qualification ~~&~~ due to blank contamination |
| Holding Times | |
| GC/MS Tune/Inst. Perform | |
| Calibrations | |
| Blanks | |
| Surrogates | |
| Matrix Spike/Dup LCS | |
| Field QC | |
| Internal Standard Performance | |
| Compound Identification and Quantitation | |
| System Performance | |

**COMMENTS[b]**: ~~the~~ No matrix spike or lab duplicate analyzed in association with these samples.

[a] Subcontracted analytical laboratory is not meeting contract and/or method requirements.
[b] Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.

# 1. INTRODUCTION

| | |
|---|---|
| Task Order Title: | NAF Midway SI/RI |
| CLEAN Contract Task Order #: | 0136 |
| SDG#: | 61542 |
| CTO Manager: | J. Cotter |
| Project Contact: | M. Medeiros |
| Matrix: | Water |
| Analysis: | Metals |
| NEESA QC Level: | D |
| No. of Samples: | 2 |
| No. of Reanalyses/Dilutions: | 0 |
| Reviewer: | K. Chapman |
| Date of Review: | December 19, 1996 |

The samples listed in Table 1 were validated based on the guidelines outlined in the Ogden *Project Procedures Manual, Comprehensive Long-Term Environmental Action Navy (CLEAN) Program* data validation procedure for Levels C and D metals and cyanide (DVP-5, Rev. 2) and validation guidelines outlined in the USEPA CLP *National Functional Guidelines for Inorganic Data Review* (2/94). Any deviations from these procedures and guidelines are documented herein. These procedures are designed to meet the data quality objectives required by the Naval Energy and Environmental Support Activity for all analyses at the requested QC level. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

**Table 1. Sample identification**

| Client ID | EPA ID | Laboratory ID | Matrix | COC Method |
|---|---|---|---|---|
| M01EW01S01 | MC185 | 314205 | water | ILM04.0 |
| M01EW01D01 | MC186 | 314206 | water | ILM04.0 |

# 2. DATA VALIDATION FINDINGS

## 2.1 SAMPLE MANAGEMENT

Following are findings associated with sample management:

### 2.1.1 Sample Preservation, Handling, and Transport

The field COC for the sample shipments to A. D. Little were not included in the data package; this was obtained from a pesticide package containing the same samples, and inserted in the package for validation. The cooler shipped from the field to A. D. Little was documented on the COC to have had a temperature reading above the NEESA 20.027B temperature limit of $4 \pm 2^{\circ}C$ at the time of receipt, but as the target analytes are not volatile, no qualifications were necessary. After the samples were received at A. D. Little, they were shipped to Inchcape's Colchester laboratory for metals analysis. The sample receipt form documents that the samples arrived at a temperature below the NEESA 20.027B requirement, but the containers were documented to be intact, and no qualifications were necessary. The field shipments were noted on the COC to not have had a custody seals at the time of receipt; however, the sample log-in sheet for Inchape documented an intact custody seal on the cooler. No sample handling or transport problems were noted for any sample shipments. No qualifications were assigned for sample preservation, handling, or transport.

### 2.1.2 Chain of Custody

All COCs were legible and signed by laboratory personnel. A sample receipt checklist, which supplied additional information, was included for some shipments. No qualifications were required based on sample receipt information.

### 2.1.3 Holding Times

The dates of collection recorded on the COC and the dates of analysis recorded in the raw data documented that all sample analyses were performed within the specified holding times of six months for the metals (except mercury) and 28 days for mercury. No qualifications were assigned to the sample results.

## 2.2 CALIBRATION

All calibration information supplied on the Form IIs and in the raw data met acceptance criteria, and no qualifications were required.

## 2.3 BLANKS

A number of detects were reported in the calibration and method blanks associated with the samples in this set. Sample results were qualified as follows:

| Findings | Associated Samples | Qualification of Data |
|---|---|---|
| Chromium was detected in CCB3 at a concentration of 1.3 μg/L. | MC185 MC186 | Sample results for chromium were qualified "UJ." |
| Iron was detected in CCB3 at a concentration of 18.7 μg/L. | MC186 | Sample result for iron was qualified "UJ." |
| Lead was reported in CCB3 at a concentration of -2.5 μg/L. | MC185 MC186 | Sample results for lead were qualified "UJ." |
| Mercury was reported in CCB3 at a concentration of - 0.1 μg/L. | MC185 MC186 | Sample results for mercury were qualified "UJ." |
| Selenium was detected in CCB3 at a concentration of 3.4 μg/L. | MC185 MC186 | Sample results for selenium were qualified "UJ." |

## 2.4 ICP INTERFERENCE CHECK SAMPLE (ICP ICS)

All ICP check sample results were acceptable, and no qualifications were necessary.

## 2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

An aqueous LCS was analyzed in association with the samples in this data validation report, with acceptable results for all analytes. No qualifications were necessary.

## 2.6 LABORATORY DUPLICATES

No laboratory duplicate was analyzed in association with the samples in the data validation report; therefore, these samples were not validated for this criteria.

## 2.7 MATRIX SPIKE

No matrix spike was analyzed in association with the samples in the data validation report; therefore, these samples were not validated for this criteria.

## 2.8 FURNACE ATOMIC ABSORPTION QC

Graphite furnace atomic absorption is not applicable to the analyses presented in this data validation report.

## 2.9 ICP SERIAL DILUTION

An ICP serial dilution was run on sample MC186 with acceptable results for all analytes. No qualifications were required.

## 2.10 SAMPLE RESULT VERIFICATION

A NEESA Level D validation was performed on the sample results in this data validation report. Upon review of the raw data, no transcription or calculation errors were noted. The sodium levels in the two samples validated were unusually high, at a level of greater than 20× the linear range of the instrument for sodium. The only analyte reported from a dilution was sodium. Unless all analytes were run at a dilution, with elevated reporting limits, it is not possible to gauge if the sodium IECs affecting the other reported analytes were sufficient to correct for any spectral and physical interferences caused by the high sodium in the samples. Without knowing if the interelement corrections were sufficient, it is difficult to know if the lower level detects were reliable. There is no precedence to qualify the lower level detects, and therefore no qualifications were assigned. However, the possibility of interference should be noted.

## 2.11 FIELD QC SAMPLES

Field QC samples were evaluated, and if necessary, qualified based only on method blanks and calibration blanks. Any remaining detects are used to evaluate the associated samples.

Following are findings associated with field QC samples:

### 2.11.1 Field Blanks and Equipment Rinsates

The two samples contained in this data validation report were eluriates, and had no associated field QC samples.

### 2.11.2 Field Duplicates

Samples MC185/MC186 were identified as the field duplicate pair for this SDG. Qualifications are not assigned to sample results on the basis of field duplicate pairs; however, RPDs are calculated between results for these samples. If RPDs are greater than 50% for waters or 100% for soils, the RPDs and affected analytes are noted in the data validation report. The RPD for cadmium was greater than 50%. Both arsenic and vanadium were detected in MC185 and not in MC186. All other RPDs were less than 50%, and all other detects were in common.

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MC185

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 96000_____

Lab Code: INCHVT Case No.: MIDW__ SAS No.: _____ SDG No.: 61542_

Matrix (soil/water): WATER Lab Sample ID: 314205

Level (low/med): LOW__ Date Received: 09/26/96

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

| CAS No. | Analyte | Concentration | C | Q | M | Lab Qual | Qual code |
|---|---|---|---|---|---|---|---|
| 7429-90-5 | Aluminum_ | 31.5 | U | | P_ | u | |
| 7440-36-0 | Antimony_ | 3.6 | U | | P_ | u | |
| 7440-38-2 | Arsenic__ | 3.3 | B | | P_ | | |
| 7440-39-3 | Barium___ | 7.7 | U | | P_ | u | |
| 7440-41-7 | Beryllium | 0.30 | U | | P_ | u | |
| 7440-43-9 | Cadmium__ | 0.66 | B | | P_ | | |
| 7440-70-2 | Calcium__ | 416000 | | | P_ | | |
| 7440-47-3 | Chromium_ | 2.7 | B | | P_ | uJ | B |
| 7440-48-4 | Cobalt___ | 2.3 | U | | P_ | u | |
| 7440-50-8 | Copper___ | 7.5 | B | | P_ | | |
| 7439-89-6 | Iron_____ | 103 | | | P_ | | |
| 7439-92-1 | Lead_____ | 15.0 | U | | P_ | uJ | B |
| 7439-95-4 | Magnesium | 1370000 | | | P_ | | |
| 7439-96-5 | Manganese | 6.0 | U | | P_ | u | |
| 7439-97-6 | Mercury__ | 0.10 | U | | CV | uJ | B |
| 7440-02-0 | Nickel___ | 3.9 | B | | P_ | | |
| 7440-09-7 | Potassium | 513000 | | | P_ | | |
| 7782-49-2 | Selenium_ | 4.2 | B | | P_ | uJ | B |
| 7440-22-4 | Silver___ | 2.0 | B | | P_ | | |
| 7440-23-5 | Sodium___ | 11400000 | | | P_ | | |
| 7440-28-0 | Thallium_ | 3.6 | U | | P_ | u | |
| 7440-62-2 | Vanadium_ | 2.5 | B | | P_ | | |
| 7440-66-6 | Zinc_____ | 21.7 | | | P_ | | |
| | Cyanide__ | | | | NR | | |
| | | | | | | | |

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

OGDEN VALIDATED

LEVEL D

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MC186

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 96000_____

Lab Code: INCHVT Case No.: MIDW__ SAS No.: _____ SDG No.: 61542_

Matrix (soil/water): WATER Lab Sample ID: 314206

Level (low/med): LOW__ Date Received: 09/26/96

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

| CAS No. | Analyte | Concentration | C | Q | M | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|---|
| 7429-90-5 | Aluminum_ | 31.5 | U | | P_ | U | |
| 7440-36-0 | Antimony_ | 3.6 | U | | P_ | U | |
| 7440-38-2 | Arsenic__ | 2.8 | U | | P_ | U | |
| 7440-39-3 | Barium___ | 7.7 | U | | P_ | U | |
| 7440-41-7 | Beryllium | 0.30 | U | | P_ | U | |
| 7440-43-9 | Cadmium__ | 1.8 | B | | P_ | | |
| 7440-70-2 | Calcium__ | 415000 | | | P_ | | |
| 7440-47-3 | Chromium_ | 2.0 | B | | P_ | UJ | B |
| 7440-48-4 | Cobalt___ | 2.3 | U | | P_ | U | |
| 7440-50-8 | Copper___ | 7.2 | B | | P_ | | |
| 7439-89-6 | Iron_____ | 87.7 | B | | P_ | UJ | B |
| 7439-92-1 | Lead_____ | 15.0 | U | | P_ | UJ | B |
| 7439-95-4 | Magnesium | 1360000 | | | P_ | | |
| 7439-96-5 | Manganese | 6.0 | U | | P_ | U | |
| 7439-97-6 | Mercury__ | 0.10 | U | | CV | UJ | B |
| 7440-02-0 | Nickel___ | 3.8 | B | | P_ | | |
| 7440-09-7 | Potassium | 509000 | | | P_ | | |
| 7782-49-2 | Selenium_ | 5.0 | B | | P_ | UJ | B |
| 7440-22-4 | Silver___ | 1.8 | B | | P_ | | |
| 7440-23-5 | Sodium___ | 11500000 | | | P_ | | |
| 7440-28-0 | Thallium_ | 3.6 | U | | P_ | U | |
| 7440-62-2 | Vanadium_ | 1.8 | U | | P_ | U | |
| 7440-66-6 | Zinc_____ | 22.3 | | | P_ | | |
| | Cyanide__ | | | | NR | | |
| | | | | | | | |

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

LEVEL D

OGDEN VALIDATED

OGDEN

# DATA VALIDATION REPORT

CLEAN CONTRACT TASK ORDER #136
NAF Midway Site Investigations

ANALYSIS: POLYNUCLEAR AROMATIC HYDROCARBONS

SAMPLE DELIVERY GROUP: OMIS01

Prepared by

Ogden—Denver Operations
550 South Wadsworth Boulevard Suite 500
Lakewood, Colorado 80226

# CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

Ogden Environmental and Energy Services Co., Inc.
550 South Wadsworth Boulevard
Suite 500
Lakewood, CO 80226

Package ID: C136PA20
Task Order: CTO 136
SDG No.: OMIS01
No. of Analyses: 2

Laboratory: AD Little
Reviewer: K. McNeill
Analysis/Method: Polynuclear Aromatic Hydrocarbons

Date: 12/17/96
Reviewer's Signature: Kane McNeill

| ACTION ITEMS[a] | |
|---|---|
| 1. **Case Narrative Deficiencies** | |
| 2. **Out of Scope Analyses** | |
| 3. **Analyses Not Conducted** | |
| 4. **Missing Hardcopy Deliverables** | |
| 5. **Incorrect Hardcopy Deliverables** | |
| 6. **Deviations from Analysis Protocol, e.g.,** | High cooler temps upon receipt<br>- No sample dates on COC<br>- Initial Calibration Qualifications<br>- Method Blank Qualifications<br>- Blank Spike Qualifications<br>- Detection Limit Qualifications<br>- Some "J" values raised to MDL. |
| Holding Times | |
| GC/MS Tune/Inst. Perform | |
| Calibrations | |
| Blanks | |
| Surrogates | |
| Matrix Spike/Dup LCS | |
| Field QC | |
| Internal Standard Performance | |
| Compound Identification and Quantitation | |
| System Performance | |

| COMMENTS[b] |
|---|
| |

[a] Subcontracted analytical laboratory is not meeting contract and/or method requirements.
[b] Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.

# 1. INTRODUCTION

| | |
|---|---|
| Task Order Title: | NAF Midway Site Investigations |
| CLEAN Contract Task Order #: | 0136 |
| SDG#: | OMIS01 |
| CTO Manager: | J. Cotter |
| Project Contact: | M. Medeiros |
| Matrix: | Water |
| Analysis: | Polynuclear Aromatic Hydrocarbons |
| NEESA QC Level: | D |
| No. of Samples: | 2 |
| No. of Reanalyses/Dilutions: | 0 |
| Reviewer: | K. McNeill |
| Date of Review: | December 17,1996 |

The samples listed in Table 1 were validated based on the NOAA National Status and Trends Analytical Protocols, data validation procedure for Levels C and D semivolatile organics (DVP-3, Rev. 2) and the *National Functional Guidelines For Organic Data Review* (2/94). These protocols vary from the CLP Protocols upon which the Navy CLEAN data validation procedures were based. Instances where quality control parameters vary from the CLP Data Validation procedures are documented in the text of this report and should be noted with respect to the overall data quality objectives of this project. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in estimated value were not denoted by a qualification code since the data had already been rejected.

## Table 1. Sample identification

| Client ID | EPA ID | Lab ID | Matrix | COC Method |
|---|---|---|---|---|
| M01EW01S01 | MC185 | 96B2950 | water | STIV141A |
| M01EW01D01 | MC186 | 96B2951 | water | STIV141A |

# 2. DATA VALIDATION FINDINGS

## 2.1 SAMPLE MANAGEMENT

Following are findings associated with sample management:

### 2.1.1 Sample Preservation, Handling, and Transport

The samples in this SDG were received by the laboratory above the temperature limits (11.9 °C) specified by NEESA 20.2-047B. According to the laboratory upon sample receipt, an inadequate amount of ice was sent in the cooler and no seal was present on the cooler. Since this was an extractable method, no qualifications were required. No other problems were noted during sample handling and transport.

### 2.1.2 Chain of Custody

The COCs were all signed by laboratory personnel upon receipt. The date and time of sampling was not noted on the COCs received by the laboratory. The sampling date was assumed by the reviewer to be the date noted for the release of the cooler to the shipping company. The samples were noted on the COC as water samples; however, the laboratories case narrative referred to the samples matrix as "sediment elutriate." No qualifications were required.

### 2.1.3 Holding Times

The samples were extracted and analyzed within the required holding times; therefore, no qualifications were required.

## 2.2 GC/MS TUNING

The laboratory tuned the mass spectrometer using perfluorotributylamine (PFTBA) to maximize the sensitivity of the instrument in the mass range of interest, 100-300 atomic mass units. The performance checks were found to be acceptable.

## 2.3 CALIBRATION

Calculations of RRFs, %Ds, and %RSDs were checked for some analytes from the raw data and no calculation or transcription errors were found. The initial calibration had a high %RSD value for 2,4-dinitrophenol, 65%. 2,4-Dinitrophenol was qualified "UJ" for nondetects in MC185 and MC186. The continuing calibrations had all %D values within QC limits. No other qualifications were required.

## 2.4 BLANKS

The laboratory analyzed one method blank with the samples in this SDG. The following table lists the affected samples, detected compounds, and their qualifications:

| Affected analytes | Affected samples | Qualifications given |
|---|---|---|
| Naphthalene, naphthalene-C1, biphenyl, phenanthrene, anthracene, fluoranthene, and pyrene. | MC185 | "U" at the MDL |
| Naphthalene-C1, biphenyl, phenanthrene, anthracene, fluoranthene, and pyrene. | MC186 | "U" at the MDL |
| Naphthalene | MC186 | "UJ" for nondetects |

Bis(2-ethylhexyl)phthalate was found in the method blank also, but it did not require any qualifications because the 10x value was below the detects in both samples.

## 2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

The laboratory analyzed a blank spike sample with the samples in this SDG. The analyte anthracene was recovered below the QC limits. Anthracene was qualified "UJ" for nondetects in both MC185 and MC186 because no MS/MSD was performed. An evaluation of the raw data revealed no transcription or calculation errors. No other qualifications were required.

## 2.6 SURROGATE RECOVERY

Recoveries for surrogate compounds were within QC limits for all associated samples. Evaluation of the raw data revealed no transcription or calculation errors. No qualifications were required.

## 2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

No MS/MSD was performed with this SDG. According to the case narrative, no MS/MSD was requested per a conversation with Ogden personnel. No qualifications were required for the lack of a MS/MSD sample.

## 2.8 FIELD QC SAMPLES

Field QC samples were evaluated and, if necessary, qualified based on method blanks only (see Section 2.4). Remaining detects were then used to qualify the samples. The following are findings associated with field QC samples:

### 2.8.1 Field Blanks and Equipment Rinsates

No Field QC samples were applicable with this SDG. According to the CTO136 analytical summary table none were associated with this SDG. No qualifications were required.

### 2.8.2 Duplicates

Samples MC185/MC186 were the field duplicates associated with this SDG. The samples had twelve similar detects, only one of the compounds had %D values above 50% between them. The high %D compound was bis(2-ethylhexyl)phthalate at 124%. Sample MC186 had one detect for naphthalene that was detected only in that sample. No qualifications are required for field duplicate samples.

## 2.9 INTERNAL STANDARDS PERFORMANCE

All samples had fluorene-d10 and chrysene-d12 area recoveries' within QC limits of the associated calibration standards. The retention times of the internal standards were within ±30 seconds of the retention times for the associated calibration standards. The internal standard sample area values were also within (+100%)/(-50%) of the internal standards area value. An evaluation of the raw data revealed no transcription errors. No qualifications were required.

## 2.10 TARGET COMPOUND LIST IDENTIFICATION

The laboratory analyzed for PAH, alkyl PAH target compounds, and additional semivolatile compounds as specified in the CTO136 laboratory SOW. Chromatograms, retention times, and spectra were all examined and no problems were noted.

## 2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

The Arthur D. Little, Inc. method detection limit studies were out of date and inconsistent with the provided Form Is. The reporting limits for 2,4-dinitrophenol and dibenzo(a,h)anthracene were incorrectly reported on the Form I's. The nondetect values that have been corrected are noted with a "$" for MC185 and MC186. Several compounds in both samples were qualified "J" by the laboratory; however, after review of "J" compounds it was determined any value below 1/2 the MDL would be raised to the MDL value and qualified as a false detect "+". The following compounds were qualified "U" at the MDL for both samples: fluorene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(e)pyrene, benzo(a)pyrene, perylene, indeno (1,2,3-cd)pyrene, and benzo (g,h,i)perylene. The following compounds were also raised in MC186: fluoranthene + pyrene c1-alkyl-sub, chrysene, and dibenzo(a,h)anthracene. The MDLs have been adjusted for sample volume. No other qualifications were required.

## 2.12 TENTATIVELY IDENTIFIED COMPOUNDS

Tentatively identified compounds are not evaluated by the NOAA Status and Trends Method for Trace Organic Contaminants.

## 2.13 SYSTEM PERFORMANCE

A review of the chromatograms, spectral fits, and calibrations showed no identifiable problems with system performance.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC185

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CT0136 ADL Project No.: 69084 SDG No.: OMIS01

Matrix: (soil/water) WATER Lab Sample ID: 96B2950

Sample wt/vol: 2.0300 L Lab File ID: >X1824

Level: (low/med) LOW Date Received: 09/25/96

% Moisture: decanted: (Y/N) Date Extracted: 09/27/96

Concentrated Extract Volume: 0.2500(mL) Date Analyzed: 10/19/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 4.0000

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/L | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| 1203 | Naphthalene | | ~~0.004500~~ 0.0054 | U | U | B |
| APHTHALC1 | Naphthalenes, C1-alkyl-substituted- | | ~~0.002600~~ 0.0054 | U | U | B |
| APHTHALC2 | Naphthalenes, C2-alkyl-substituted- | | 0.003000 | J | U | |
| APHTHALC3 | Naphthalenes, C3-alkyl-substituted- | | 0.005400 | U | U | |
| APHTHALC4 | Naphthalenes, C4-alkyl-substituted- | | 0.005400 | U | | |
| 20821 | 1,2,4-Trichlorobenzene | | 0.006100 | U | | |
| 08703 | 1,3,5-Trichlorobenzene | | 0.006300 | U | | |
| 7683 | Hexachlorobutadiene | | 0.005700 | U | | |
| 3062 | 2,4,6-Trichlorophenol | | 9.900000 | U | | |
| 5954 | 2,4,5-Trichlorophenol | | 9.900000 | U | | |
| 285 | 2,4-Dinitrophenol | | 49.000000 | U | UJ | C |
| 08968 | Acenaphthylene | | 0.005100 | U | U | |
| 3329 | Acenaphthene | | 0.001300 | J | J | |
| 2524 | Biphenyl | 0.0042 | ~~0.000810~~ ~~0.0048~~ | U | U | B |
| 5737 | Fluorene | 0.0038 | ~~0.000670~~ | U | U | + |
| LUORENESC1 | Fluorenes, C1-alkyl-substituted- | | 0.003800 | U | U | |
| LUORENESC2 | Fluorenes, C2-alkyl-substituted- | | 0.003800 | U | U | |
| LUORENESC3 | Fluorenes, C3-alkyl-substituted- | | 0.003800 | U | U | |
| 5018 | Phenanthrene | | ~~0.001400~~ 0.0022 | U | U | B |
| 20127 | Anthracene | | ~~0.000400~~ 0.0066 | U | UJ | B, *5 |
| HENANTHC1 | Phenanthrenes+Anthracenes, C1-alkyl-sub | | 0.002200 | U | U | |
| HENANTHC2 | Phenanthrenes+Anthracenes, C2-alkyl-sub | | 0.002200 | U | | |
| HENANTHC3 | Phenanthrenes+Anthracenes, C3-alkyl-sub | | 0.002200 | U | | |
| HENANTHC4 | Phenanthrenes+Anthracenes, C4-alkyl-sub | | 0.002200 | U | | |
| 32650 | Dibenzothiophene | | 0.002700 | U | | |
| BENZC1ALK | Dibenzothiophenes, C1-alkyl-substituted | | 0.002700 | U | | |
| BENZC2ALK | Dibenzothiophenes, C2-alkyl-substituted | | 0.002700 | U | | |
| BENZC3ALK | Dibenzothiophenes, C3-alkyl-substituted | | 0.002700 | U | U | |
| 6440 | Fluoranthene | | ~~0.001500~~ 0.0031 | U | U | B |
| 29000 | Pyrene | | ~~0.001500~~ 0.0054 | U | U | B |
| LUORANTHC1 | Fluoranthenes+Pyrenes, C1-alkyl-sub | | ~~0.000940~~ 0.0031 | U | UJ | + |
| LUORANTHC2 | Fluoranthenes+Pyrenes, C2-alkyl-sub | | 0.003100 | U | U | |
| LUORANTHC3 | Fluoranthenes+Pyrenes, C3-alkyl-sub | | 0.003100 | U | U | |
| 553 | Benzo(a)anthracene | | ~~0.011000~~ 0.010 | U | U | # |
| 8019 | Chrysene | | ~~0.000990~~ 0.0040 | U | UJ | + |
| HRYSC1ALK | Chrysenes, C1-alkyl-substituted- | | 0.004000 | U | U | |
| HRYSC2ALK | Chrysenes, C2-alkyl-substituted- | | 0.004000 | U | | |
| HRYSC3ALK | Chrysenes, C3-alkyl-substituted- | | 0.004000 | U | | |
| HRYSC4ALK | Chrysenes, C4-alkyl-substituted- | | 0.004000 | U | U | |
| 7817 | bis(2-Ethylhexyl)phthalate | | 1.600000 | | | |
| 5992 | Benzo(b)fluoranthene | | ~~0.001300~~ 0.0011 | U | UJ | # + |
| 7089 | Benzo(k)fluoranthene | | ~~0.000640~~ 0.0087 | U | U | # + |
| 2972 | Benzo(e)pyrene | | ~~0.000630~~ 0.0090 | U | U | # + |
| 328 | Benzo(a)pyrene | | ~~0.000900~~ 0.0088 | U | U | # + |
| 8550 | Perylene | | ~~0.000200~~ 0.0086 | U | U | |
| 3395 | Indeno(1,2,3-cd)pyrene | | ~~0.000780~~ 0.0083 | U | U | |
| 703 | Dibenzo(a,h)anthracene | | ~~0.000380~~ 0.010 | U | U | |
| 1242 | Benzo(g,h,i)perylene | | ~~0.000790~~ 0.010 | U | UJ | |

KM
12/17/96

OGDEN VALIDATED
LEVEL D

2,4-Trichlorobenzene, 1,3,5-Trichlorobenzene, Hexachlorobutadiene, 2,4,6-Trichlorophenol, 2,4,5-Trichlorophenol, 4-Dinitrophenol and bis(2-Ehthylhexyl)phthalate will be reported when quantified but are considered non-target mpounds for method STIV141A.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC186 ✓

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CT0136 **ADL Project No.:** 69084 **SDG No.:** OMIS01

**Matrix: (soil/water)** WATER **Lab Sample ID:** 96B2951 ✓

**Sample wt/vol:** 2.4300 L ✓ **Lab File ID:** >X1825

**Level: (low/med)** LOW **Date Received:** 09/25/96

**% Moisture:** **decanted: (Y/N)** **Date Extracted:** 09/27/96

**Concentrated Extract Volume:** 0.2500(mL) ✓ **Date Analyzed:** 10/19/96

**Injection Volume:** 2 ✓ (uL) **Dilution Factor:** 1.0000 ✓

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 4.0000 ✓

**Concentration Units: (ug/L or ug/Kg)** ug/L

| Cas No: | Compound | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| 91203 | Naphthalene | 0.006500 | | UJ | B |
| NAPHTHALC1 | Naphthalenes, C1-alkyl-substituted- | ~~0.003600~~ 0.0045 | ~~J~~ U | U | B |
| NAPHTHALC2 | Naphthalenes, C2-alkyl-substituted- | 0.004400 | J | U | |
| NAPHTHALC3 | Naphthalenes, C3-alkyl-substituted- | 0.004500 | U | U | |
| NAPHTHALC4 | Naphthalenes, C4-alkyl-substituted- | 0.004500 | U | | |
| 120821 | 1,2,4-Trichlorobenzene | 0.005100 | U | | |
| 108703 | 1,3,5-Trichlorobenzene | 0.005200 | U | | |
| 87683 | Hexachlorobutadiene | 0.004800 | U | | |
| 88062 | 2,4,6-Trichlorophenol | 8.200000 | U | | |
| 95954 | 2,4,5-Trichlorophenol | 8.200000 | U | | |
| 51285 | 2,4-Dinitrophenol | 41.000000 | U | UJ | C |
| 208968 | Acenaphthylene | 0.004200 | U | U | |
| 83329 | Acenaphthene | 0.001300 | J | U | |
| 92524 | Biphenyl | ~~0.000890~~ 0.0037 | ~~J~~ U | U | B |
| 86737 | Fluorene | ~~0.000670~~ .0032 | ~~J~~ U | U | ~~B~~ + |
| FLUORENESC1 | Fluorenes, C1-alkyl-substituted- | 0.003200 | U | U | |
| FLUORENESC2 | Fluorenes, C2-alkyl-substituted- | 0.003200 | U | U | |
| FLUORENESC3 | Fluorenes, C3-alkyl-substituted- | 0.003200 | U | U | |
| 85018 | Phenanthrene | ~~0.001200~~ 0.0018 | ~~J~~ U | U | B |
| 120127 | Anthracene | ~~0.000300~~ 0.0056 | ~~J~~ U ~~J~~ | UJ | B, *5 |
| PHENANTHC1 | Phenanthrenes+Anthracenes, C1-alkyl-sub | 0.001900 | U | U | |
| PHENANTHC2 | Phenanthrenes+Anthracenes, C2-alkyl-sub | 0.001900 | U | | |
| PHENANTHC3 | Phenanthrenes+Anthracenes, C3-alkyl-sub | 0.001900 | U | | |
| PHENANTHC4 | Phenanthrenes+Anthracenes, C4-alkyl-sub | 0.001900 | U | | |
| 132650 | Dibenzothiophene | 0.002200 | U | | |
| DIBENZC1ALK | Dibenzothiophenes, C1-alkyl-substituted | 0.002200 | U | | |
| DIBENZC2ALK | Dibenzothiophenes, C2-alkyl-substituted | 0.002200 | U | | |
| DIBENZC3ALK | Dibenzothiophenes, C3-alkyl-substituted | 0.002200 | U | U | |
| 206440 | Fluoranthene | ~~0.000880~~ 0.0025 | ~~J~~ U | U | B |
| 129000 | Pyrene | ~~0.000880~~ 0.0045 | ~~J~~ U | U | B |
| FLUORANTHC1 | Fluoranthenes+Pyrenes, C1-alkyl-sub | 0.002600 | U | U | |
| FLUORANTHC2 | Fluoranthenes+Pyrenes, C2-alkyl-sub | 0.002600 | U | | |
| FLUORANTHC3 | Fluoranthenes+Pyrenes, C3-alkyl-sub | 0.002600 | U | | |
| 56553 | Benzo(a)anthracene | ~~0.008900~~ .0082 | U | U | # |
| 218019 | Chrysene | 0.003300 | U | U | |
| CHRYSC1ALK | Chrysenes, C1-alkyl-substituted- | 0.003300 | U | | |
| CHRYSC2ALK | Chrysenes, C2-alkyl-substituted- | 0.003300 | U | | |
| CHRYSC3ALK | Chrysenes, C3-alkyl-substituted- | 0.003300 | U | | |
| CHRYSC4ALK | Chrysenes, C4-alkyl-substituted- | 0.003300 | U | U | |
| 117817 | bis(2-Ethylhexyl)phthalate | 0.370000 | | | |
| 205992 | Benzo(b)fluoranthene | ~~0.000670~~ 0.0090 | ~~J~~ U | U ~~J~~ | ~~B~~ + |
| 207089 | Benzo(k)fluoranthene | ~~0.000340~~ 0.0072 | ~~J~~ U | | |
| 192972 | Benzo(e)pyrene | ~~0.000360~~ 0.0074 | ~~J~~ U | | |
| 50328 | Benzo(a)pyrene | ~~0.000360~~ 0.0072 | ~~J~~ U | | |
| 198550 | Perylene | ~~0.000110~~ 0.0070 | ~~J~~ U | | |
| 193395 | Indeno(1,2,3-cd)pyrene | ~~0.000390~~ 0.0068 | ~~J~~ U | U ~~J~~ | |
| 53703 | Dibenzo(a,h)anthracene | ~~0.008400~~ 0.0082 | U | U | # |
| 191242 | Benzo(g,h,i)perylene | ~~0.000380~~ 0.0082 | J | U ~~J~~ | ~~B~~ + |

**OGDEN VALIDATED** **LEVEL D**

KM 12/17/96

,2,4-Trichlorobenzene, 1,3,5-Trichlorobenzene, Hexachlorobutadiene, 2,4,6-Trichlorophenol, 2,4,5-Trichlorophenol, ,4-Dinitrophenol and bis(2-Ehthylhexyl)phthalate will be reported when quantified but are considered non-target ompounds for method STIV141A.

OGDEN

# DATA VALIDATION REPORT

CLEAN CONTRACT TASK ORDER #0136
NAF Midway Site Investigations

ANALYSIS: PESTICIDES/PCBs

SAMPLE DELIVERY GROUP: OMIFT01

Prepared by

Ogden—Denver Operations
550 South Wadsworth Boulevard, Suite 500
Lakewood, Colorado 80226

# CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

Ogden Environmental and Energy Services Co., Inc.
550 South Wadsworth Boulevard
Suite 500
Lakewood, CO 80226

Package ID C136PP62
Task Order 110190136
SDG No. OMIFT01
No. of Analyses 16 / 11

Laboratory A. D. LITTLE
Reviewer M. Pokorny
Analysis/Method Pesticides/PCBs

Date: 12-23-96
Reviewer's Signature M. Pokorny

| ACTION ITEMS[a] | |
|---|---|
| 1. **Case Narrative Deficiencies** | |
| 2. **Out of Scope Analyses** | |
| 3. **Analyses Not Conducted** | |
| 4. **Missing Hardcopy Deliverables** | |
| 5. **Incorrect Hardcopy Deliverables** | |
| 6. **Deviations from Analysis Protocol, e.g.,** | QUALIFICATIONS GIVEN FOR CALIBRATION DEFICIENCIES, BLANK CONTAMINATION AND FALSE POSITIVES. |
| Holding Times | |
| GC/MS Tune/Inst. Perform | |
| Calibrations | |
| Blanks | |
| Surrogates | |
| Matrix Spike/Dup LCS | |
| Field QC | |
| Internal Standard Performance | |
| Compound Identification and Quantitation | |
| System Performance | |

| COMMENTS[b] | |
|---|---|
| | |

[a] Subcontracted analytical laboratory is not meeting contract and/or method requirements.
[b] Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.

# 1. INTRODUCTION

| | |
|---|---|
| Task Order Title: | NAF Midway Site Investigations |
| CLEAN Contract Task Order #: | 0136 |
| SDG#: | OMIFT01 |
| CTO Manager: | J. Cotter |
| Project Contact: | M. Medeiros |
| Matrix: | Tissue |
| Analysis: | Pesticides/PCBs |
| NEESA QC Level: | D |
| No. of Samples: | 16 |
| No. of Reanalyses/Dilutions: | 11 |
| Reviewer: | M. Pokorny |
| Date of Review: | December 23, 1996 |

The samples listed in Table 1 were validated based on the NOAA National Status and Trends Analytical Protocols, data validation procedure for Levels C and D pesticides/PCBs (DVP-4, Rev. 2) and the *National Functional Guidelines For Organic Data Review* (2/94). These protocols vary from the CLP Protocols upon which the Navy CLEAN data validation procedures were based. Instances where quality control parameters vary from the CLP Data Validation procedures are documented in the text of this report and should be noted with respect to the overall data quality objectives of this project. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in estimated value were not denoted by a qualification code since the data had already been rejected.

**Table 1. Sample identification**

| Client ID | EPA ID | Laboratory ID | Matrix | COC Method |
|---|---|---|---|---|
| M00MT01S02 | MA709 | 96B3046 | tissue | STIV141C/E |
| M00MT01S04 | MA710 | 96B2981 | tissue | STIV141C/E |
| M00MT04S02 | MA717 | 96B2982 | tissue | STIV141C/E |
| M00MT02S02 | MA725 | 96B2983 | tissue | STIV141C/E |
| M00MT03S02 | MA728 | 96B3020 | tissue | STIV141C/E |
| M01MT02S02 | MC224 | 96B2974 | tissue | STIV141C/E |
| M01MT02S02 | MC224DL | 96B2974DL | tissue | STIV141C/E |
| M01MT01S02 | MC231 | 96B2978 | tissue | STIV141C/E |
| M01MT01S02 | MC231DL | 96B2978DL | tissue | STIV141C/E |
| M99MT03S02 | MV018 | 96B2984 | tissue | STIV141C/E |
| M99MT03S02 | MV018DL | 96B2984DL | tissue | STIV141C/E |
| M99MT04S02 | MV022 | 96B2985 | tissue | STIV141C/E |
| M99MT04S02 | MV022DL | 96B2985DL | tissue | STIV141C/E |
| M99MT04D02 | MV023 | 96B2986 | tissue | STIV141C/E |
| M99MT04D02 | MV023DL | 96B2986DL | tissue | STIV141C/E |
| M99MT08S02 | MV025 | 96B2987 | tissue | STIV141C/E |
| M99MT08S02 | MV025DL | 96B2987DL | tissue | STIV141C/E |
| M99MT01S02 | MV028 | 96B2989 | tissue | STIV141C/E |
| M99MT01S02 | MV028DL | 96B2989DL | tissue | STIV141C/E |
| M99MT06S02 | MV032 | 96B2990 | tissue | STIV141C/E |
| M99MT06S02 | MV032DL | 96B2990DL | tissue | STIV141C/E |
| M99MT07S02 | MV035 | 96B2992 | tissue | STIV141C/E |
| M99MT07S02 | MV035DL | 96B2992DL | tissue | STIV141C/E |
| M99MT05S02 | MV038 | 96B2994 | tissue | STIV141C/E |
| M99MT05S02 | MV038DL | 96B2994DL | tissue | STIV141C/E |

| Client ID | EPA ID | Laboratory ID | Matrix | COC Method |
|---|---|---|---|---|
| M99MT02S02 | MV041 | 96B2996 | tissue | STIV141C/E |
| M99MT02S02 | MV041DL | 96B2996DL | tissue | STIV141C/E |

# 2. DATA VALIDATION FINDINGS

## 2.1 SAMPLE MANAGEMENT

The following are findings associated with sample management:

### 2.1.1 Sample Preservation, Handling, and Transport

No preservation was required for pesticide/PCB analysis. All of the samples in this SDG were received by the laboratory frozen as required by the A.D. Little QAPP. No sample containers were noted to be damaged. No qualifications were required.

### 2.1.2 Chain of Custody

All COCs were legible and complete. All COCs were signed by laboratory and field personnel. Questions regarding sample management were answered on the COCs. No discrepancies were noted and qualifications were not assigned.

### 2.1.3 Holding Times

All samples in this SDG were extracted and analyzed within the prescribed holding time of six months for tissues; therefore, no qualifications were required.

## 2.2 PESTICIDES INSTRUMENT PERFORMANCE

No percent resolution or endrin/4,4'-DDT degradation analyses were performed by the laboratory, as required by the CLP SOW (3/90). These analyses have not been established in the Status and Trends protocols; therefore, no evaluation was given to the data based on percent resolution or breakdown degradation. PCBs 103 and 198 were used as the surrogates for this SDG, while tetrachloro-m-xylene served as the internal standard. All target analytes were quantified versus the internal standard recovery. No surrogate or internal standard retention time window was specified in the Status and Trends protocols. The laboratory established a window of $\pm 0.075$ or 0.15 minutes. Based on professional judgement, the reviewer considered this an acceptable range. All surrogate retention times were within the retention time windows established by the initial calibration. The retention time window for all target compounds was established by the laboratory at $\pm 0.075$ minutes, although some windows were reduced or expanded for proper peak identification. In these instances, the reviewer deemed the retention time windows to be acceptable. All continuing calibration standards had retention times within the retention time windows established with the initial calibration standards. No qualifications of the data were required.

## 2.3 CALIBRATION

The following are the findings associated with calibration:

### 2.3.1 Analytical Sequence

The laboratory modified the analytical sequence from the Status and Trends protocols. The laboratory analyzed an initial five-point calibration with subsequent mid-level calibration standards analyzed for every ten field samples and at the end of each sequence. Status and Trends protocols suggested a four-point calibration be interspersed with samples and no more than six samples be analyzed in between calibration standards. The laboratory modifications were considered acceptable by the reviewer; therefore, no qualifications were required.

### 2.3.2 Initial Calibration

The NOAA Status and Trends used a correlation coefficient to determine the accuracy of initial calibrations. The laboratory deviated from the protocols by measuring the %RSDs from relative response factors for each initial calibration. The laboratory established %RSDs must be less than or equal to 25% for 90% of all compounds and less than or equal to 35% for all compounds. A percent RSD of 25 percent or less was used to evaluate the initial calibration. The %RSDs for delta-BHC were above the QC limits on the DB-17 and RTX-5 columns for the initial calibration performed on 10/24/96; samples MC224, MC231, MA728, MA710, MA717, MA725, MV018, MV022, MV023, MV025, MV028, MV032, MV035, MV038, MV041, and MA709 had delta-BHC nondetects qualified as estimated, "UJ" and delta-BHC detects qualified "J." The initial calibration from 10/24/96 also had a high %RSD for PCB-18 on the RTX-5 column; all of the above mentioned samples had PCB-18 nondetects qualified as estimated, "UJ" and PCB-18 detects qualified "J."

The %RSDs for delta-BHC were above the QC limits on the DB-17 and RTX-5 columns for the initial calibration performed on 10/31/96. PCB-101 had a high %RSD for the RTX-5 column for the initial calibration dated 10/31/96; sample MC224DL was qualified as estimated, "J", for PCB-101. The initial calibration from 10/24/96 had a high %RSD for PCB-18 on the RTX-5 column. Most of the target compounds associated with the above calibrations were rejected in favor of more acceptable dilutions. No other qualifications were assigned.

### 2.3.3 Continuing Calibration

No QC limits have been established for continuing calibration standards by the Status and Trends protocols. The laboratory established a %D less than or equal to 25% for 90% of the target compounds and less than or equal to 35% for all compounds. For continuing calibration standards, a %D of 25 percent was used to evaluate the data. The continuing calibration dated 10/26/96 had high %Ds for gamma-BHC, delta-BHC and 4,4′-DDD on the RTX-5 column. Sample MA709 had gamma-BHC and 4,4′-DDD qualified as estimated, "J", and delta-BHC qualified as an estimated nondetect, "UJ." No other qualifications were required.

## 2.4 BLANKS

The following are the findings associated with blanks:

### 2.4.1 Instrument Blanks

No instrument blanks were analyzed for this SDG. NOAA Status and Trends protocols do not suggest the analysis of instrument blanks; therefore, no evaluation of the data was given based on instrument blanks.

### 2.4.2 Method Blanks

NOAA Status and Trends protocols suggested method blanks were acceptable if no target compound detects were found above 3× the MDLs. The laboratory further defined the QC limits for blanks by stating no more than 2 analytes to exceed 3× the MDLs. Because the reporting limits and the MDLs were the same for this SDG, the reviewer chose a more conservative QC criterion. Validation was based on the Ogden DVP-4, Rev. 2, which states that blanks not have target compounds above the reporting limits.

One tissue method blank was analyzed with this SDG. PCB-153, PCB-138, PCB-187, PCB-180, PCB-170, PCB-195, PCB-195, and PCB-206 were detected in the tissue method blank. PCB-170 was qualified as "UJ" in sample MA717 due to method blank contamination. No further qualifications were deemed necessary by the reviewer.

## 2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

The laboratory analyzed two SRM samples (one PCB and one pesticide) in lieu of a blank spike/blank spike duplicate. The QC criteria established to evaluate the matrix spike/ matrix spike duplicate was used by the laboratory for the SRMs. Because the Status and Trends protocols did not address SRMs and the established limits were stricter than those in the CLP SOW (3/90), the reviewer deemed the limits acceptable. All target analytes met the QC criteria; therefore, no qualifications were required.

## 2.6 SURROGATE RECOVERY

The laboratory established surrogate recovery QC limits that were stricter than those applied in the Status and Trends protocols. Surrogate recoveries were calculated and reported for the RTX-5 column only; therefore, surrogate recovery evaluation was limited to the data from the RTX-5 column. All surrogate recoveries were within QC limits of 50 to 125 percent except for high recoveries of PCB-198 for samples MC224, MC231, and MV028. In addition to surrogates PCB-103 and PCB-198, the laboratory identified an additional surrogate, 4,4'-dibromo-octafluoro-biphenyl (DBOFB). Percent recoveries for DBOFB were reported in the raw data, but not on the summary forms. No historical data or QC limits were provided for DBOFB; therefore, recoveries for DBOFB were not evaluated by the reviewer. Samples MC224DL, MC231DL, MV035DL, and MV028DL were diluted due to high concentrations of target compounds and all surrogates were diluted out. No qualifications were required since none of the samples had more than one surrogate recovered high.

## 2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

The MS/MSD was performed on sample MC231 of this SDG. Due to high concentrations of target compounds in sample MC231, percent recoveries and RPDs could not be evaluated. No qualifications were required.

## 2.8 SAMPLE CLEANUP PERFORMANCE

GPC cleanups were performed on all samples in this SDG. The Form Is indicated that none of the samples were sulfur cleaned. Because no performance raw data was provided by the laboratory, sample cleanup performance was evaluated on surrogate recoveries and SRM results. Review of the raw data indicated no target analyte loss due to cleanup procedures; therefore, qualifications were not required.

## 2.9 FIELD QC SAMPLES

Field QC samples are evaluated, and if necessary, qualified based only on method blanks. Any remaining detects are used to evaluate the associated samples. The following are findings associated with field QC samples:

### 2.9.1 Field Blanks and Equipment Rinsates

Samples MV011, MV012 and MV013 (SDG:OMISW01) were identified as the equipment rinsates associated with this SDG. Sample MV010 (SDG:OMISW01) was identified as the field blank associated with this SDG. Sample MV011 had detects for PCB-8, PCB-18, PCB-105, hexachlorobenzene, methoxychlor and endrin ketone. Sample MV012 had detects for hexachlorobenzene and endosulfan sulfate. Sample MV013 did not have any target compounds detected. Sample MV010 had detects for hexachlorobenzene, gamma-BHC, PCB-8 and PCB-18. None of the samples of this SDG required qualifications based on field QC samples.

### 2.9.2 Field Duplicates

Two duplicate pairs were identified with this SDG, MA709/MA710 and MV022/MV023. The duplicate pair MA709/MA710 had many common detects between the samples, all of which had RPDs of less than 100% except for 4,4´-DDE which had an RPD of 160%. Sample MA710 had detects for PCB-18, PCB-52, PCB-105, PCB-187, gamma-chlordane and dieldrin; sample MA709 had nondetects for these compounds. Sample MA709 had detects for endosulfan I and beta-BHC; sample MA710 did not have detects for endosulfan I and beta-BHC. The duplicate pair MV022/MV023 had many common detects between the samples, all of which had RPDs of less than 100% except for hexachlorobenzene, trans-nonachlor, 4,4´-DDE, 4,4´-DDD and mirex which had RPDs of 120%, 121%, 122%, 113%, and 128% respectively. Sample MV023 had detects for alpha-chlordane and endosulfan II; sample MV022 had nondetects for these compounds. Sample MV022 had an endrin detect, sample MV023 had a nondetect for endrin. Qualifications are not assigned to the data based on field duplicate analysis.

## 2.10 COMPOUND IDENTIFICATION

Compound identification verification was performed by the reviewer. Possible false negative detects were eliminated upon examination of the chromatograms and quantitation sheets by the reviewer. All detected analytes were confirmed by second column confirmation. Some samples exhibited elevated baselines occurring after 65 minutes into the run. Based on the surrogate recovery for PCB 198 and a comparison of raw data to chromatograms from low level standards, the reviewer determined that target analyte peaks, if present, could be identified.

The laboratory quantitated several compounds without second column confirmation. These compounds were qualified by the laboratory as "NJ" or "N." In addition, several compounds were reported below the reporting limit and at levels less than ½ the MDL. These compounds were qualified by the laboratory as "J." Upon review of the raw data and based on professional judgement, the reviewer identified all compounds quantified from a single column and several "J" compounds reported by the laboratory as false positives. The reporting concentrations were changed to the reporting limits and the qualifiers changed to nondetects, "U."

Cis-nonachlor was reported on the Form Is for all samples; however, cis-nonachlor was not identified as a target compound. As a result, the cis-nonachlor was not validated. No qualifications were required.

## 2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantification was verified in the samples in this SDG. Due to high concentrations of PCB congeners, samples MC224DL, MC231DL, MV018DL, MV022DL, MV023DL, MV025DL, MV028DL, MV032DL, MV035DL, MV038DL, and MV041DL were analyzed at 500, 500, 10, 20, 40, 20, 400, 40, 40, 10, and 10 fold dilutions respectively. Target compounds not requiring dilutions were rejected, "R" in the diluted samples, while target compounds that exceeded the linear range were rejected in the least diluted samples. Several samples had detects above linear range in the original analysis and detects for the same compounds below the reporting limits in the second analysis. The detects from the second (diluted) analysis were qualified as estimated, "J."

No %Ds were calculated or reported for target analyte detects. The RTX-5 column served as the primary column for all target compounds, with the exception of PCB 8, alpha-BHC, endosulfan I, 2,4'-DDE, and in most cases, PCB-138, which were quantified from the DB-17 column. The confirmation column was used for confirmation of analytes and no quantification occurred from the column. Review of the raw data confirmed that target analytes were present on both columns and quantification was performed on the correct primary column; therefore no evaluation was given to %D information. No other qualifications were required.

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA709

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3046

**Sample wt/vol:** 0.0091 Kg **Lab File ID:** 3,1024963A,36,1

**% Moisture:** 64.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/26/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,36,1 | | | | |
| 319846 | alpha-BHC | 0.230000 | | | | |
| 3424826 | 2,4'-DDE | 0.200000 | | U | | |
| 959988 | Endosulfan I | 0.160000 | | J | UC | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,36,1 | | | | |
| 118741 | Hexachlorobenzene | 0.340000 | | | | |
| 319857 | beta-BHC | 0.180000 | | | | |
| 58899 | gamma-BHC (Lindane) | 0.560000 | | | J | C |
| 319868 | delta-BHC | ~~0.410000~~ | 0.020 | ~~N~~ U | UJ | +,C |
| 76448 | Heptachlor | 0.068000 | | U | | |
| 309002 | Aldrin | ~~0.700000~~ | 0.082 | ~~N~~ U | UJ | + |
| 5103742 | gamma-Chlordane | 0.360000 | | U | | |
| 5103719 | alpha-Chlordane | 0.150000 | | J | *J | |
| 5103731 | cis-Nonachlor | 0.190000 | | U | | |
| 39765805 | trans-Nonachlor | 2.300000 | | | | |
| 1024573 | Heptachlor epoxide | 0.590000 | | | | |
| 60571 | Dieldrin | ~~1.200000~~ | 0.13 | ~~N~~ U | U | + |
| 72559 | 4,4'-DDE | 5.400000 | | | | |
| 53190 | 2,4'-DDD | 14.000000 | | | | |
| 72208 | Endrin | 0.074000 | | U | UC | C |
| 72548 | 4,4'-DDD | 1.200000 | | | | |
| 789026 | 2,4'-DDT | 0.130000 | | U | | |
| 33216659 | Endosulfan II | 0.270000 | | U | | |
| 1031078 | Endosulfan sulfate | 0.270000 | | U | | |
| 50293 | 4,4'-DDT | 1.000000 | | | | |
| 7421934 | Endrin aldehyde | 0.180000 | | U | | |
| 53494705 | Endrin ketone | 0.180000 | | U | | |
| 72435 | Methoxychlor | 0.160000 | | U | | |
| 2385855 | Mirex | 0.130000 | | U | | |

MP 12-20-96

**LEVEL D**

*Analysis Not Validated

**OGDEN VALIDATED**

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA710

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2981

**Sample wt/vol:** 0.0078 Kg **Lab File ID:** 3,1024963A,20,1

**% Moisture:** 68.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/25/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,20,1 | | | | |
| 319846 | alpha-BHC | 0.240000 | | | | |
| 3424826 | 2,4'-DDE | 0.240000 | | U | U | |
| 959988 | Endosulfan I | 0.320000 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,20,1 | | | | |
| 118741 | Hexachlorobenzene | 0.460000 | | | | |
| 319857 | beta-BHC | ~~0.330000~~ | 0.12 | N U | U | + |
| 58899 | gamma-BHC (Lindane) | 0.630000 | | | | |
| 319868 | delta-BHC | ~~0.890000~~ | 0.096 | N U | U | +, C |
| 76448 | Heptachlor | 0.080000 | | U | | |
| 309002 | Aldrin | 0.430000 | | U | | |
| 5103742 | gamma-Chlordane | 0.120000 | | J | UCC | |
| 5103719 | alpha-Chlordane | 0.400000 | | | | |
| 5103731 | cis-Nonachlor | 0.220000 | | U | * | |
| 39765805 | trans-Nonachlor | 3.500000 | | | | |
| 1024573 | Heptachlor epoxide | 0.430000 | | | | |
| 50571 | Dieldrin | 1.600000 | | | | |
| 72559 | 4,4'-DDE | 18.000000 | | | | |
| 53190 | 2,4'-DDD | 12.000000 | | | | |
| 72208 | Endrin | 0.087000 | | U | U | |
| 72548 | 4,4'-DDD | 1.700000 | | | | |
| 789026 | 2,4'-DDT | 0.150000 | | U | | |
| 33216659 | Endosulfan II | 0.320000 | | U | UCC | |
| 1031078 | Endosulfan sulfate | 0.320000 | | U | | |
| 50293 | 4,4'-DDT | 2.300000 | | | | |
| 7421934 | Endrin aldehyde | 0.220000 | | U | U | |
| 53494705 | Endrin ketone | 0.220000 | | U | | |
| 72435 | Methoxychlor | 0.180000 | | U | | |
| 2385855 | Mirex | 0.150000 | | U | | |

WP 12-20-96

*Analysis Not Validated

**LEVEL D**

**OGDEN VALIDATED**

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA717

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2982

**Sample wt/vol:** 0.0075 Kg **Lab File ID:** 3,1024963A,21,1

**% Moisture:** 68.60 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/25/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/Kg

| Cas No: | Compound | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: DB-17 | Lab File ID: 3,1024963A,21,1 | | | | |
| 319846 | alpha-BHC | 0.210000 | | | |
| 3424826 | 2,4'-DDE | 0.250000 | U | | |
| 959988 | Endosulfan I | 0.170000 | J | U | |
| Compound from Column: RTX-5 | Lab File ID: 2,1024962A,21,1 | | | | |
| 118741 | Hexachlorobenzene | 0.400000 | | | |
| 319857 | beta-BHC | ~~0.400000~~ 0.12 | ~~N~~ U | U | + |
| 58899 | gamma-BHC (Lindane) | ~~0.460000~~ 0.12 | ~~N~~ U | U | + |
| 319868 | delta-BHC | 0.450000 | | U | C |
| 76448 | Heptachlor | 0.082000 | U | U | |
| 309002 | Aldrin | 0.440000 | U | U | |
| 5103742 | gamma-Chlordane | 0.430000 | U | U | |
| 5103719 | alpha-Chlordane | ~~0.088000~~ 0.24 | ~~N~~ U | U | + |
| 5103731 | cis-Nonachlor | 0.230000 | U | * | |
| 39765805 | trans-Nonachlor | ~~0.440000~~ 0.23 | ~~N~~ U | U | + |
| 1024573 | Heptachlor epoxide | 0.150000 | U | U | |
| 60571 | Dieldrin | 0.160000 | U | U | |
| 72559 | 4,4'-DDE | ~~0.230000~~ 1.05 | ~~N~~ U | U | + |
| 53190 | 2,4'-DDD | 0.830000 | | | |
| 72208 | Endrin | 0.090000 | U | U | |
| 72548 | 4,4'-DDD | 0.660000 | U | U | |
| 789026 | 2,4'-DDT | ~~0.760000~~ 0.16 | ~~N~~ U | U | + |
| 33216659 | Endosulfan II | 0.320000 | U | | |
| 1031078 | Endosulfan sulfate | 0.340000 | | | |
| 50293 | 4,4'-DDT | 0.290000 | | | |
| 7421934 | Endrin aldehyde | 0.220000 | U | U | |
| 53494705 | Endrin ketone | 0.220000 | U | | |
| 72435 | Methoxychlor | 0.190000 | U | | |
| 2385855 | Mirex | 0.150000 | U | | |

MD 12-20-96

*Analysis Not Validated

LEVEL D

OGDEN VALIDATED

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MA725

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2983

**Sample wt/vol:** 0.0087 Kg **Lab File ID:** 3,1024963A,24,1

**% Moisture:** 65.60 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/25/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,24,1 | | | | |
| 319846 | alpha-BHC | 0.430000 | | | | |
| 3424826 | 2,4'-DDE | 0.250000 | | | | |
| 959988 | Endosulfan I | 0.580000 | | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,24,1 | | | | |
| 118741 | Hexachlorobenzene | 0.220000 | | | | |
| 319857 | beta-BHC | ~~0.087000~~ | 0.10 | ~~N~~U | U | + |
| 58899 | gamma-BHC (Lindane) | 1.500000 | | | | |
| 319868 | delta-BHC | 0.086000 | | U | UJ | C |
| 76448 | Heptachlor | 0.072000 | | U | U | |
| 309002 | Aldrin | 0.380000 | | U | | |
| 5103742 | gamma-Chlordane | 0.380000 | | U | | |
| 5103719 | alpha-Chlordane | 0.210000 | | U | | |
| 5103731 | cis-Nonachlor | 0.200000 | | U | * | |
| 39765805 | trans-Nonachlor | ~~1.100000~~ | 0.20 | ~~N~~U | U | + |
| 1024573 | Heptachlor epoxide | 0.300000 | | | | |
| 60571 | Dieldrin | ~~0.390000~~ | 0.10 | ~~N~~U | U | + |
| 72559 | 4,4'-DDE | 1.300000 | | | | |
| 53190 | 2,4'-DDD | 6.800000 | | | | |
| 72208 | Endrin | 0.078000 | | U | U | |
| 72548 | 4,4'-DDD | 0.570000 | | U | U | |
| 789026 | 2,4'-DDT | 0.140000 | | U | U | |
| 33216659 | Endosulfan II | 0.280000 | | U | U | |
| 1031078 | Endosulfan sulfate | 0.450000 | | | | |
| 50293 | 4,4'-DDT | 0.210000 | | U | U | |
| 7421934 | Endrin aldehyde | 0.190000 | | U | U | |
| 53494705 | Endrin ketone | 0.190000 | | U | U | |
| 72435 | Methoxychlor | ~~0.190000~~ | 0.16 | ~~N~~U | U | + |
| 2385855 | Mirex | 0.130000 | | U | U | |

MP 12.20.96

**LEVEL D**

*Analysis Not Validated

**OGDEN VALIDATED**

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MA728

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3020

**Sample wt/vol:** 0.0088 Kg **Lab File ID:** 3,1024963A,19,1

**% Moisture:** 65.40 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/25/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,19,1 | | | | |
| 319846 | alpha-BHC | 0.390000 | | | | |
| 3424826 | 2,4'-DDE | 0.170000 | | J | 44 | |
| 959988 | Endosulfan I | 0.180000 | | J | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,19,1 | | | | |
| 118741 | Hexachlorobenzene | 0.490000 | | | | |
| 319857 | beta-BHC | ~~0.220000~~ | 0.10 | ~~N~~U | U | + |
| 58899 | gamma-BHC (Lindane) | ~~1.300000~~ | 0.11 | ~~N~~U | U | + |
| 319868 | delta-BHC | 0.500000 | | | | C |
| 76448 | Heptachlor | 0.071000 | | U | CU | |
| 309002 | Aldrin | 0.380000 | | U | | |
| 5103742 | gamma-Chlordane | 0.370000 | | U | | |
| 5103719 | alpha-Chlordane | 0.210000 | | U | * | |
| 5103731 | cis-Nonachlor | 0.200000 | | U | | |
| 39765805 | trans-Nonachlor | ~~0.320000~~ | 0.19 | ~~N~~U | U | + |
| 1024573 | Heptachlor epoxide | 0.290000 | | | | |
| 60571 | Dieldrin | 0.140000 | | U | U | |
| 72559 | 4,4'-DDE | 1.300000 | | | | |
| 53190 | 2,4'-DDD | 1.100000 | | | | |
| 72208 | Endrin | 0.077000 | | J | 44 | |
| 72548 | 4,4'-DDD | 0.380000 | | J | | |
| 789026 | 2,4'-DDT | 0.130000 | | U | CCC | |
| 33216659 | Endosulfan II | 0.280000 | | U | | |
| 1031078 | Endosulfan sulfate | 0.280000 | | U | | |
| 50293 | 4,4'-DDT | 0.690000 | | | | |
| 7421934 | Endrin aldehyde | 0.190000 | | U | CCC | |
| 53494705 | Endrin ketone | 0.190000 | | U | | |
| 72435 | Methoxychlor | 0.160000 | | U | | |
| 2385855 | Mirex | 0.480000 | | | | |

MP
12-20-96

*Analysis Not Validated

LEVEL D
OGDEN VALIDATED

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC224

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2974

**Sample wt/vol:** 0.0079 Kg **Lab File ID:** 3,1024963A,15,1

**% Moisture:** 67.70 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/24/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) | ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,15,1 | | | | |
| 319846 | alpha-BHC | 0.130000 | | J | J | |
| 3424826 | 2,4'-DDE | 13.000000 | | | | |
| 959988 | Endosulfan I | 0.310000 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,15,1 | | | | |
| 118741 | Hexachlorobenzene | 0.540000 | | | | |
| 319857 | beta-BHC | ~~0.260000~~ | 0.12 | ~~N~~U | U | + |
| 58899 | gamma-BHC (Lindane) | 0.370000 | | | | |
| 319868 | delta-BHC | ~~0.190000~~ | 0.095 | ~~N~~U | U | +, C |
| 76448 | Heptachlor | 0.078000 | | U | U | |
| 309002 | Aldrin | 0.420000 | | U | U | |
| 5103742 | gamma-Chlordane | 0.370000 | | J | J | |
| 5103719 | alpha-Chlordane | 2.600000 | | | | |
| 5103731 | cis-Nonachlor | 0.720000 | | | * | |
| 39765805 | trans-Nonachlor | 7.000000 | | | | |
| 1024573 | Heptachlor epoxide | 0.140000 | | U | U | |
| 60571 | Dieldrin | ~~1.700000~~ | 0.15 | ~~N~~U | U | + |
| 72559 | 4,4'-DDE | 140.000000 | | E | R | D |
| 53190 | 2,4'-DDD | 26.000000 | | | | |
| 72208 | Endrin | 0.085000 | | U | U | |
| 72548 | 4,4'-DDD | 34.000000 | | E | R | D |
| 789026 | 2,4'-DDT | 37.000000 | | E | R | D |
| 33216659 | Endosulfan II | 0.310000 | | U | U | |
| 1031078 | Endosulfan sulfate | 0.310000 | | U | U | |
| 50293 | 4,4'-DDT | 15.000000 | | | | |
| 7421934 | Endrin aldehyde | 0.210000 | | U | U | |
| 53494705 | Endrin ketone | 0.210000 | | U | U | |
| 72435 | Methoxychlor | 0.180000 | | U | U | |
| 2385855 | Mirex | 8.200000 | | | | |

*Analysis Not Validated

**LEVEL D**

**OGDEN VALIDATED**

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC224DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019
**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01
**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2974DL
**Sample wt/vol:** 0.0079 Kg **Lab File ID:** 3,1030963,9,1
**% Moisture:** 67.70 **decanted: (Y/N)** **Date Received:** 09/30/96
**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96
**Concentrated Extract Volume:** 250.0000(mL) **Date Analyzed:** 10/31/96
**Injection Volume:** 2 (uL) **Dilution Factor:** 500.0000
**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000
**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: DB-17 Lab File ID: 3,1030963,9,1 | | | | | |
| 319846 | alpha-BHC | 72.000000 | UR | R | D |
| 3424826 | 2,4'-DDE | 120.000000 | UR | | |
| 959988 | Endosulfan I | 150.000000 | UR | | |
| Compound from Column: RTX-5 Lab File ID: 2,1030962,9,1 | | | | | |
| 118741 | Hexachlorobenzene | 48.000000 | UR | R | D |
| 319857 | beta-BHC | 58.000000 | UR | | |
| 58899 | gamma-BHC (Lindane) | 59.000000 | UR | | |
| 319868 | delta-BHC | 47.000000 | UR | | |
| 76448 | Heptachlor | 39.000000 | UR | | |
| 309002 | Aldrin | 210.000000 | UR | | |
| 5103742 | gamma-Chlordane | 210.000000 | UR | | |
| 5103719 | alpha-Chlordane | 120.000000 | UR | | |
| 5103731 | cis-Nonachlor | 26.000000 | JR | * | |
| 39765805 | trans-Nonachlor | 110.000000 | UR | R | D |
| 1024573 | Heptachlor epoxide | 72.000000 | UR | | |
| 60571 | Dieldrin | 76.000000 | UR | | |
| 72559 | 4,4'-DDE | 170.000000 | DJ | J | * 11 |
| 53190 | 2,4'-DDD | 54.000000 | JR | R | D |
| 72208 | Endrin | 42.000000 | UR | R | D |
| 72548 | 4,4'-DDD | 24.000000 | DJ | J | * 11 |
| 789026 | 2,4'-DDT | 83.000000 | NR | | |
| 33216659 | Endosulfan II | 150.000000 | UR | R | D |
| 1031078 | Endosulfan sulfate | 150.000000 | UR | | |
| 50293 | 4,4'-DDT | 110.000000 | UR | | |
| 7421934 | Endrin aldehyde | 110.000000 | UR | | |
| 53494705 | Endrin ketone | 110.000000 | UR | | |
| 72435 | Methoxychlor | 89.000000 | UR | | |
| 2385855 | Mirex | 72.000000 | UR | | |

*Analysis Not Validated

**LEVEL D**
**OGDEN VALIDATED**

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC231

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2978

**Sample wt/vol:** 0.0081 Kg **Lab File ID:** 3,1024963A,16,1

**% Moisture:** 67.60 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/24/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) | ug/Kg | Q | RQV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,16,1 | | | | |
| 319846 | alpha-BHC | 0.370000 | | | | |
| 3424826 | 2,4'-DDE | 25.000000 | | | * | |
| 5103731 | cis-Nonachlor | 1.600000 | | | | |
| 789026 | 2,4'-DDT | 11.000000 | | | | |
| 959988 | Endosulfan I | 0.300000 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,16,1 | | | | |
| 118741 | Hexachlorobenzene | 0.750000 | | | | |
| 319857 | beta-BHC | 0.520000 | 0.11 | NU | U | + |
| 58899 | gamma-BHC (Lindane) | 1.100000 | | | | |
| 319868 | delta-BHC | 0.400000 | 0.092 | NU | UJ | +, C |
| 76448 | Heptachlor | 0.077000 | | U | U | |
| 309002 | Aldrin | 0.410000 | | U | U | |
| 5103742 | gamma-Chlordane | 0.810000 | | | | |
| 5103719 | alpha-Chlordane | 6.100000 | | | | |
| 39765805 | trans-Nonachlor | 14.000000 | | | | |
| 1024573 | Heptachlor epoxide | 0.140000 | | U | U | |
| 60571 | Dieldrin | 16.000000 | 0.15 | NU | U | + |
| 72559 | 4,4'-DDE | 190.000000 | | E | R | D |
| 53190 | 2,4'-DDD | 62.000000 | | E | R | D |
| 72208 | Endrin | 0.084000 | | U | U | |
| 72548 | 4,4'-DDD | 84.000000 | | E | R | D |
| 33216659 | Endosulfan II | 0.300000 | | U | U | |
| 1031078 | Endosulfan sulfate | 0.300000 | | U | U | |
| 50293 | 4,4'-DDT | 22.000000 | 0.15 | NU | U | + |
| 7421934 | Endrin aldehyde | 0.210000 | | U | U | |
| 53494705 | Endrin ketone | 0.210000 | | U | U | |
| 72435 | Methoxychlor | 0.180000 | | U | U | |
| 2385855 | Mirex | 3.800000 | | | | |

MP
12.20.96

*Analysis Not Validated

**LEVEL D**

**OGDEN VALIDATED**

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET



**EPA SAMPLE NO.**
MC231DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019
**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01
**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2978DL
**Sample wt/vol:** 0.0081 Kg **Lab File ID:** 3,1030963,10,1
**% Moisture:** 67.60 **decanted: (Y/N)** **Date Received:** 09/30/96
**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96
**Concentrated Extract Volume:** 250.0000(mL) **Date Analyzed:** 10/31/96
**Injection Volume:** 2 (uL) **Dilution Factor:** 500.0000
**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000
**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1030963,10,1 | | | |
| 319846 | alpha-BHC | 71.000000 | UR | R | D |
| 3424826 | 2,4'-DDE | 110.000000 | UR | R | D |
| 959988 | Endosulfan I | 150.000000 | UR | R | D |
| Compound from Column: | RTX-5 | Lab File ID: 2,1030962,10,1 | | | |
| 118741 | Hexachlorobenzene | 47.000000 | UR | R | D |
| 319857 | beta-BHC | 57.000000 | UR | | |
| 58899 | gamma-BHC (Lindane) | 58.000000 | UR | | |
| 319868 | delta-BHC | 46.000000 | UR | | |
| 76448 | Heptachlor | 39.000000 | UR | | |
| 309002 | Aldrin | 210.000000 | UR | | |
| 5103742 | gamma-Chlordane | 200.000000 | UR | | |
| 5103719 | alpha-Chlordane | 110.000000 | UR | | |
| 5103731 | cis-Nonachlor | 76.000000 | NJR | * | |
| 39765805 | trans-Nonachlor | 110.000000 | UR | R | D |
| 1024573 | Heptachlor epoxide | 71.000000 | UR | R | D |
| 60571 | Dieldrin | 75.000000 | UR | R | D |
| 72559 | 4,4'-DDE | 320.000000 | DJ | J | *11 |
| 53190 | 2,4'-DDD | 130.000000 | D | R | D |
| 72208 | Endrin | 42.000000 | UR | R | D |
| 72548 | 4,4'-DDD | 62.000000 | DJ | J | *11 |
| 789026 | 2,4'-DDT | 170.000000 | NR | R | D |
| 33216659 | Endosulfan II | 150.000000 | UR | | |
| 1031078 | Endosulfan sulfate | 150.000000 | UR | | |
| 50293 | 4,4'-DDT | 110.000000 | UR | | |
| 7421934 | Endrin aldehyde | 100.000000 | UR | | |
| 53494705 | Endrin ketone | 100.000000 | UR | | |
| 72435 | Methoxychlor | 88.000000 | UR | | |
| 2385855 | Mirex | 5.700000 | JR | | |

12/23/96

**LEVEL D**

**OGDEN VALIDATED**

*Analysis Not Validated

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MV018

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2984

**Sample wt/vol:** 0.0078 Kg **Lab File ID:** 3,1024963A,25,1

**% Moisture:** 69.20 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/25/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,25,1 | | | | |
| 319846 | alpha-BHC | 0.530000 | | | | |
| 3424826 | 2,4'-DDE | 1.200000 | | | | |
| 959988 | Endosulfan I | 0.310000 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,25,1 | | | | |
| 118741 | Hexachlorobenzene | 0.540000 | | | | |
| 319857 | beta-BHC | 0.120000 | | U | U | |
| 58899 | gamma-BHC (Lindane) | 1.900000 | | | | |
| 319868 | delta-BHC | ~~3.200000~~ | 0.096 | ~~N~~ U | UJ | +,C |
| 76448 | Heptachlor | ~~0.600000~~ | 0.079 | ~~N~~ U | U | + |
| 309002 | Aldrin | 0.420000 | | U | | |
| 5103742 | gamma-Chlordane | 0.200000 | | J | UJ | |
| 5103719 | alpha-Chlordane | 0.240000 | | U | | |
| 5103731 | cis-Nonachlor | 0.860000 | | N | * | |
| 39765805 | trans-Nonachlor | 1.400000 | | | | |
| 1024573 | Heptachlor epoxide | 0.140000 | | J | UJ | |
| 60571 | Dieldrin | 0.160000 | | U | | |
| 72559 | 4,4'-DDE | 36.000000 | | | | |
| 53190 | 2,4'-DDD | 7.200000 | | | | |
| 72208 | Endrin | 6.100000 | | | | |
| 72548 | 4,4'-DDD | 3.600000 | | | | |
| 789026 | 2,4'-DDT | 5.100000 | | | | |
| 33216659 | Endosulfan II | 0.310000 | | U | U | |
| 1031078 | Endosulfan sulfate | 0.310000 | | U | U | |
| 50293 | 4,4'-DDT | 2.400000 | | | | |
| 7421934 | Endrin aldehyde | 0.210000 | | U | U | |
| 53494705 | Endrin ketone | 0.210000 | | U | U | |
| 72435 | Methoxychlor | 0.180000 | | U | U | |
| 2385855 | Mirex | 0.340000 | | | | |

MP 12-20-96

*Analysis Not Validated

**LEVEL D**

**OGDEN VALIDATED**

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV018DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2984DL

**Sample wt/vol:** 0.0078 Kg **Lab File ID:** 3,1030963,14,1

**% Moisture:** 69.20 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 10.0000(mL) **Date Analyzed:** 10/31/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 10.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1030963,14,1 | | | |
| 319846 | alpha-BHC | 2.900000 | UR | R | D |
| 3424826 | 2,4'-DDE | 4.700000 | UR | | |
| 959988 | Endosulfan I | 6.300000 | UR | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1030962,14,1 | | | |
| 118741 | Hexachlorobenzene | 1.400000 | JR | R | D |
| 319857 | beta-BHC | 2.300000 | UR | | |
| 58899 | gamma-BHC (Lindane) | 0.880000 | JR | | |
| 319868 | delta-BHC | 4.400000 | R | | |
| 76448 | Heptachlor | 1.600000 | UR | | |
| 309002 | Aldrin | 8.500000 | UR | | |
| 5103742 | gamma-Chlordane | 8.400000 | UR | | |
| 5103719 | alpha-Chlordane | 4.700000 | UR | | |
| 5103731 | cis-Nonachlor | 4.400000 | UR | * | |
| 39765805 | trans-Nonachlor | 1.400000 | JR | R | D |
| 1024573 | Heptachlor epoxide | 2.900000 | UR | | |
| 60571 | Dieldrin | 3.100000 | UR | | |
| 72559 | 4,4'-DDE | 27.000000 | R | | |
| 53190 | 2,4'-DDD | 11.000000 | R | | |
| 72208 | Endrin | 1.700000 | UR | | |
| 72548 | 4,4'-DDD | 3.600000 | JR | | |
| 789026 | 2,4'-DDT | 7.200000 | R | | |
| 33216659 | Endosulfan II | 6.300000 | UR | | |
| 1031078 | Endosulfan sulfate | 6.300000 | UR | | |
| 50293 | 4,4'-DDT | 4.900000 | R | | |
| 7421934 | Endrin aldehyde | 4.300000 | UR | | |
| 53494705 | Endrin ketone | 4.300000 | UR | | |
| 72435 | Methoxychlor | 3.600000 | UR | | |
| 2385855 | Mirex | 0.530000 | JR | | |

*Analysis Not Validated

LEVEL D
OGDEN VALIDATED

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MV022

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2985

**Sample wt/vol:** 0.0079 Kg **Lab File ID:** 3,1024963A,26,1

**% Moisture:** 69.10 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/26/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,26,1 | | | |
| 319846 | alpha-BHC | 0.210000 | | | |
| 3424826 | 2,4'-DDE | 1.100000 | | | |
| 959988 | Endosulfan I | 0.310000 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,26,1 | | | |
| 118741 | Hexachlorobenzene | 0.520000 | | | |
| 319857 | beta-BHC | 0.120000 | U | U | |
| 58899 | gamma-BHC (Lindane) | 0.850000 0.12 | ~~N~~ U | UJ | +, C |
| 319868 | delta-BHC | 2.200000 0.095 | ~~N~~ U | U | + |
| 76448 | Heptachlor | 0.720000 | | | |
| 309002 | Aldrin | 0.420000 | U | U | |
| 5103742 | gamma-Chlordane | 0.210000 | J | UJ | |
| 5103719 | alpha-Chlordane | 0.230000 | U | U | |
| 5103731 | cis-Nonachlor | 0.980000 | | * | |
| 39765805 | trans-Nonachlor | 4.700000 | | | |
| 1024573 | Heptachlor epoxide | 0.140000 | U | U | |
| 60571 | Dieldrin | 0.150000 | U | U | |
| 72559 | 4,4'-DDE | 72.000000 | E | R | D |
| 53190 | 2,4'-DDD | 6.300000 | | | |
| 72208 | Endrin | 2.900000 | | | |
| 72548 | 4,4'-DDD | 4.700000 | | | |
| 789026 | 2,4'-DDT | 3.600000 | | | |
| 33216659 | Endosulfan II | 0.310000 | U | U | |
| 1031078 | Endosulfan sulfate | 0.310000 | U | U | |
| 50293 | 4,4'-DDT | 9.000000 | | | |
| 7421934 | Endrin aldehyde | 0.210000 | U | U | |
| 53494705 | Endrin ketone | 0.210000 | U | U | |
| 72435 | Methoxychlor | 0.180000 | U | U | |
| 2385855 | Mirex | 1.100000 | | | |

MP
12-20-96

LEVEL D

CODEN VALIDATED

*Analysis Not Validated

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MV022DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2985DL

**Sample wt/vol:** 0.0079 Kg **Lab File ID:** 3,1030963,13,1

**% Moisture:** 69.10 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 5.0000(mL) **Date Analyzed:** 10/31/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 20.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1030963,13,1 | | | |
| 319846 | alpha-BHC | 1.400000 | UR | R | D |
| 3424826 | 2,4'-DDE | 1.100000 | JR | R | D |
| 959988 | Endosulfan I | 3.100000 | UR | R | D |
| Compound from Column: | RTX-5 | Lab File ID: 2,1030962,13,1 | | | |
| 118741 | Hexachlorobenzene | 1.100000 | R | R | D |
| 319857 | beta-BHC | 1.200000 | UR | | |
| 58899 | gamma-BHC (Lindane) | 0.320000 | JR | | |
| 319868 | delta-BHC | 3.200000 | R | | |
| 76448 | Heptachlor | 0.790000 | UR | | |
| 309002 | Aldrin | 4.200000 | UR | | |
| 5103742 | gamma-Chlordane | 4.100000 | UR | | |
| 5103719 | alpha-Chlordane | 2.300000 | UR | | |
| 5103731 | cis-Nonachlor | 0.330000 | JR | * | |
| 39765805 | trans-Nonachlor | 4.000000 | R | R | D |
| 1024573 | Heptachlor epoxide | 1.400000 | UR | R | D |
| 60571 | Dieldrin | 1.500000 | UR | R | D |
| 72559 | 4,4'-DDE | 46.000000 | ~~R~~ | | |
| 53190 | 2,4'-DDD | 7.400000 | R | R | D |
| 72208 | Endrin | 0.850000 | UR | | |
| 72548 | 4,4'-DDD | 3.800000 | JR | | |
| 789026 | 2,4'-DDT | 4.100000 | R | | |
| 33216659 | Endosulfan II | 3.100000 | UR | | |
| 1031078 | Endosulfan sulfate | 3.100000 | UR | | |
| 50293 | 4,4'-DDT | 9.300000 | R | | |
| 7421934 | Endrin aldehyde | 2.100000 | UR | | |
| 53494705 | Endrin ketone | 2.100000 | UR | | |
| 72435 | Methoxychlor | 1.800000 | UR | | |
| 2385855 | Mirex | 1.300000 | JR | | |

MB
12-20-96

**LEVEL D**

*Analysis Not Validated

**OGDEN VALIDATED**

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MV023

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2986

**Sample wt/vol:** 0.0092 Kg **Lab File ID:** 3,1024963A,27,1

**% Moisture:** 63.20 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/26/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,27,1 | | | | |
| 319846 | alpha-BHC | 0.280000 | | | | |
| 3424826 | 2,4'-DDE | 1.600000 | | | | |
| 959988 | Endosulfan I | 0.260000 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,27,1 | | | | |
| 118741 | Hexachlorobenzene | 2.100000 | | | | |
| 319857 | beta-BHC | ~~0.240000~~ | 0.16 | ~~U~~ NU | U | + |
| 58899 | gamma-BHC (Lindane) | 1.500000 | | | | |
| 319868 | delta-BHC | ~~0.910000~~ | 0.082 | ~~U~~ NU | UJ | +, C |
| 76448 | Heptachlor | 0.260000 | | | | |
| 309002 | Aldrin | 0.360000 | | U | U | |
| 5103742 | gamma-Chlordane | 0.360000 | | | | |
| 5103719 | alpha-Chlordane | 0.500000 | | | * | |
| 5103731 | cis-Nonachlor | 1.900000 | | | | |
| 39765805 | trans-Nonachlor | 19.000000 | | | | |
| 1024573 | Heptachlor epoxide | 0.120000 | | U | U | |
| 60571 | Dieldrin | ~~1.700000~~ | 0.13 | ~~U~~ NU | U | + |
| 72559 | 4,4'-DDE | 140.000000 | | E | R | D |
| 53190 | 2,4'-DDD | 9.400000 | | | | |
| 72208 | Endrin | 0.073000 | | U | U | |
| 72548 | 4,4'-DDD | 17.000000 | | | | |
| 789026 | 2,4'-DDT | 5.800000 | | | | |
| 33216659 | Endosulfan II | 0.570000 | | | | |
| 1031078 | Endosulfan sulfate | 0.260000 | | U | U | |
| 50293 | 4,4'-DDT | 29.000000 | | E | R | D |
| 7421934 | Endrin aldehyde | 0.180000 | | U | U | |
| 53494705 | Endrin ketone | 0.180000 | | U | U | |
| 72435 | Methoxychlor | 0.150000 | | U | U | |
| 2385855 | Mirex | 5.000000 | | | | |

MP 12-20-96

*Analysis Not Validated

LEVEL D

OGDEN VALIDATED

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV023DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019
**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01
**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2986DL
**Sample wt/vol:** 0.0092 Kg **Lab File ID:** 3,1030963,15,1
**% Moisture:** 63.20 **decanted: (Y/N)** **Date Received:** 09/30/96
**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96
**Concentrated Extract Volume:** 20.0000(mL) **Date Analyzed:** 10/31/96
**Injection Volume:** 2 (uL) **Dilution Factor:** 40.0000
**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000
**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1030963,15,1 | | | | |
| 319846 | alpha-BHC | 4.900000 | UR | R | D |
| 3424826 | 2,4'-DDE | 8.000000 | UR | | |
| 959988 | Endosulfan I | 11.000000 | UR | | |
| Compound from Column: | RTX-5 Lab File ID: 2,1030962,15,1 | | | | |
| 118741 | Hexachlorobenzene | 2.100000 | JR | R | D |
| 319857 | beta-BHC | 4.000000 | UR | | |
| 58899 | gamma-BHC (Lindane) | 4.100000 | UR | | |
| 319868 | delta-BHC | 0.870000 | JR | | |
| 76448 | Heptachlor | 2.700000 | UR | | |
| 309002 | Aldrin | 14.000000 | UR | | |
| 5103742 | gamma-Chlordane | 14.000000 | UR | | |
| 5103719 | alpha-Chlordane | 8.000000 | UR | * | |
| 5103731 | cis-Nonachlor | 1.500000 | JR | R | D |
| 39765805 | trans-Nonachlor | 16.000000 | R | R | D |
| 1024573 | Heptachlor epoxide | 4.900000 | UR | R | D |
| 60571 | Dieldrin | 5.200000 | UR | | |
| 72559 | 4,4'-DDE | 190.000000 | D | | |
| 53190 | 2,4'-DDD | 11.000000 | R | R | D |
| 72208 | Endrin | 2.900000 | UR | | |
| 72548 | 4,4'-DDD | 12.000000 | JR | | |
| 789026 | 2,4'-DDT | 7.800000 | R | | |
| 33216659 | Endosulfan II | 11.000000 | UR | | |
| 1031078 | Endosulfan sulfate | 11.000000 | UR | | |
| 50293 | 4,4'-DDT | 22.000000 | D | | |
| 7421934 | Endrin aldehyde | 7.200000 | UR | R | D |
| 53494705 | Endrin ketone | 7.200000 | UR | | |
| 72435 | Methoxychlor | 6.100000 | UR | | |
| 2385855 | Mirex | 6.200000 | R | | |

*Analysis Not Validated

LEVEL D
OGDEN VALIDATED

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MV025

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2987

**Sample wt/vol:** 0.0071 Kg **Lab File ID:** 3,1024963A,28,1

**% Moisture:** 72.10 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/26/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,28,1 | | | | |
| 319846 | alpha-BHC | 0.380000 | | | | |
| 3424826 | 2,4'-DDE | 1.800000 | | | | |
| 959988 | Endosulfan I | 0.350000 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,28,1 | | | | |
| 118741 | Hexachlorobenzene | 0.430000 | | | | |
| 319857 | beta-BHC | ~~0.260000~~ | 0.13 | ~~N~~ U | U | + |
| 58899 | gamma-BHC (Lindane) | 1.200000 | | | | |
| 319868 | delta-BHC | ~~1.100000~~ | 0.11 | ~~N~~ U | UJ | + C |
| 76448 | Heptachlor | 0.088000 | | U | U | |
| 309002 | Aldrin | 0.470000 | | U | U | |
| 5103742 | gamma-Chlordane | 0.140000 | | J | J | |
| 5103719 | alpha-Chlordane | 0.260000 | | U | U | |
| 5103731 | cis-Nonachlor | 0.200000 | | ~~N~~ U | * | |
| 39765805 | trans-Nonachlor | 1.100000 | | | | |
| 1024573 | Heptachlor epoxide | 0.160000 | | U | U | |
| 60571 | Dieldrin | 0.170000 | | U | U | |
| 72559 | 4,4'-DDE | 37.000000 | | | | |
| 53190 | 2,4'-DDD | 11.000000 | | | | |
| 72208 | Endrin | ~~1.500000~~ | 0.094 | ~~N~~ U | U* | + |
| 72548 | 4,4'-DDD | 5.100000 | | | | |
| 789026 | 2,4'-DDT | ~~6.000000~~ | 0.17 | ~~N~~ U | U | + |
| 33216659 | Endosulfan II | 0.350000 | | U | U | |
| 1031078 | Endosulfan sulfate | 0.350000 | | U | U | |
| 50293 | 4,4'-DDT | 1.800000 | | | | |
| 7421934 | Endrin aldehyde | 0.240000 | | U | U | |
| 53494705 | Endrin ketone | 0.240000 | | U | U | |
| 72435 | Methoxychlor | 0.200000 | | U | U | |
| 2385855 | Mirex | 1.200000 | | | | |

MP 12.20.96

*Analysis Not Validated

LEVEL D
OGDEN VALIDATED

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV025DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2987DL

**Sample wt/vol:** 0.0071 Kg **Lab File ID:** 3,1030963,16,1

**% Moisture:** 72.10 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 10.0000(mL) **Date Analyzed:** 10/31/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 20.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/Kg

| Cas No: | Compound | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1030963,16,1 | | | |
| 319846 | alpha-BHC | 3.200000 | UR | R | D |
| 3424826 | 2,4'-DDE | 1.900000 | JR | | |
| 959988 | Endosulfan I | 6.900000 | UR | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1030962,16,1 | | | |
| 118741 | Hexachlorobenzene | 1.400000 | JR | R | D |
| 319857 | beta-BHC | 2.600000 | UR | | |
| 58899 | gamma-BHC (Lindane) | 2.700000 | UR | | |
| 319868 | delta-BHC | 0.720000 | JR | | |
| 76448 | Heptachlor | 1.800000 | UR | | |
| 309002 | Aldrin | 9.400000 | UR | | |
| 5103742 | gamma-Chlordane | 9.300000 | UR | | |
| 5103719 | alpha-Chlordane | 5.200000 | UR | | |
| 5103731 | cis-Nonachlor | 4.900000 | UR | * | |
| 39765805 | trans-Nonachlor | 4.900000 | UR | R | D |
| 1024573 | Heptachlor epoxide | 3.200000 | UR | | |
| 60571 | Dieldrin | 3.400000 | UR | | |
| 72559 | 4,4'-DDE | 25.000000 | R | | |
| 53190 | 2,4'-DDD | 13.000000 | R | | |
| 72208 | Endrin | 1.900000 | UR | | |
| 72548 | 4,4'-DDD | 4.100000 | JR | | |
| 789026 | 2,4'-DDT | 7.800000 | R | | |
| 33216659 | Endosulfan II | 6.900000 | UR | | |
| 1031078 | Endosulfan sulfate | 6.900000 | UR | | |
| 50293 | 4,4'-DDT | 1.800000 | JR | | |
| 7421934 | Endrin aldehyde | 4.700000 | UR | | |
| 53494705 | Endrin ketone | 4.700000 | UR | | |
| 72435 | Methoxychlor | 4.000000 | UR | | |
| 2385855 | Mirex | 0.390000 | JR | | |

*Analysis Not Validated

LEVEL D
OGDEN VALIDATED

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MV028

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2989

**Sample wt/vol:** 0.0072 Kg **Lab File ID:** 3,1024963A,29,1

**% Moisture:** 71.00 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/26/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) | ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,29,1 | | | | |
| 319846 | alpha-BHC | 0.160000 | | U | U | |
| 3424826 | 2,4'-DDE | 0.260000 | | U | U | |
| 959988 | Endosulfan I | 0.340000 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,29,1 | | | | |
| 118741 | Hexachlorobenzene | 1.200000 | | | | |
| 319857 | beta-BHC | 0.130000 | | U | U | |
| 58899 | gamma-BHC (Lindane) | ~~3.000000~~ | 0.13 | ~~N~~ U | U | + |
| 319868 | delta-BHC | ~~1.100000~~ | 0.10 | ~~N~~ U | U | + |
| 76448 | Heptachlor | ~~0.120000~~ | 0.025 | ~~N~~ U | U | + |
| 309002 | Aldrin | 0.460000 | | U | U | |
| 5103742 | gamma-Chlordane | 0.200000 | | J | U | |
| 5103719 | alpha-Chlordane | 0.260000 | | U | U | |
| 5103731 | cis-Nonachlor | 2.000000 | | | * | |
| 39765805 | trans-Nonachlor | 10.000000 | | | | |
| 1024573 | Heptachlor epoxide | 0.160000 | | U | U | |
| 60571 | Dieldrin | 0.170000 | | U | U | |
| 72559 | 4,4'-DDE | 140.000000 | | E | R | D |
| 53190 | 2,4'-DDD | 7.300000 | | | | |
| 72208 | Endrin | 0.094000 | | U | U | |
| 72548 | 4,4'-DDD | 19.000000 | | | | |
| 789026 | 2,4'-DDT | 5.900000 | | | | |
| 33216659 | Endosulfan II | 0.340000 | | U | U | |
| 1031078 | Endosulfan sulfate | 0.340000 | | U | U | |
| 50293 | 4,4'-DDT | 17.000000 | | | | |
| 7421934 | Endrin aldehyde | 0.230000 | | U | U | |
| 53494705 | Endrin ketone | 0.230000 | | U | U | |
| 72435 | Methoxychlor | 0.200000 | | U | U | |
| 2385855 | Mirex | 3.000000 | | | | |

MR 12-20-96

**LEVEL D**

*Analysis Not Validated

**OGDEN VALIDATED**

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MV028DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2989DL

**Sample wt/vol:** 0.0072 Kg **Lab File ID:** 3,1105963,9,1

**% Moisture:** 71.00 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 200.0000(mL) **Date Analyzed:** 11/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 400.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1105963,9,1 | | | | |
| 319846 | alpha-BHC | 88.000000 | UR | R | D |
| 3424826 | 2,4'-DDE | 139.082000 | UR | | |
| 959988 | Endosulfan I | 190.000000 | UR | | |
| Compound from Column: | RTX-5 Lab File ID: 2,1105962,9,1 | | | | |
| 118741 | Hexachlorobenzene | 58.000000 | UR | R | D |
| 319857 | beta-BHC | 71.000000 | UR | | |
| 58899 | gamma-BHC (Lindane) | 72.000000 | UR | | |
| 319868 | delta-BHC | 57.000000 | UR | | |
| 76448 | Heptachlor | 48.000000 | UR | | |
| 309002 | Aldrin | 250.000000 | UR | | |
| 5103742 | gamma-Chlordane | 250.000000 | UR | | |
| 5103719 | alpha-Chlordane | 140.000000 | UR | | |
| 5103731 | cis-Nonachlor | 130.000000 | UR | * | |
| 39765805 | trans-Nonachlor | 130.000000 | UR | R | D |
| 1024573 | Heptachlor epoxide | 88.000000 | UR | R | D |
| 60571 | Dieldrin | 94.000000 | UR | R | D |
| 72559 | 4,4'-DDE | 120.000000 | DJ | J | *11 |
| 53190 | 2,4'-DDD | 150.000000 | UR | R | D |
| 72208 | Endrin | 52.000000 | UR | | |
| 72548 | 4,4'-DDD | 380.000000 | UR | | |
| 789026 | 2,4'-DDT | 91.000000 | UR | | |
| 33216659 | Endosulfan II | 190.000000 | UR | | |
| 1031078 | Endosulfan sulfate | 190.000000 | UR | | |
| 50293 | 4,4'-DDT | 140.000000 | UR | | |
| 7421934 | Endrin aldehyde | 130.000000 | UR | | |
| 53494705 | Endrin ketone | 130.000000 | UR | | |
| 72435 | Methoxychlor | 110.000000 | UR | | |
| 2385855 | Mirex | 2.900000 | JR | | |

*Analysis Not Validated

**LEVEL D**

**OGDEN VALIDATED**

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MV032

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2990

**Sample wt/vol:** 0.0074 Kg **Lab File ID:** 3,1024963A,30,1

**% Moisture:** 70.90 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/26/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,30,1 | | | | |
| 319846 | alpha-BHC | 0.400000 | | | | |
| 3424826 | 2,4'-DDE | 2.400000 | | | | |
| 959988 | Endosulfan I | 0.330000 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,30,1 | | | | |
| 118741 | Hexachlorobenzene | 0.690000 | | | | |
| 319857 | beta-BHC | 0.560000 | 0.12 | ~~N~~ U | U | + |
| 58899 | gamma-BHC (Lindane) | 1.700000 | 0.10 | ~~N~~ U | UJ | +, L |
| 319868 | delta-BHC | 0.820000 | 0.10 | ~~N~~ U | U | + |
| 76448 | Heptachlor | 0.084000 | | U | U | |
| 309002 | Aldrin | 0.450000 | | U | U | |
| 5103742 | gamma-Chlordane | 0.120000 | | J | UJ | |
| 5103719 | alpha-Chlordane | 0.250000 | | U | U* | |
| 5103731 | cis-Nonachlor | 1.600000 | | | | |
| 39765805 | trans-Nonachlor | 8.000000 | | | | |
| 1024573 | Heptachlor epoxide | 0.150000 | | U | U | |
| 60571 | Dieldrin | 0.160000 | | U | U | |
| 72559 | 4,4'-DDE | 160.000000 | | E | R | D |
| 53190 | 2,4'-DDD | 13.000000 | | | | |
| 72208 | Endrin | 0.091000 | | U | U | |
| 72548 | 4,4'-DDD | 12.000000 | | | | |
| 789026 | 2,4'-DDT | 9.900000 | | | | |
| 33216659 | Endosulfan II | 0.330000 | | U | U | |
| 1031078 | Endosulfan sulfate | 0.330000 | | U | U | |
| 50293 | 4,4'-DDT | 10.000000 | | | | |
| 7421934 | Endrin aldehyde | 0.230000 | | U | U | |
| 53494705 | Endrin ketone | 0.230000 | | U | U | |
| 72435 | Methoxychlor | 0.190000 | | U | U | |
| 2385855 | Mirex | 2.900000 | | | | |

MW 12.20.96

**LEVEL D**

*Analysis Not Validated

OGDEN VALIDATED

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV032DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019
**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01
**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2990DL
**Sample wt/vol:** 0.0074 Kg **Lab File ID:** 3,1030963,18,1
**% Moisture:** 70.90 **decanted: (Y/N)** **Date Received:** 09/30/96
**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96
**Concentrated Extract Volume:** 20.0000(mL) **Date Analyzed:** 10/31/96
**Injection Volume:** 2 (uL) **Dilution Factor:** 40.0000
**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000
**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: DB-17 | Lab File ID: 3,1030963,18,1 | | | | |
| 319846 | alpha-BHC | 6.100000 | UR | R | D |
| 3424826 | 2,4'-DDE | 9.900000 | UR | | |
| 959988 | Endosulfan I | 13.000000 | UR | | |
| Compound from Column: RTX-5 | Lab File ID: 2,1030962,18,1 | | | | |
| 118741 | Hexachlorobenzene | 0.620000 | JR | R | D |
| 319857 | beta-BHC | 4.900000 | UR | | |
| 58899 | gamma-BHC (Lindane) | 5.100000 | UR | | |
| 319868 | delta-BHC | 4.000000 | UR | | |
| 76448 | Heptachlor | 3.300000 | UR | | |
| 309002 | Aldrin | 18.000000 | UR | | |
| 5103742 | gamma-Chlordane | 18.000000 | UR | | |
| 5103719 | alpha-Chlordane | 9.900000 | UR | | |
| 5103731 | cis-Nonachlor | 9.300000 | UR | * | |
| 39765805 | trans-Nonachlor | 7.400000 | JR | R | D |
| 1024573 | Heptachlor epoxide | 6.100000 | UR | | |
| 60571 | Dieldrin | 6.500000 | UR | | |
| 72559 | 4,4'-DDE | 110.000000 | D | | |
| 53190 | 2,4'-DDD | 18.000000 | R | R | D |
| 72208 | Endrin | 3.600000 | UR | | |
| 72548 | 4,4'-DDD | 8.700000 | JR | | |
| 789026 | 2,4'-DDT | 14.000000 | R | | |
| 33216659 | Endosulfan II | 13.000000 | UR | | |
| 1031078 | Endosulfan sulfate | 13.000000 | UR | | |
| 50293 | 4,4'-DDT | 7.100000 | JR | | |
| 7421934 | Endrin aldehyde | 9.000000 | UR | | |
| 53494705 | Endrin ketone | 9.000000 | UR | | |
| 72435 | Methoxychlor | 7.600000 | UR | | |
| 2385855 | Mirex | 3.200000 | JR | | |

LEVEL D

*Analysis Not Validated

OGDEN VALIDATED

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MV035

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2992

**Sample wt/vol:** 0.0076 Kg **Lab File ID:** 3,1024963A,31,1

**% Moisture:** 70.20 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/26/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup:** (Y/N) **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | RGV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,31,1 | | | | |
| 319846 | alpha-BHC | 0.510000 | | | | |
| 3424826 | 2,4'-DDE | 1.400000 | | | | |
| 959988 | Endosulfan I | 0.320000 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,31,1 | | | | |
| 118741 | Hexachlorobenzene | 1.500000 | | | | |
| 319857 | beta-BHC | 0.120000 | | U | U | |
| 58899 | gamma-BHC (Lindane) | ~~2.300000~~ | 0.12 | ~~N~~ U | U | + |
| 319868 | delta-BHC | ~~1.500000~~ | 0.10 | ~~N~~ U | U | +, c |
| 76448 | Heptachlor | 0.082000 | | U | U | |
| 309002 | Aldrin | 0.440000 | | U | U | |
| 5103742 | gamma-Chlordane | 0.120000 | | J | U | |
| 5103719 | alpha-Chlordane | 0.270000 | | | * | |
| 5103731 | cis-Nonachlor | 0.780000 | | | | |
| 39765805 | trans-Nonachlor | 1.800000 | | | | |
| 1024573 | Heptachlor epoxide | 0.150000 | | U | U | |
| 60571 | Dieldrin | 0.160000 | | U | U | |
| 72559 | 4,4'-DDE | 55.000000 | | E | R | D |
| 53190 | 2,4'-DDD | 9.600000 | | | | |
| 72208 | Endrin | 0.089000 | | U | U | |
| 72548 | 4,4'-DDD | 10.000000 | | | | |
| 789026 | 2,4'-DDT | ~~5.000000~~ | 0.16 | ~~N~~ U | U | + |
| 33216659 | Endosulfan II | 0.320000 | | U | U | |
| 1031078 | Endosulfan sulfate | 0.320000 | | U | U | |
| 50293 | 4,4'-DDT | 6.800000 | | | | |
| 7421934 | Endrin aldehyde | 0.220000 | | U | U | |
| 53494705 | Endrin ketone | 0.220000 | | U | U | |
| 72435 | Methoxychlor | 0.190000 | | U | U | |
| 2385855 | Mirex | 0.650000 | | | | |

MP 12.20.96

LEVEL D
OGDEN VALIDATED

*Analysis Not Validated

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MV035DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2992DL

**Sample wt/vol:** 0.0076 Kg **Lab File ID:** 3,1030963,21,1

**% Moisture:** 70.20 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 20.0000(mL) **Date Analyzed:** 11/01/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 40.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1030963,21,1 | | | | |
| 319846 | alpha-BHC | 6.000000 | UR | R | D |
| 3424826 | 2,4'-DDE | 9.700000 | UR | | |
| 959988 | Endosulfan I | 13.000000 | UR | | |
| Compound from Column: | RTX-5 Lab File ID: 2,1030962,21,1 | | | | |
| 118741 | Hexachlorobenzene | 2.300000 | JR | R | D |
| 319857 | beta-BHC | 4.800000 | UR | | |
| 58899 | gamma-BHC (Lindane) | 5.000000 | UR | | |
| 319868 | delta-BHC | 1.300000 | JR | | |
| 76448 | Heptachlor | 3.300000 | UR | | |
| 309002 | Aldrin | 18.000000 | UR | | |
| 5103742 | gamma-Chlordane | 17.000000 | UR | | |
| 5103719 | alpha-Chlordane | 9.700000 | UR | | |
| 5103731 | cis-Nonachlor | 9.100000 | UR | * | |
| 39765805 | trans-Nonachlor | 2.500000 | JR | R | D |
| 1024573 | Heptachlor epoxide | 6.000000 | UR | | |
| 60571 | Dieldrin | 6.400000 | UR | | |
| 72559 | 4,4'-DDE | 49.000000 | D | | |
| 53190 | 2,4'-DDD | 19.000000 | R | R | D |
| 72208 | Endrin | 3.600000 | UR | | |
| 72548 | 4,4'-DDD | 9.900000 | JR | | |
| 789026 | 2,4'-DDT | 10.000000 | R | | |
| 33216659 | Endosulfan II | 13.000000 | UR | | |
| 1031078 | Endosulfan sulfate | 13.000000 | UR | | |
| 50293 | 4,4'-DDT | 7.800000 | JR | | |
| 7421934 | Endrin aldehyde | 8.800000 | UR | | |
| 53494705 | Endrin ketone | 8.800000 | UR | | |
| 72435 | Methoxychlor | 7.500000 | UR | | |
| 2385855 | Mirex | 1.200000 | JR | | |

**LEVEL D**

**OGDEN VALIDATED**

*Analysis Not Validated

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MV038

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2994

**Sample wt/vol:** 0.0085 Kg **Lab File ID:** 3,1024963A,32,1

**% Moisture:** 66.90 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/26/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 4.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) | ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,32,1 | | | | |
| 319846 | alpha-BHC | 0.330000 | | | | |
| 3424826 | 2,4'-DDE | 1.900000 | | | | |
| 959988 | Endosulfan I | 0.580000 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,32,1 | | | | |
| 118741 | Hexachlorobenzene | 0.540000 | | | | |
| 319857 | beta-BHC | 0.220000 | | U | U | |
| 58899 | gamma-BHC (Lindane) | 0.460000 | | | | |
| 319868 | delta-BHC | ~~0.800000~~ | 0.088 | ~~U~~ | UJ | +,C |
| 76448 | Heptachlor | 0.150000 | | U | U | |
| 309002 | Aldrin | 0.780000 | | U | ↓ | |
| 5103742 | gamma-Chlordane | 0.770000 | | U | | |
| 5103719 | alpha-Chlordane | 0.440000 | | U | | |
| 5103731 | cis-Nonachlor | 0.800000 | | | * | |
| 39765805 | trans-Nonachlor | 1.800000 | | | | |
| 1024573 | Heptachlor epoxide | 0.270000 | | U | U | |
| 60571 | Dieldrin | 0.290000 | | U | U | |
| 72559 | 4,4'-DDE | 36.000000 | | | | |
| 53190 | 2,4'-DDD | 8.900000 | | | | |
| 72208 | Endrin | 0.160000 | | U | U | |
| 72548 | 4,4'-DDD | 5.700000 | | | | |
| 789026 | 2,4'-DDT | 6.600000 | | | | |
| 33216659 | Endosulfan II | 0.580000 | | U | U | |
| 1031078 | Endosulfan sulfate | 0.580000 | | U | U | |
| 50293 | 4,4'-DDT | 3.900000 | | | | |
| 7421934 | Endrin aldehyde | 0.400000 | | U | U | |
| 53494705 | Endrin ketone | 0.400000 | | U | ↓ | |
| 72435 | Methoxychlor | 0.330000 | | U | | |
| 2385855 | Mirex | 0.360000 | | | | |

MR 12.20.96

**LEVEL D**

**OGDEN VALIDATED**

*Analysis Not Validated

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV038DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2994DL

**Sample wt/vol:** 0.0085 Kg **Lab File ID:** 3,1030963,22,1

**% Moisture:** 66.90 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 5.0000(mL) **Date Analyzed:** 11/01/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 10.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 4.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1030963,22,1 | | | | |
| 319846 | alpha-BHC | 2.700000 | UR | R | D |
| 3424826 | 2,4'-DDE | 4.400000 | UR | | |
| 959988 | Endosulfan I | 5.800000 | UR | | |
| Compound from Column: | RTX-5 Lab File ID: 2,1030962,22,1 | | | | |
| 118741 | Hexachlorobenzene | 0.540000 | JR | R | D |
| 319857 | beta-BHC | 2.200000 | UR | | |
| 58899 | gamma-BHC (Lindane) | 2.200000 | UR | | |
| 319868 | delta-BHC | 0.640000 | JR | | |
| 76448 | Heptachlor | 1.500000 | UR | | |
| 309002 | Aldrin | 7.800000 | UR | | |
| 5103742 | gamma-Chlordane | 7.700000 | UR | | |
| 5103719 | alpha-Chlordane | 4.400000 | UR | | |
| 5103731 | cis-Nonachlor | 4.100000 | UR | * | |
| 39765805 | trans-Nonachlor | 1.700000 | JR | R | D |
| 1024573 | Heptachlor epoxide | 2.700000 | UR | | |
| 60571 | Dieldrin | 2.900000 | UR | | |
| 72559 | 4,4'-DDE | 26.000000 | R | | |
| 53190 | 2,4'-DDD | 11.000000 | R | | |
| 72208 | Endrin | 1.600000 | UR | | |
| 72548 | 4,4'-DDD | 4.700000 | JR | | |
| 789026 | 2,4'-DDT | 7.400000 | R | | |
| 33216659 | Endosulfan II | 5.800000 | UR | | |
| 1031078 | Endosulfan sulfate | 5.800000 | UR | | |
| 50293 | 4,4'-DDT | 3.000000 | JR | | |
| 7421934 | Endrin aldehyde | 4.000000 | UR | | |
| 53494705 | Endrin ketone | 4.000000 | UR | | |
| 72435 | Methoxychlor | 3.300000 | UR | | |
| 2385855 | Mirex | 0.380000 | JR | | |

**LEVEL D**

**OGDEN VALIDATED**

*Analysis Not Validated

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MV041

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2996

**Sample wt/vol:** 0.0074 Kg **Lab File ID:** 3,1024963A,33,1

**% Moisture:** 70.30 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/26/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 4.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) | ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,33,1 | | | | |
| 319846 | alpha-BHC | 0.550000 | | | | |
| 3424826 | 2,4'-DDE | 1.400000 | | | | |
| 959988 | Endosulfan I | 0.660000 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,33,1 | | | | |
| 118741 | Hexachlorobenzene | 0.420000 | | | | |
| 319857 | beta-BHC | 0.250000 | | U | U | |
| 58899 | gamma-BHC (Lindane) | 0.730000 | | | | |
| 319868 | delta-BHC | ~~1.600000~~ | 0.10 | ~~U~~ | UJ | +, C |
| 76448 | Heptachlor | 0.170000 | | U | U | |
| 309002 | Aldrin | 0.900000 | | U | | |
| 5103742 | gamma-Chlordane | 0.880000 | | U | | |
| 5103719 | alpha-Chlordane | 0.500000 | | U | | |
| 5103731 | cis-Nonachlor | 0.710000 | | | * | |
| 39765805 | trans-Nonachlor | 1.200000 | | | | |
| 1024573 | Heptachlor epoxide | 0.310000 | | U | U | |
| 60571 | Dieldrin | 0.330000 | | U | | |
| 72559 | 4,4'-DDE | 65.000000 | | | | |
| 53190 | 2,4'-DDD | 8.500000 | | | | |
| 72208 | Endrin | 0.180000 | | U | U | |
| 72548 | 4,4'-DDD | 4.300000 | | | | |
| 789026 | 2,4'-DDT | 5.200000 | | | | |
| 33216659 | Endosulfan II | 0.660000 | | U | U | |
| 1031078 | Endosulfan sulfate | 0.660000 | | U | | |
| 50293 | 4,4'-DDT | 3.800000 | | | | |
| 7421934 | Endrin aldehyde | 0.450000 | | U | U | |
| 53494705 | Endrin ketone | 0.450000 | | U | | |
| 72435 | Methoxychlor | 0.380000 | | U | U | |
| 2385855 | Mirex | 0.520000 | | | | |

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*Analysis Not Validated

**LEVEL D**

**OGDEN VALIDATED**

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV041DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2996DL

**Sample wt/vol:** 0.0074 Kg **Lab File ID:** 3,1030963,23,1

**% Moisture:** 70.30 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 5.0000(mL) **Date Analyzed:** 11/01/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 10.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 4.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1030963,23,1 | | | | |
| 319846 | alpha-BHC | 3.100000 | UR | R | D |
| 3424826 | 2,4'-DDE | 5.000000 | UR | | |
| 959988 | Endosulfan I | 6.600000 | UR | | |
| Compound from Column: | RTX-5 Lab File ID: 2,1030962,23,1 | | | | |
| 118741 | Hexachlorobenzene | 0.600000 | JR | R | D |
| 319857 | beta-BHC | 2.500000 | UR | | |
| 58899 | gamma-BHC (Lindane) | 2.500000 | UR | | |
| 319868 | delta-BHC | 0.860000 | JR | | |
| 76448 | Heptachlor | 1.700000 | UR | | |
| 309002 | Aldrin | 9.000000 | UR | | |
| 5103742 | gamma-Chlordane | 8.800000 | UR | | |
| 5103719 | alpha-Chlordane | 5.000000 | UR | | |
| 5103731 | cis-Nonachlor | 4.600000 | UR | * | |
| 39765805 | trans-Nonachlor | 0.950000 | JR | R | D |
| 1024573 | Heptachlor epoxide | 3.100000 | UR | | |
| 60571 | Dieldrin | 3.300000 | UR | | |
| 72559 | 4,4'-DDE | 41.000000 | R | | |
| 53190 | 2,4'-DDD | 8.800000 | R | | |
| 72208 | Endrin | 1.800000 | UR | | |
| 72548 | 4,4'-DDD | 3.300000 | JR | | |
| 789026 | 2,4'-DDT | 5.200000 | R | | |
| 33216659 | Endosulfan II | 6.600000 | UR | | |
| 1031078 | Endosulfan sulfate | 6.600000 | UR | | |
| 50293 | 4,4'-DDT | 2.100000 | JR | | |
| 7421934 | Endrin aldehyde | 4.500000 | UR | | |
| 53494705 | Endrin ketone | 4.500000 | UR | | |
| 72435 | Methoxychlor | 3.800000 | UR | | |
| 2385855 | Mirex | 0.320000 | JR | | |

**LEVEL D**

*Analysis Not Validated

**OGDEN VALIDATED**

1D
PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA709



**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3046

**Sample wt/vol:** 0.0091 Kg **Lab File ID:** 3,1024963A,36,1

**% Moisture:** 64.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/26/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,36,1 | | | | |
| 34883437 | PCB-8 (2,4') | 1.300 | | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,36,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.120 | | U | U | C |
| 7012375 | PCB-28 (2,4,4') | 0.110 | | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | ~~0.910~~ | 0.21 | ~~U~~ | U | + |
| 41464395 | PCB-44 (2,2',3,5') | 0.094 | | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.160 | | U | U | |
| 37680732 | PCB-101 (2,2',3,5,5') | 1.200 | | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.210 | | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.560 | | U | U | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 2.600 | | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.120 | | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 2.200 | | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.170 | | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.400 | | U | U | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.150 | | J | U | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 1.100 | | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.300 | | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.250 | | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.160 | | U | U | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.100 | 0.091 | ~~U~~ | U | + |

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**LEVEL D**

**OGDEN VALIDATED**

1D
PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MA710

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019
**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01
**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2981
**Sample wt/vol:** 0.0078 Kg **Lab File ID:** 3,1024963A,20,1
**% Moisture:** 68.50 **decanted: (Y/N)** **Date Received:** 09/30/96
**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96
**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/25/96
**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000
**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000
**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1024963A,20,1 | | | | |
| 34883437 | PCB-8 (2,4') | 2.600 | | | |
| Compound from Column: | RTX-5 Lab File ID: 2,1024962A,20,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 1.000 | | J | C |
| 7012375 | PCB-28 (2,4,4') | 0.130 | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | 1.800 | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.110 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.190 | U | U | |
| 37680732 | PCB-101 (2,2',3,5,5') | 3.400 | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.250 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.660 | U | U | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 6.100 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.770 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 4.200 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.200 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 1.700 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.240 | J | J | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 2.300 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.720 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.310 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.190 | U | U | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.110 | U | U | |

**LEVEL D**

**OGDEN VALIDATED**

1D
PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA717



**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2982

**Sample wt/vol:** 0.0075 Kg **Lab File ID:** 3,1024963A,21,1

**% Moisture:** 68.60 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/25/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,21,1 | | | |
| 34883437 | PCB-8 (2,4') | 1.800 | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,21,1 | | | |
| 37680652 | PCB-18 (2,2',5) | ~~2.700~~ 0.15 | ~~N~~ U | U | +,C |
| 7012375 | PCB-28 (2,4,4') | 0.140 | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | 1.300 | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.110 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.190 | U | U | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.590 | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.250 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.680 | U | U | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 1.800 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.260 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 1.500 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.210 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 1.500 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.180 | J | J | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 1.200 | | UJ | B |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.220 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.370 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.210 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.110 | U | U | |

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**LEVEL D**

**OGDEN VALIDATED**

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA725

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2983

**Sample wt/vol:** 0.0087 Kg **Lab File ID:** 3,1024963A,24,1

**% Moisture:** 65.60 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/25/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/Kg

| Cas No: | Compound | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,24,1 | | | |
| 34883437 | PCB-8 (2,4') | 1.500 | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,24,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 2.600 | | J | C |
| 7012375 | PCB-28 (2,4,4') | 0.190 | | | |
| 35693993 | PCB-52 (2,2',5,5') | ~~3.400~~ 0.22 | ~~J~~ U | U | + |
| 41464395 | PCB-44 (2,2',3,5') | 0.099 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.170 | U | U | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.840 | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.220 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.590 | U | U | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 2.000 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.410 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 1.200 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.180 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 3.000 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.350 | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 1.000 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.280 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.220 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.240 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.095 | U | U | |

**LEVEL D**

**OGDEN VALIDATED**

1D
PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA728



**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3020

**Sample wt/vol:** 0.0088 Kg **Lab File ID:** 3,1024963A,19,1

**% Moisture:** 65.40 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/25/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,19,1 | | | |
| 34883437 | PCB-8 (2,4') | 2.700 | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,19,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.120 | U | UJ | C |
| 7012375 | PCB-28 (2,4,4') | 0.120 | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | 1.700 | | | |
| 1464395 | PCB-44 (2,2',3,5') | 0.098 | U | U | |
| 598100 | PCB-66 (2,3',4,4') | 0.160 | U | U | |
| 680732 | PCB-101 (2,2',3,5,5') | 1.700 | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.220 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 1.400 | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 8.600 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.240 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 4.800 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.180 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 5.200 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.250 | J | J | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 7.800 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 3.000 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.840 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.560 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.110 | | | |

**LEVEL D**

**OGDEN VALIDATED**

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC224

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2974

**Sample wt/vol:** 0.0079 Kg **Lab File ID:** 3,1024963A,15,1

**% Moisture:** 67.70 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/24/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,15,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.960 | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,15,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 4.800 | | J | C |
| 7012375 | PCB-28 (2,4,4') | 15.000 | | R | D |
| 35693993 | PCB-52 (2,2',5,5') | 41.000 | E | | |
| 41464395 | PCB-44 (2,2',3,5') | 16.000 | | | |
| 32598100 | PCB-66 (2,3',4,4') | 34.000 | E | R | D |
| 37680732 | PCB-101 (2,2',3,5,5') | 180.000 | E | R | D |
| 32598133 | PCB-77 (3,3',4,4') | 0.240 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 180.000 | E | R | D |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 420.000 | E | R | D |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.130 | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 240.000 | E | R | D |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.200 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 250.000 | E | R | D |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 120.000 | E | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 200.000 | E | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 130.000 | E | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 84.000 | E | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 69.000 | E | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 8.100 | | | |

**LEVEL D**
**OGDEN VALIDATED**

1D
PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC224DL



**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2974DL

**Sample wt/vol:** 0.0079 Kg **Lab File ID:** 3,1030963,9,1

**% Moisture:** 67.70 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 250.0000(mL) **Date Analyzed:** 10/31/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 500.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1030963,9,1 | | | |
| 34883437 | PCB-8 (2,4') | 52.000 | UR | R | D |
| Compound from Column: | RTX-5 | Lab File ID: 2,1030962,9,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 67.000 | UR | R | D |
| 7012375 | PCB-28 (2,4,4') | 23.000 | JR | J | |
| 35693993 | PCB-52 (2,2',5,5') | 120.000 | D | | |
| 41464395 | PCB-44 (2,2',3,5') | 24.000 | JR | R | D |
| 32598100 | PCB-66 (2,3',4,4') | 64.000 | DJ | J | |
| 37680732 | PCB-101 (2,2',3,5,5') | 800.000 | D | J | C |
| 32598133 | PCB-77 (3,3',4,4') | 120.000 | UR | R | D |
| 31508006 | PCB-118 (2,3',4,4',5) | 600.000 | D | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 5,700.000 | D | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 160.000 | D | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 3,500.000 | D | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 98.000 | UR | R | D |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 3,700.000 | D | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 210.000 | D | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 6,200.000 | D | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 2,600.000 | D | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 800.000 | D | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 590.000 | D | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 15.000 | JR | R | D |

MD
12-23-96

**LEVEL D**

**OGDEN VALIDATED**

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC231

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2978

**Sample wt/vol:** 0.0081 Kg **Lab File ID:** 3,1024963A,16,1

**% Moisture:** 67.60 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/24/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,16,1 | | | |
| 34883437 | PCB-8 (2,4') | 1.500 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 100.000 | E | R | D |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,16,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 7.800 | | J | C |
| 7012375 | PCB-28 (2,4,4') | 21.000 | | | |
| 35693993 | PCB-52 (2,2',5,5') | 97.000 | E | R | D |
| 41464395 | PCB-44 (2,2',3,5') | 31.000 | E | | |
| 32598100 | PCB-66 (2,3',4,4') | 190.000 | E | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 240.000 | E | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.240 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 470.000 | E | R | D |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 530.000 | E | R | D |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 410.000 | E | R | D |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.190 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 270.000 | E | R | D |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 130.000 | E | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 210.000 | E | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 140.000 | E | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 91.000 | E | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 80.000 | E | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 11.000 | | | |

**LEVEL D**

**OGDEN VALIDATED**

MC231DL

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT01

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B2978DL

Sample wt/vol: 0.0081 Kg Lab File ID: 3,1030963,10,1

% Moisture: 67.60 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/14/96

Concentrated Extract Volume: 250.0000(mL) Date Analyzed: 10/31/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1030963,10,1 | | | |
| 34883437 | PCB-8 (2,4') | 51.000 | UR | R | D |
| Compound from Column: | RTX-5 | Lab File ID: 2,1030962,10,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 66.000 | UR | R | D |
| 7012375 | PCB-28 (2,4,4') | 42.000 | NJR | R | D |
| 35693993 | PCB-52 (2,2',5,5') | 310.000 | D | | |
| 41464395 | PCB-44 (2,2',3,5') | 62.000 | D | | |
| 32598100 | PCB-66 (2,3',4,4') | 180.000 | D | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 2,000.000 | D | | |
| 32598133 | PCB-77 (3,3',4,4') | 120.000 | UR | R | D |
| 31508006 | PCB-118 (2,3',4,4',5) | 1,200.000 | D | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 9,400.000 | D | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 430.000 | D | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 6,300.000 | D | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 97.000 | UR | R | D |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 5,800.000 | D | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 440.000 | D | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 9,800.000 | D | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 4,300.000 | D | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 1,300.000 | D | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 820.000 | D | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 20.000 | JR | R J | D |
| ~~PCB-189~~ | ~~PCB-189 (2,2',4,5',6)~~ | ~~50.000~~ | ~~JS~~ | ~~R J~~ * | ~~D~~ |

MP 12.23.96

* Analysis not Validated

LEVEL D

OGDEN VALIDATED

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV018

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2984

**Sample wt/vol:** 0.0078 Kg **Lab File ID:** 3,1024963A,25,1

**% Moisture:** 69.20 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/25/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,25,1 | | | |
| 34883437 | PCB-8 (2,4') | 2.600 | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,25,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 1.600 | | J | C |
| 7012375 | PCB-28 (2,4,4') | 2.300 | | | |
| 35693993 | PCB-52 (2,2',5,5') | 4.700 | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.110 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 1.900 | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 19.000 | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.240 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 18.000 | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 160.000 | E | R | D |
| 32598144 | PCB-105 (2,3,3',4,4') | 6.700 | | R | D |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 84.000 | E | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.200 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 80.000 | E | R | D |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 6.900 | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 88.000 | E | R | D |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 63.000 | E | R | D |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 20.000 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 17.000 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 27.000 | E | R | D |

LEVEL D
OGDEN VALIDATED

1D
PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV018DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2984DL

**Sample wt/vol:** 0.0078 Kg **Lab File ID:** 3,1030963,14,1

**% Moisture:** 69.20 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 10.0000(mL) **Date Analyzed:** 10/31/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 10.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1030963,14,1 | | | |
| 34883437 | PCB-8 (2,4') | 2.100 | UR | R | D |
| Compound from Column: | RTX-5 | Lab File ID: 2,1030962,14,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 2.700 | UR | R | D |
| 7012375 | PCB-28 (2,4,4') | 5.100 | R | | |
| 35693993 | PCB-52 (2,2',5,5') | 4.000 | JR | | |
| 41464395 | PCB-44 (2,2',3,5') | 2.200 | UR | | |
| 32598100 | PCB-66 (2,3',4,4') | 3.700 | UR | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 28.000 | R | | |
| 32598133 | PCB-77 (3,3',4,4') | 4.900 | UR | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 26.000 | R | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 250.000 | D | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 9.300 | R | R | D |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 120.000 | D | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 4.000 | UR | R | D |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 120.000 | D | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 8.600 | R | R | D |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 230.000 | D | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 90.000 | D | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 26.000 | R | R | D |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 24.000 | R | R | D |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 43.000 | D | | |

**LEVEL D**

**OGDEN VALIDATED**

1D
# PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MV022

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2985

**Sample wt/vol:** 0.0079 Kg **Lab File ID:** 3,1024963A,26,1

**% Moisture:** 69.10 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/26/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,26,1 | | | |
| 34883437 | PCB-8 (2,4') | 1.600 | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,26,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.900 | | J | C |
| 7012375 | PCB-28 (2,4,4') | 2.600 | | | |
| 35693993 | PCB-52 (2,2',5,5') | 4.100 | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.980 | | | |
| 32598100 | PCB-66 (2,3',4,4') | 3.300 | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 21.000 | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.240 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 19.000 | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 120.000 | E | R | D |
| 32598144 | PCB-105 (2,3,3',4,4') | 6.100 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 69.000 | E | R | D |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.200 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 54.000 | E | R | D |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 6.700 | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 76.000 | E | R | D |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 48.000 | E | R | D |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 9.600 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 17.000 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 33.000 | E | R | D |

LEVEL D

OGDEN VALIDATED

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV022DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2985DL

**Sample wt/vol:** 0.0079 Kg **Lab File ID:** 3,1030963,13,1

**% Moisture:** 69.10 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 5.0000(mL) **Date Analyzed:** 10/31/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 20.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1030963,13,1 | | | | |
| 34883437 | PCB-8 (2,4') | 1.000 | JR | R | D |
| Compound from Column: | RTX-5 Lab File ID: 2,1030962,13,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.840 | JR | R | D |
| 7012375 | PCB-28 (2,4,4') | 3.200 | R | | |
| 35693993 | PCB-52 (2,2',5,5') | 2.900 | R | | |
| 41464395 | PCB-44 (2,2',3,5') | 1.100 | UR | | |
| 32598100 | PCB-66 (2,3',4,4') | 1.800 | UR | | |
| 7680732 | PCB-101 (2,2',3,5,5') | 24.000 | R | | |
| 32598133 | PCB-77 (3,3',4,4') | 2.400 | UR | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 23.000 | R | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 150.000 | D | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 4.600 | R | R | D |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 81.000 | D | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 2.000 | UR | R | D |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 66.000 | D | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 6.600 | R | R | D |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 120.000 | D | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 51.000 | D | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 17.000 | R | R | D |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 19.000 | R | R | D |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 39.000 | D | | |

**LEVEL D**

**OGDEN VALIDATED**

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV023



**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2986

**Sample wt/vol:** 0.0092 Kg **Lab File ID:** 3,1024963A,27,1

**% Moisture:** 63.20 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/26/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,27,1 | | | |
| 34883437 | PCB-8 (2,4') | 1.700 | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,27,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.680 | | J | C |
| 7012375 | PCB-28 (2,4,4') | 2.500 | | | |
| 35693993 | PCB-52 (2,2',5,5') | 5.200 | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.770 | | | |
| 32598100 | PCB-66 (2,3',4,4') | 4.500 | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 37.000 | E | R | D |
| 32598133 | PCB-77 (3,3',4,4') | 0.210 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 36.000 | E | R | D |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 160.000 | E | R | D |
| 32598144 | PCB-105 (2,3,3',4,4') | 12.000 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 120.000 | E | R | D |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.170 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 100.000 | E | R | D |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 12.000 | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 78.000 | E | R | D |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 62.000 | E | R | D |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 16.000 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 22.000 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 38.000 | E | R | D |

LEVEL D

OGDEN VALIDATED

1D
# PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MV023DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2986DL

**Sample wt/vol:** 0.0092 Kg **Lab File ID:** 3,1030963,15,1

**% Moisture:** 63.20 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 20.0000(mL) **Date Analyzed:** 10/31/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 40.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1030963,15,1 | | | | |
| 34883437 | PCB-8 (2,4') | 3.600 | UR | R | D |
| Compound from Column: | RTX-5 Lab File ID: 2,1030962,15,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 4.600 | UR | R | D |
| 7012375 | PCB-28 (2,4,4') | 2.700 | JR | | |
| 35693993 | PCB-52 (2,2',5,5') | 6.100 | JR | | |
| 41464395 | PCB-44 (2,2',3,5') | 3.700 | UR | | |
| 32598100 | PCB-66 (2,3',4,4') | 6.200 | JR | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 50.000 | D | J | C |
| 32598133 | PCB-77 (3,3',4,4') | 8.300 | UR | R | D |
| 31508006 | PCB-118 (2,3',4,4',5) | 51.000 | D | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 310.000 | D | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 4.600 | UR | R | D |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 170.000 | D | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 6.800 | UR | R | D |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 160.000 | D | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 14.000 | R | R | D |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 260.000 | D | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 100.000 | D | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 21.000 | R | R | D |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 27.000 | R | R | D |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 57.000 | D | | |

**LEVEL D**

**OGDEN VALIDATED**

1D
# PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MV025

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019
**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01
**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2987
**Sample wt/vol:** 0.0071 Kg **Lab File ID:** 3,1024963A,28,1
**% Moisture:** 72.10 **decanted: (Y/N)** **Date Received:** 09/30/96
**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96
**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/26/96
**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000
**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000
**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,28,1 | | | |
| 34883437 | PCB-8 (2,4') | 2.400 | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,28,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.150 | U | UJ | C |
| 7012375 | PCB-28 (2,4,4') | 2.000 | | | |
| 35693993 | PCB-52 (2,2',5,5') | 3.900 | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.920 | | | |
| 32598100 | PCB-66 (2,3',4,4') | 4.100 | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 30.000 | E | R | D |
| 32598133 | PCB-77 (3,3',4,4') | 0.270 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 25.000 | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 200.000 | E | R | D |
| 32598144 | PCB-105 (2,3,3',4,4') | 9.800 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 130.000 | E | R | D |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.220 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 120.000 | E | R | D |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 11.000 | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 100.000 | E | R | D |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 79.000 | E | R | D |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 22.000 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 29.000 | E | R | D |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 39.000 | E | R | D |

LEVEL D
OGDEN VALIDATED

1D
PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MV025DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2987DL

**Sample wt/vol:** 0.0071 Kg **Lab File ID:** 3,1030963,16,1

**% Moisture:** 72.10 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 10.0000(mL) **Date Analyzed:** 10/31/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 20.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1030963,16,1 | | | |
| 34883437 | PCB-8 (2,4') | 1.300 | JR | R | D |
| Compound from Column: | RTX-5 | Lab File ID: 2,1030962,16,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 3.000 | UR | R | D |
| 7012375 | PCB-28 (2,4,4') | 2.600 | JR | | |
| 35693993 | PCB-52 (2,2',5,5') | 4.800 | JR | | |
| 41464395 | PCB-44 (2,2',3,5') | 2.400 | UR | | |
| 32598100 | PCB-66 (2,3',4,4') | 4.100 | UR | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 39.000 | D | J | C |
| 32598133 | PCB-77 (3,3',4,4') | 5.400 | UR | R | D |
| 31508006 | PCB-118 (2,3',4,4',5) | 31.000 | R | R | D |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 310.000 | D | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 12.000 | R | R | D |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 160.000 | D | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 4.400 | UR | R | D |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 160.000 | D | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 12.000 | R | R | D |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 300.000 | D | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 120.000 | D | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 38.000 | R | R | D |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 37.000 | D | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 53.000 | D | | |

**LEVEL D**

**OGDEN VALIDATED**

1D
# PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MV028

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2989

**Sample wt/vol:** 0.0072 Kg **Lab File ID:** 3,1024963A,29,1

**% Moisture:** 71.00 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/26/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,29,1 | | | |
| 34883437 | PCB-8 (2,4') | 3.300 | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,29,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.150 | U | UJ | C |
| 7012375 | PCB-28 (2,4,4') | 2.200 | | | |
| 35693993 | PCB-52 (2,2',5,5') | 13.000 | | | |
| 41464395 | PCB-44 (2,2',3,5') | 2.300 | | | |
| 32598100 | PCB-66 (2,3',4,4') | 4.800 | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 37.000 | E | R | D |
| 32598133 | PCB-77 (3,3',4,4') | 0.270 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 44.000 | E | R | D |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 170.000 | E | R | D |
| 32598144 | PCB-105 (2,3,3',4,4') | 17.000 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 110.000 | E | R | D |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.220 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 190.000 | E | R | D |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 13.000 | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 100.000 | E | R | D |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 69.000 | E | ↓ | ↓ |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 93.000 | E | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 100.000 | E | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 130.000 | E | | |

**LEVEL D**
**OGDEN VALIDATED**

1D
PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MV028DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2989DL

**Sample wt/vol:** 0.0072 Kg **Lab File ID:** 3,1105963,9,1

**% Moisture:** 71.00 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 200.0000(mL) **Date Analyzed:** 11/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 400.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1105963,9,1 | | | |
| 34883437 | PCB-8 (2,4') | 64.000 | UR | R | D |
| Compound from Column: | RTX-5 | Lab File ID: 2,1105962,9,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 82.000 | UR | R | D |
| 7012375 | PCB-28 (2,4,4') | 79.000 | UR | | |
| 35693993 | PCB-52 (2,2',5,5') | 140.000 | UR | | |
| 41464395 | PCB-44 (2,2',3,5') | 67.000 | UR | | |
| 32598100 | PCB-66 (2,3',4,4') | 110.000 | UR | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 60.000 | DJ | J | C |
| 32598133 | PCB-77 (3,3',4,4') | 150.000 | UR | R | D |
| 31508006 | PCB-118 (2,3',4,4',5) | 62.000 | DJ | J | #11 |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 420.000 | DJ | J | #11 |
| 32598144 | PCB-105 (2,3,3',4,4') | 82.000 | UR | R | D |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 180.000 | DJ | J | +11 |
| 57465288 | PCB-126 (3,3',4,4',5) | 120.000 | UR | R | D |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 710.000 | D | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 190.000 | UR | R | D |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 820.000 | D | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 120.000 | D | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 210.000 | D | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 1,800.000 | D | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 3,200.000 | D | | |

MP
12.23.96

**LEVEL D**

**OGDEN VALIDATED**

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV032

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2990

**Sample wt/vol:** 0.0074 Kg **Lab File ID:** 3,1024963A,30,1

**% Moisture:** 70.90 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/26/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,30,1 | | | |
| 34883437 | PCB-8 (2,4') | 2.500 | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,30,1 | | | |
| 37680652 | PCB-18 (2,2',5) | ~~0.860~~ 0.15 | ~~U~~ U | UJ | +,c |
| 7012375 | PCB-28 (2,4,4') | 2.600 | | | |
| 35693993 | PCB-52 (2,2',5,5') | 7.500 | | | |
| 41464395 | PCB-44 (2,2',3,5') | 1.100 | | | |
| 32598100 | PCB-66 (2,3',4,4') | 8.100 | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 42.000 | E | R | D |
| 32598133 | PCB-77 (3,3',4,4') | 0.260 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 47.000 | E | R | D |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 240.000 | E | R | D |
| 32598144 | PCB-105 (2,3,3',4,4') | 13.000 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 180.000 | E | R | D |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.210 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 160.000 | E | R | D |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 18.000 | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 110.000 | E | R | D |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 94.000 | E | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 35.000 | E | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 44.000 | E | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 60.000 | E | | |

MP 12-20-96

**LEVEL D**

**OGDEN VALIDATED**

1D
PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MV032DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2990DL

**Sample wt/vol:** 0.0074 Kg **Lab File ID:** 3,1030963,18,1

**% Moisture:** 70.90 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 20.0000(mL) **Date Analyzed:** 10/31/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 40.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1030963,18,1 | | | |
| 34883437 | PCB-8 (2,4') | 4.400 | UR | R | D |
| Compound from Column: | RTX-5 | Lab File ID: 2,1030962,18,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 5.700 | UR | R | D |
| 7012375 | PCB-28 (2,4,4') | 3.600 | JR | | |
| 35693993 | PCB-52 (2,2',5,5') | 8.400 | JR | | |
| 41464395 | PCB-44 (2,2',3,5') | 4.600 | UR | | |
| 32598100 | PCB-66 (2,3',4,4') | 7.800 | UR | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 66.000 | D | J | C |
| 32598133 | PCB-77 (3,3',4,4') | 10.000 | UR | R | D |
| 31508006 | PCB-118 (2,3',4,4',5) | 65.000 | D | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 560.000 | D | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 20.000 | R | R | D |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 280.000 | D | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 8.400 | UR | R | D |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 250.000 | D | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 21.000 | R | R | D |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 450.000 | D | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 190.000 | D | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 37.000 | D | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 59.000 | D | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 98.000 | D | | |

**LEVEL D**

**OGDEN VALIDATED**

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV035

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2992

**Sample wt/vol:** 0.0076 Kg **Lab File ID:** 3,1024963A,31,1

**% Moisture:** 70.20 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/26/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,31,1 | | | |
| 34883437 | PCB-8 (2,4') | 3.600 | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,31,1 | | | |
| 37680652 | PCB-18 (2,2',5) | ~~1.100~~ 0.14 | ~~NU~~ | UJ | +, C |
| 7012375 | PCB-28 (2,4,4') | 2.200 | | | |
| 35693993 | PCB-52 (2,2',5,5') | 5.100 | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.930 | | | |
| 32598100 | PCB-66 (2,3',4,4') | 3.300 | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 26.000 | E | R | D |
| 32598133 | PCB-77 (3,3',4,4') | 0.250 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 25.000 | E | R | D |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 140.000 | E | R | D |
| 32598144 | PCB-105 (2,3,3',4,4') | 7.700 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 100.000 | E | R | D |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.210 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 92.000 | E | R | D |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 11.000 | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 66.000 | E | R | D |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 56.000 | E | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 29.000 | E | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 25.000 | E | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 34.000 | E | | |

MMD 12-23-96

**LEVEL D**

**OGDEN VALIDATED**

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV035DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2992DL

**Sample wt/vol:** 0.0076 Kg **Lab File ID:** 3,1030963,21,1

**% Moisture:** 70.20 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 20.0000(mL) **Date Analyzed:** 11/01/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 40.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1030963,21,1 | | | |
| 34883437 | PCB-8 (2,4') | 2.900 | JR | R | D |
| Compound from Column: | RTX-5 | Lab File ID: 2,1030962,21,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 5.600 | UR | R | D |
| 7012375 | PCB-28 (2,4,4') | 4.100 | JR | ↓ | ↓ |
| 35693993 | PCB-52 (2,2',5,5') | 7.800 | JR | | |
| 41464395 | PCB-44 (2,2',3,5') | 4.500 | UR | | |
| 32598100 | PCB-66 (2,3',4,4') | 7.600 | UR | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 60.000 | D | | |
| 32598133 | PCB-77 (3,3',4,4') | 10.000 | UR | R | D |
| 31508006 | PCB-118 (2,3',4,4',5) | 52.000 | D | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 450.000 | D | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 18.000 | R | R | D |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 240.000 | D | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 8.200 | UR | R | D |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 220.000 | D | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 18.000 | R | R | D |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 390.000 | D | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 170.000 | D | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 46.000 | D | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 50.000 | D | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 90.000 | D | | |

**LEVEL D**

**OGDEN VALIDATED**

1D
# PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MV038

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2994

**Sample wt/vol:** 0.0085 Kg **Lab File ID:** 3,1024963A,32,1

**% Moisture:** 66.90 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 10/26/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 4.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,32,1 | | | |
| 34883437 | PCB-8 (2,4') | 2.700 | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,32,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.900 | | UJ | C |
| 7012375 | PCB-28 (2,4,4') | 2.000 | | | |
| 35693993 | PCB-52 (2,2',5,5') | 3.700 | | | |
| 41464395 | PCB-44 (2,2',3,5') | 1.400 | | | |
| 32598100 | PCB-66 (2,3',4,4') | 4.200 | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 29.000 | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.450 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 25.000 | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 200.000 | E | R | D |
| 32598144 | PCB-105 (2,3,3',4,4') | 6.500 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 140.000 | E | R | D |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.370 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 96.000 | E | R | D |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 9.400 | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 140.000 | E | R | D |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 85.000 | E | R | D |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 19.000 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 26.000 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 50.000 | E | R | D |

**LEVEL D**

**OGDEN VALIDATED**

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV038DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2994DL

**Sample wt/vol:** 0.0085 Kg **Lab File ID:** 3,1030963,22,1

**% Moisture:** 66.90 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 5.0000(mL) **Date Analyzed:** 11/01/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 10.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 4.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL. CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1030963,22,1 | | | | |
| 34883437 | PCB-8 (2,4') | 1.900 | JR | R | D |
| Compound from Column: | RTX-5 Lab File ID: 2,1030962,22,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 2.500 | UR | R | D |
| 7012375 | PCB-28 (2,4,4') | 2.300 | JR | | |
| 35693993 | PCB-52 (2,2',5,5') | 4.700 | R | | |
| 41464395 | PCB-44 (2,2',3,5') | 2.000 | UR | | |
| 32598100 | PCB-66 (2,3',4,4') | 3.400 | UR | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 35.000 | R | | |
| 32598133 | PCB-77 (3,3',4,4') | 4.500 | UR | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 28.000 | R | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 250.000 | D | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 2.500 | UR | R | D |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 180.000 | D | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 3.700 | UR | R | D |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 120.000 | D | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 9.800 | R | R | D |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 220.000 | D | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 94.000 | D | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 19.000 | R | R | D |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 30.000 | R | R | D |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 64.000 | D | | |

**LEVEL D**

**OGDEN VALIDATED**

1D
PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV041

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT01

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B2996

Sample wt/vol: 0.0074 Kg Lab File ID: 3,1024963A,33,1

% Moisture: 70.30 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/14/96

Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 10/26/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 4.0000

Sulfur Cleanup: (Y/N) N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1024963A,33,1 | | | |
| 34883437 | PCB-8 (2,4') | 4.200 | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1024962A,33,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.820 | | ~~U~~ J | C |
| 7012375 | PCB-28 (2,4,4') | 2.400 | | | |
| 35693993 | PCB-52 (2,2',5,5') | 4.700 | | | |
| 41464395 | PCB-44 (2,2',3,5') | 1.000 | | | |
| 32598100 | PCB-66 (2,3',4,4') | 2.800 | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 22.000 | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.520 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 19.000 | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 140.000 | E | R | D |
| 32598144 | PCB-105 (2,3,3',4,4') | 5.100 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 82.000 | E | R | D |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.420 | U | UR | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 70.000 | E | R | D |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 7.000 | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 120.000 | E | R | D |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 58.000 | E | R | D |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 12.000 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 19.000 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 44.000 | | | |

MP
12.23.96

LEVEL D

OGDEN VALIDATED

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV041DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT01

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2996DL

**Sample wt/vol:** 0.0074 Kg **Lab File ID:** 3,1030963,23,1

**% Moisture:** 70.30 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/14/96

**Concentrated Extract Volume:** 5.0000(mL) **Date Analyzed:** 11/01/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 10.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 4.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1030963,23,1 | | | |
| 34883437 | PCB-8 (2,4') | 1.100 | JR | R | D |
| Compound from Column: | RTX-5 | Lab File ID: 2,1030962,23,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 2.900 | UR | R | D |
| 7012375 | PCB-28 (2,4,4') | 2.700 | JR | | |
| 35693993 | PCB-52 (2,2',5,5') | 4.700 | JR | | |
| 41464395 | PCB-44 (2,2',3,5') | 2.300 | UR | | |
| 32598100 | PCB-66 (2,3',4,4') | 3.900 | UR | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 24.000 | R | | |
| 32598133 | PCB-77 (3,3',4,4') | 5.200 | UR | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 18.000 | R | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 170.000 | D | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 2.900 | UR | R | D |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 89.000 | D | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 4.200 | UR | R | D |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 78.000 | D | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 5.900 | JR | R | D |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 130.000 | D | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 54.000 | ~~R~~ | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 9.800 | R | R | D |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 17.000 | R | R | D |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 53.000 | R | R | D |

**LEVEL D**

**OGDEN VALIDATED**

OGDEN

# DATA VALIDATION REPORT

CLEAN CONTRACT TASK ORDER #136
NAF Midway Site Investigations

ANALYSIS: PESTICIDES/PCB CONGENERS
SAMPLE DELIVERY GROUP: OMIFT02

Prepared by

Ogden—Denver Operations
550 South Wadsworth Boulevard, Suite 500
Lakewood, Colorado 80226

# CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

Ogden Environmental and Energy Services Co., Inc.
550 South Wadsworth Boulevard
Suite 500
Lakewood, CO 80226

Package ID: C136PP61
Task Order: 110190136
SDG No.: OMIFT02
No. of Analyses: 20

Laboratory: AD Little
Reviewer: H. White
Analysis/Method: Pesticides/PCB Congeners

Date: 12-23-96
Reviewer's Signature: Heidi A. White

## ACTION ITEMS[a]

| | |
|---|---|
| 1. **Case Narrative Deficiencies** | |
| 2. **Out of Scope Analyses** | |
| 3. **Analyses Not Conducted** | |
| 4. **Missing Hardcopy Deliverables** | |
| 5. **Incorrect Hardcopy Deliverables** | |
| 6. **Deviations from Analysis Protocol, e.g.,** | - Qualifications assigned for 2 samples for surrogate deficiencies. |
| Holding Times | - Qualifications assigned for calibration deficiencies for delta-BHC, PCB-52, PCB-101. |
| GC/MS Tune/Inst. Perform | |
| Calibrations | - Samples qualified for false positives |
| Blanks | |
| Surrogates | |
| Matrix Spike/Dup LCS | - Compounds reported below RL or above ~~limit~~ linear range qualified - see Sec. #11. |
| Field QC | |
| Internal Standard Performance | |
| Compound Identification and Quantitation | |
| System Performance | |

## COMMENTS[b]

[a] Subcontracted analytical laboratory is not meeting contract and/or method requirements.
[b] Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.

# 1. INTRODUCTION

| | |
|---|---|
| Task Order Title: | NAF Midway Site Investigations |
| CLEAN Contract Task Order #: | 0136 |
| SDG#: | OMIFT02 |
| CTO Manager: | J. Cotter |
| Project Contact: | M. Medeiros |
| Matrix: | Tissue |
| Analysis: | Pesticides/PCB Congeners |
| NEESA QC Level: | D |
| No. of Samples: | 20 |
| No. of Reanalyses/Dilutions: | 10 |
| Reviewer: | H. White |
| Date of Review: | December 20, 1996 |

The samples listed in Table 1 were validated based on the NOAA National Status and Trends Analytical Protocols, data validation procedure for Levels C and D pesticides/PCBs (DVP-4, Rev. 2) and the *National Functional Guidelines For Organic Data Review* (2/94). These protocols vary from the CLP Protocols upon which the Navy CLEAN data validation procedures were based. Instances where quality control parameters vary from the CLP Data Validation procedures are documented in the text of this report and should be noted with respect to the overall data quality objectives of this project. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in estimated value were not denoted by a qualification code since the data had already been rejected.

**Table 1. Sample identification**

| Client ID | EPA ID | Laboratory ID | Matrix | COC Method |
|---|---|---|---|---|
| M00MT01S04 | MA713 | 96B3047 | tissue | STIV141C/E |
| M00MT01D04 | MA714 | 96B3048 | tissue | STIV141C/E |
| M00MT04S04 | MA718 | 96B3049 | tissue | STIV141C/E |
| M01MT05S02 | MC190 | 96B3027 | tissue | STIV141C/E |
| M01MT05S02 | MC190DL | 963027DL | tissue | STIV141C/E |
| M01MT05S04 | MC191 | 96B3028 | tissue | STIV141C/E |
| M01MT05S04 | MC191DL | 96B3028DL | tissue | STIV141C/E |
| M01MT05D04 | MC192 | 96B3029 | tissue | STIV141C/E |
| M01MT05D04 | MC192DL | 96B3029DL | tissue | STIV141C/E |
| M01MT06S02 | MC194 | 96B3030 | tissue | STIV141C/E |
| M01MT09S02 | MC199 | 96B3031 | tissue | STIV141C/E |
| M01MT09S02 | MC199DL | 96B3031DL | tissue | STIV141C/E |
| M01MT09S04 | MC200 | 96B3032 | tissue | STIV141C/E |
| M01MT04S02 | MC202 | 96B3033 | tissue | STIV141C/E |
| M01MT04S02 | MC202DL | 96B3033DL | tissue | STIV141C/E |
| M01MT03S02 | MC206 | 96B3034 | tissue | STIV141C/E |
| M01MT03S02 | MC206DL | 96B3034DL | tissue | STIV141C/E |
| M01MT03S04 | MC207 | 96B3035 | tissue | STIV141C/E |
| M01MT03S04 | MC207DL | 96B3035DL | tissue | STIV141C/E |
| M01MT07S04 | MC213 | 96B3037 | tissue | STIV141C/E |
| M01MT07S04 | MC213DL | 96B3037DL | tissue | STIV141C/E |
| M01MT07S02 | MC214 | 96B3038 | tissue | STIV141C/E |
| M01MT11S02 | MC215 | 96B3039 | tissue | STIV141C/E |
| M01MT11D02 | MC216 | 96B3040 | tissue | STIV141C/E |
| M01MT11S04 | MC219 | 96B3041 | tissue | STIV141C/E |

| Client ID | EPA ID | Laboratory ID | Matrix | COC Method |
|---|---|---|---|---|
| M01MT12S02 | MC221 | 96B3042 | tissue | STIV141C/E |
| M01MT08S02 | MC227 | 96B3043 | tissue | STIV141C/E |
| M01MT08S02 | MC227DL | 96B3043DL | tissue | STIV141C/E |
| M01MT01S04 | MC232 | 96B3044 | tissue | STIV141C/E |
| M01MT01S04 | MC232DL | 96B3044DL | tissue | STIV141C/E |

# 2. DATA VALIDATION FINDINGS

## 2.1 SAMPLE MANAGEMENT

The following are findings associated with sample management:

### 2.1.1 Sample Preservation, Handling, and Transport

No preservations were required for pesticide/PCB analysis. Samples in this SDG were received by the laboratory below temperature limits established in NEESA 20.2-047B; however, Status and Trends protocols require tissue samples to be frozen and therefore, no qualifications were assigned. No samples were noted to be broken upon arrival at the laboratory. No qualifications were required.

### 2.1.2 Chain of Custody

All COCs were legible and complete. All COCs were signed by laboratory and field personnel. Other questions regarding sample conditions were answered on the COCs. No qualifications were required based on sample receipt information.

### 2.1.3 Holding Times

All samples in this SDG were extracted and analyzed within the prescribed six month holding time for tissues; therefore, no qualifications were required.

## 2.2 PESTICIDES INSTRUMENT PERFORMANCE

No percent resolution or endrin/4,4'-DDT degradation analyses were performed by the laboratory, as required by the CLP SOW (3/90). These analyses have not been established in the Status and Trends protocols; therefore, no evaluation was given to the data based on percent resolution or breakdown degradation. PCBs 103 and 198 were used as the surrogates for this SDG, while tetrachloro-m-xylene served as the internal standard. All target analytes were quantified versus the internal standard recovery. No surrogate or internal standard retention time window was specified in the Status and Trends protocols. The laboratory established a window of $\pm 0.075$ or 0.15 minutes Based on professional judgement, the reviewer considered this an acceptable range. The surrogate and internal standard compounds were within the absolute retention time windows established with initial calibration standards. The retention time for all target compounds was established by the laboratory at $\pm 0.075$ minutes, although some windows were reduced or expanded for proper peak identification. In these instances, the reviewer deemed the retention time windows to be acceptable. All continuing calibration standards had retention times within the retention time windows established with the initial calibration standards. No qualifications of the data were required.

## 2.3 CALIBRATION

### 2.3.1 Analytical Sequence

The laboratory modified the analytical sequence from the Status and Trends protocols. The laboratory analyzed an initial five-point calibration with subsequent mid-level calibration standards analyzed for every ten field samples, and at the end of each sequence. Status and Trends protocols suggested a four-point calibration be interspersed with samples and no more than six samples be analyzed in between calibration standards. The laboratory modifications were considered acceptable by the reviewer; therefore, no qualifications were required.

### 2.3.2 Initial Calibration

The NOAA Status and Trends used a correlation coefficient (r) to determine the accuracy of initial calibrations. The laboratory deviated from the protocols by measuring the %RSDs from relative response factors for each initial calibration. The laboratory established the %RSD must be less than or equal to 25% for 90% of all compounds and less than or equal to 35% for all compounds. The reviewer used a QC criterion of 25% for all compounds for the %RSDs.

Delta-BHC, PCB-52, and PCB-101 exceeded the QC limits on the RTX-5 column for the initial calibration performed on 11/4/96. In addition, delta-BHC exceeded the QC limits on the DB-17 column. Delta-BHC and PCB-126 exceeded the QC limits for the RTX-5 column and delta-BHC and PCB-52 exceeded the QC limits on the DB-17 column for the initial calibration performed on 11/13/96. Detects for delta-BHC and PCB-52 were qualified "J" and nondetects "UJ" in all samples. Detects for PCB-101 were qualified "J" and nondetects "UJ" in all samples except MC206DL, MC213DL, MC227DL, and MC232DL. No qualifications were assigned for PCB-126.

### 2.3.3 Continuing Calibration

No QC limits have been established for continuing calibration standards by the Status and Trends protocols. The laboratory established a %D less than or equal to 25% for 90% of the target compounds and less than or equal to 35% for all compounds. For validation purposes, the reviewer used a QC criterion of 25% for the %Ds. All continuing calibration standard %Ds reported from the RTX-5 column and DB-17 column were within the QC limits.

## 2.4 BLANKS

### 2.4.1 Instrument Blanks

No instrument blanks were analyzed for this SDG. NOAA Status and Trends protocols do not suggest the analysis of instrument blanks; therefore, no evaluation of the data was given based on instrument blanks.

### 2.4.2 Method Blanks

NOAA Status and Trends protocols suggested method blanks were acceptable if no target compound detects were found 3X above the MDLs. The laboratory further qualified the QC limits for blanks, stating that no more than 2 target analytes could exceed 3X the MDLs. Because the reporting limits and the MDLs were the same for this SDG (see Section 2.11), the reviewer chose a more conservative QC criteria. The CLP SOW (3/90) criteria for method blanks was used to evaluate the data. Validation procedures were based on the Ogden DVP-4, Revision 2, which states no target compounds above the reporting limits.

One water method blank was analyzed with this SDG. PCB-138 was detected in the method blank but below the reporting limit. No qualifications were deemed necessary by the reviewer.

## 2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

The laboratory analyzed one SRM in lieu of a blank spike/blank spike duplicate. The QC criteria established to evaluate the matrix spike/ matrix spike duplicate was used by the laboratory for the LCS. Because the Status and Trends protocols did not address LCSs and the established limits were stricter than those in the CLP SOW (3/90), the reviewer deemed the limits acceptable. All target analytes met the QC criteria; therefore, no qualifications were required.

## 2.6 SURROGATE RECOVERY

The laboratory established surrogate recovery QC limits that were stricter than those applied in the Status and Trends protocols. Surrogate recoveries were calculated and reported for the RTX-5 column only; therefore, surrogate recovery evaluation was limited to the data from the RTX-5 column. The surrogate recovery PCB-198 exceeded the QC limits 50 to 125 percent in samples MC206 and MC232. In addition, the percent recovery for PCB-103 exceeded the QC limits for MC206. Review of the raw data indicated that elevated recoveries were caused by high concentrations of target compounds. All detects were qualified as estimated, "J" in MC206 and MC232. Nondetects were not qualified.

In addition to surrogates PCB-103 and PCB-198, the laboratory identified an additional surrogate, 4,4'-dibromo-octafluoro-biphenyl (DBOFB). Percent recoveries for DBOFB were reported in the raw data, but not on the summary forms. No historical data or QC limits were provided for DBOFB; therefore, recoveries for DBOFB were not evaluated by the reviewer

## 2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

The MS/MSD analyses were performed on sample MA718. Matrix spike recoveries were recalculated from the raw data. No transcription or calculation errors were noted. All target compounds were within established QC limits of 50 to 125 percent; therefore, no qualifications were required. The reviewer noted that the QC limits for MS/MSD results were stricter than those in the Status and Trends protocols.

## 2.8 SAMPLE CLEANUP PERFORMANCE

GPC cleanup was performed for all samples in this SDG. No QC criteria has been established for cleanup procedures by NOAA Status and Trends. Samples were evaluated based on surrogate recoveries, matrix spike recoveries, and SRM recoveries. The GPC cleanups were deemed acceptable and no qualifications were required.

## 2.9 FIELD QC SAMPLES

Field QC samples are evaluated, and if necessary, qualified based only on method blanks. Any remaining detects are used to evaluate the associated samples. The following are findings associated with field QC samples:

### 2.9.1 Field Blanks and Equipment Rinsates

The CTO 136 Analytical Summary Table identify samples MV011, MV012, and MV013 (from SDG OMISW01) as the equipment rinsates and sample MV010 (from SDG OMISW01) as the field blank. Target compounds were identified in the field blank and equipment rinsates; however, target compound detects in the samples were greater than 5× the concentrations in the field QC and no qualifications were required.

### 2.9.2 Field Duplicates

Samples MA713/MA714, MC191/MC192, and MC215/MC216 were the field duplicate samples associated with this SDG. Several target compounds for all duplicate pairs were detected in one sample only. In addition, some RPDs exceeded 100%. No qualifications are assigned to the data based on field duplicate results.

## 2.10 COMPOUND IDENTIFICATION

Compound identification was performed by the reviewer. Possible false negative detects were eliminated upon examination of the chromatograms and quantitation sheets by the reviewer. All detected analytes were confirmed by second column confirmation. Some samples exhibited elevated baselines occurring after 65 minutes into the run. Based on the surrogate recovery for PCB 198 and a comparison of raw data to chromatograms from low level standards, the reviewer determined that target analyte peaks, if present, could be identified.

The laboratory quantitated several compounds without second column confirmation. These compounds were qualified by the laboratory as "NJ" or "N." In addition, several compounds were reported below the reporting limit and at levels less than ½ the MDL. These compounds were qualified by the laboratory as "J." Using ½ the MDL as a basis for professional judgement, the reviewer identified all compounds quantified from a single column and several "J" compounds reported by the laboratory as false positives. The reporting concentrations were changed to the reporting limits and the qualifiers changed to nondetects, "U."

Cis-nonachlor was reported on the Form Is for all samples; however, cis-nonachlor was not identified as a target compound. As a result, the cis-nonachlor was not validated. No qualifications were required.

## 2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantification was verified in the samples in this SDG. No %Ds between two the columns were calculated or reported for target analyte detects. The RTX-5 column served as the primary column for all target compounds, with the exception of PCB 8, alpha-BHC, endosulfan I, 2,4'-DDE and in some cases, PCB-138 , which were quantified from the DB-17 column. The confirmation column was used for confirmation of analytes and no quantification occurred from the column. Review of the raw data confirmed that target analytes were present on both columns and quantification was performed on the correct primary column; therefore no evaluation was given to the inter-column %D information. Several compound were detected but at a level less than the reporting limits and above the MDL. Raw data was reviewed to eliminate the potential for false positives. These compounds were qualified as estimated "J."

Due to high concentrations of target analytes, MC190, MC191, MC192, MC199, MC202, MC206, MC207, MC213, MC227, and MC232 were reanalyzed at dilutions. With the exception of PCB-206 in sample MC232DL, all target compounds exceeding the linear range in the samples were rejected, "R." PCB-206 exceeded the linear range in sample MC232, but was below the reporting limit in MC232DL. As a result, PCB-206 was rejected, "R" in sample MC232DL and was qualified as estimated, "J" in sample MC232. With the exception of 4,4'-DDE and 4,4'-DDD in sample MC232DL and 4,4-DDE in sample MC206, target compounds reported below the reporting limit were rejected, "R" in the dilutions. Compounds 4,4'-DDE and 4,4'-DDD were reported from the MC232DL and MC206DL and qualified as estimated, "J."

Because no CRQL limits have been established for these methods, CRQLs were determined by an MDL study performed by the laboratory. Copies of the MDL study were included with the raw data. Verification of the raw data confirmed the correct CRQLs were applied. No qualifications were required.

# 1D
# PCB ORGANICS ANALYSIS DATA SHEET



**EPA SAMPLE NO.**

MA713

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3047

**Sample wt/vol:** 0.0083 Kg **Lab File ID:** 3,1105963A,14,1

**% Moisture:** 67.80 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/17/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/07/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| ompound from Column: | DB-17 Lab File ID: 3,1105963A,14,1 | | | | |
| 4883437 | PCB-8 (2,4') | 0.480 | | | |
| ompound from Column: | RTX-5 Lab File ID: 2,1105962A,14,1 | | | | |
| 7680652 | PCB-18 (2,2',5) | 0.270 | | | |
| 012375 | PCB-28 (2,4,4') | ~~0.062~~ 0.240 | ~~UNJ~~ | U | + |
| 5693993 | PCB-52 (2,2',5,5') | 0.450 | U | U | |
| 1464395 | PCB-44 (2,2',3,5') | 0.210 | U | UJ | C |
| 2598100 | PCB-66 (2,3',4,4') | ~~0.051~~ 0.350 | ~~UNJ~~ | U | + |
| 7680732 | PCB-101 (2,2',3,5,5') | ~~0.380~~ 1.100 | ~~UNJ~~ | UJ | +, C |
| 2598133 | PCB-77 (3,3',4,4') | 0.460 | U | U | |
| 1508006 | PCB-118 (2,3',4,4',5) | 1.200 | U | U | |
| 5065271 | PCB-153 (2,2',4,4',5,5') | 3.000 | | | |
| 2598144 | PCB-105 (2,3,3',4,4') | ~~0.140~~ 0.260 | ~~UNJ~~ | U | + |
| 5065282 | PCB-138 (2,2',3,4,4',5') | 1.500 | J | J | |
| 7465288 | PCB-126 (3,3',4,4',5) | 0.380 | U | U | |
| 2663680 | PCB-187 (2,2',3,4',5,5',6) | 1.400 | | | |
| 3380073 | PCB-128 (2,2',3,3',4,4') | 0.610 | U | U | |
| 5065293 | PCB-180 (2,2',3,4,4',5,5') | 2.600 | | | |
| 5065306 | PCB-170 (2,2',3,3',4,4',5) | 0.760 | | | |
| 2663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.330 | J | J | |
| 0186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.380 | | | |
| 051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.200 | U | U | |

**OGDEN VALIDATED**

**LEVEL D**

12/18/96

# PCB ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MA714

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Name:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3048

**Sample wt/vol:** 0.0075 Kg **Lab File ID:** 3,1105963A,17,1

**% Moisture:** 70.30 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/17/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/07/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1105963A,17,1 | | | | |
| 4883437 | PCB-8 (2,4') | 0.410 | | | |
| Compound from Column: | RTX-5 Lab File ID: 2,1105962A,17,1 | | | | |
| 7680652 | PCB-18 (2,2',5) | 0.280 | U | U | |
| 012375 | PCB-28 (2,4,4') | 0.270 | U | U | |
| 5693993 | PCB-52 (2,2',5,5') | 0.500 | U | UJ | C |
| 1464395 | PCB-44 (2,2',3,5') | 0.230 | U | U | |
| 2598100 | PCB-66 (2,3',4,4') | ~~0.110~~ 0.380 | UJ | U | + |
| 7680732 | PCB-101 (2,2',3,5,5') | ~~0.320~~ 1.20 | UJ | UJ | C,+ |
| 2598133 | PCB-77 (3,3',4,4') | 0.510 | U | U | |
| 1508006 | PCB-118 (2,3',4,4',5) | 1.400 | U | U | |
| 506 | PCB-153 (2,2',4,4',5,5') | 6.400 | | | |
| 259 | PCB-105 (2,3,3',4,4') | 0.360 | | | |
| 5065282 | PCB-138 (2,2',3,4,4',5') | 3.600 | | | |
| 7465288 | PCB-126 (3,3',4,4',5) | 0.420 | U | U | |
| 2663680 | PCB-187 (2,2',3,4',5,5',6) | 2.000 | | | |
| 8380073 | PCB-128 (2,2',3,3',4,4') | ~~0.270~~ 0.670 | UJ | U | + |
| 6065293 | PCB-180 (2,2',3,4,4',5,5') | 3.800 | | | |
| 5065306 | PCB-170 (2,2',3,3',4,4',5) | 1.700 | | | |
| 2663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.390 | J | J | |
| 0186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.340 | J | J | |
| 051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | ~~0.110~~ ~~0.200~~ 0.220 | UJ | UJ | + |

**OGDEN VALIDATED**

**LEVEL D**

12/18/96

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA718

ab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

ab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT02

latrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3049

ample wt/vol: 0.0071 Kg Lab File ID: 3,1105963A,18,1

% Moisture: 72.30 decanted: (Y/N) Date Received: 09/30/96

xtraction: (SepF/Cont/Sonc) Date Extracted: 10/16/96

oncentrated Extract Volume: 1.0000(mL) Date Analyzed: 11/07/96

njection Volume: 2 (uL) Dilution Factor: 1.0000

PC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

| as No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| mpound from Column: | DB-17 Lab File ID: 3,1105963A,18,1 | | | | |
| 883437 | PCB-8 (2,4') | 0.820 | | | |
| mpound from Column: | RTX-5 Lab File ID: 2,1105962A,18,1 | | | | |
| 680652 | PCB-18 (2,2',5) | 0.300 | U | U | |
| 12375 | PCB-28 (2,4,4') | 0.290 | U | | |
| 693993 | PCB-52 (2,2',5,5') | 0.520 | U | UJ | C |
| 464395 | PCB-44 (2,2',3,5') | 0.240 | U | | |
| 598100 | PCB-66 (2,3',4,4') | 0.410 | U | | |
| 880732 | PCB-101 (2,2',3,5,5') | ~~0.180~~ 1.300 | ~~UNJ~~ | UJ | +, C |
| 598133 | PCB-77 (3,3',4,4') | 0.540 | U | U | |
| 508006 | PCB-118 (2,3',4,4',5) | 1.400 | U | U | |
| 065271 | PCB-153 (2,2',4,4',5,5') | 0.980 | J | J | |
| 598144 | PCB-105 (2,3,3',4,4') | 0.300 | U | U | |
| 065282 | PCB-138 (2,2',3,4,4',5') | ~~1.000~~ 2.900 | ~~UJ~~ | U | + |
| 465288 | PCB-126 (3,3',4,4',5) | 0.440 | U | U | |
| 663680 | PCB-187 (2,2',3,4',5,5',6) | ~~0.370~~ 1.000 | ~~UJ~~ | U | + |
| 380073 | PCB-128 (2,2',3,3',4,4') | 0.710 | U | U | |
| 065293 | PCB-180 (2,2',3,4,4',5,5') | 0.680 | | | |
| 065306 | PCB-170 (2,2',3,3',4,4',5) | 0.180 | J | J | |
| 663782 | PCB-195 (2,2',3,3',4,4',5,6) | ~~0.088~~ 0.500 | ~~UJ~~ | U | + |
| 186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.220 | J | J | |
| 51243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | ~~0.053~~ 0.230 | ~~UNJ~~ | U | + |

OGDEN VALIDATED

LEVEL D

12/18/96

# PCB ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MC190

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3027

**Sample wt/vol:** 0.0082 Kg **Lab File ID:** 3,1105963,14,1

**% Moisture:** 67.20 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1105963,14,1 | | | | |
| 4883437 | PCB-8 (2,4') | 1.700 | | | |
| Compound from Column: | RTX-5 Lab File ID: 2,1105962,14,1 | | | | |
| 7680652 | PCB-18 (2,2',5) | 2.000 | | | |
| 012375 | PCB-28 (2,4,4') | 3.200 | | | |
| 5693993 | PCB-52 (2,2',5,5') | 8.500 | | J | C |
| 1464395 | PCB-44 (2,2',3,5') | 2.200 | | | |
| 2598100 | PCB-66 (2,3',4,4') | 5.200 | | | |
| 7680732 | PCB-101 (2,2',3,5,5') | 33.000 | | ~~J~~ | ~~C~~ |
| 2598133 | PCB-77 (3,3',4,4') | 0.460 | U | UJ | C |
| 1508006 | PCB-118 (2,3',4,4',5) | 26.000 | | | |
| 506[illegible] | PCB-153 (2,2',4,4',5,5') | 180.000 | E | R | D |
| 259[illegible] | PCB-105 (2,3,3',4,4') | 7.200 | | | |
| 5065[illegible] | PCB-138 (2,2',3,4,4',5') | 110.000 | E | R | D |
| 7465288 | PCB-126 (3,3',4,4',5) | 0.380 | U | U | |
| 2663680 | PCB-187 (2,2',3,4',5,5',6) | 110.000 | E | R | D |
| 8380073 | PCB-128 (2,2',3,3',4,4') | 10.000 | | | |
| 6065293 | PCB-180 (2,2',3,4,4',5,5') | 140.000 | E | R | D |
| 5065306 | PCB-170 (2,2',3,3',4,4',5) | 97.000 | E | R | D |
| 2663782 | PCB-195 (2,2',3,3',4,4',5,6) | 27.000 | | | |
| 0186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 22.000 | | | |
| 051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 4.800 | | | |

**OGDEN VALIDATED**

**LEVEL D**

12/26/96

1D
PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC190DL

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT02

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3027DL

Sample wt/vol: 0.0082 Kg Lab File ID: 3,1105963B,1,1

% Moisture: 67.20 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/16/96

Concentrated Extract Volume: 10.0000(mL) Date Analyzed: 11/07/96

Injection Volume: 2 (uL) Dilution Factor: 10.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| ompound from Column: | DB-17 Lab File ID: 3,1105963B,1,1 | | | | |
| 4883437 | PCB-8 (2,4') | 3.200 | R | R | D |
| ompound from Column: | RTX-5 Lab File ID: 2,1105962B,1,1 | | | | |
| 7680652 | PCB-18 (2,2',5) | 3.400 | R | R | D |
| 012375 | PCB-28 (2,4,4') | 5.700 | R | ↓ | ↓ |
| 693993 | PCB-52 (2,2',5,5') | 11.000 | R | ↓ | ↓ |
| 464395 | PCB-44 (2,2',3,5') | 2.100 | UR | ↓ | ↓ |
| 598100 | PCB-66 (2,3',4,4') | 3.500 | UR | ↓ | ↓ |
| 680732 | PCB-101 (2,2',3,5,5') | 47.000 | R | ↓ | ↓ |
| 598133 | PCB-77 (3,3',4,4') | 4.600 | UR | ↓ | ↓ |
| 508006 | PCB-118 (2,3',4,4',5) | 34.000 | R | R | D |
| 065271 | PCB-153 (2,2',4,4',5,5') | 260.000 | D | | |
| 598144 | PCB-105 (2,3,3',4,4') | 13.000 | R | R | D |
| 5065282 | PCB-138 (2,2',3,4,4',5') | 150.000 | D | | |
| 7465288 | PCB-126 (3,3',4,4',5) | 3.800 | UR | R | D |
| 663680 | PCB-187 (2,2',3,4',5,5',6) | 160.000 | D | | |
| 3380073 | PCB-128 (2,2',3,3',4,4') | 12.000 | R | R | D |
| 5065293 | PCB-180 (2,2',3,4,4',5,5') | 260.000 | D | | |
| 5065306 | PCB-170 (2,2',3,3',4,4',5) | 120.000 | D | | |
| 2663782 | PCB-195 (2,2',3,3',4,4',5,6) | 32.000 | R | R | D |
| 0186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 25.000 | R | ↓ | ↓ |
| 051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 5.600 | R | ↓ | ↓ |

OGDEN VALIDATED

LEVEL D

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC191

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3028

**Sample wt/vol:** 0.0069 Kg **Lab File ID:** 3,1105963,15,1

**% Moisture:** 73.40 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1105963,15,1 | | | | |
| 34883437 | PCB-8 (2,4') | 1.000 | | | |
| Compound from Column: | RTX-5 Lab File ID: 2,1105962,15,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.970 | | | |
| 7012375 | PCB-28 (2,4,4') | 1.700 | | | |
| 35693993 | PCB-52 (2,2',5,5') | 2.600 | | J | C |
| 41464395 | PCB-44 (2,2',3,5') | 0.250 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 2.400 | | ~~J~~ J | C |
| 37680732 | PCB-101 (2,2',3,5,5') | 9.900 | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.560 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 15.000 | | | |
| 3506[illegible]1 | PCB-153 (2,2',4,4',5,5') | 110.000 | E | R | D |
| 325[illegible] | PCB-105 (2,3,3',4,4') | 4.300 | | | |
| 350[illegible]2 | PCB-138 (2,2',3,4,4',5') | 70.000 | E | R | D |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.450 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 58.000 | E | R | D |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 5.300 | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 110.000 | E | R | D |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 49.000 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 12.000 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 8.600 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 3.000 | | | |

**OGDEN VALIDATED**

**LEVEL D**

12/20/96

1D
PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC191DL

.ab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

.ab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT02

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3028DL

Sample wt/vol: 0.0069 Kg Lab File ID: 3,1105963B,2,1

% Moisture: 73.40 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/16/96

Concentrated Extract Volume: 5.0000(mL) Date Analyzed: 11/07/96

Injection Volume: 2 (uL) Dilution Factor: 5.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1105963B,2,1 | | | | |
| 1883437 | PCB-8 (2,4') | 1.200 | UR | R | D |
| Compound from Column: | RTX-5 Lab File ID: 2,1105962B,2,1 | | | | |
| 7680652 | PCB-18 (2,2',5) | 1.600 | UR | R | D |
| 012375 | PCB-28 (2,4,4') | 2.400 | R | | |
| 5693993 | PCB-52 (2,2',5,5') | 3.400 | R | | |
| 464395 | PCB-44 (2,2',3,5') | 1.200 | UR | | |
| 2598100 | PCB-66 (2,3',4,4') | 2.100 | UR | | |
| 7680732 | PCB-101 (2,2',3,5,5') | 13.000 | R | | |
| 2598133 | PCB-77 (3,3',4,4') | 2.800 | UR | | |
| 1508006 | PCB-118 (2,3',4,4',5) | 19.000 | R | | |
| 5065271 | PCB-153 (2,2',4,4',5,5') | 160.000 | D | | |
| 2598144 | PCB-105 (2,3,3',4,4') | 7.300 | R | R | D |
| 5065282 | PCB-138 (2,2',3,4,4',5') | 92.000 | D | | |
| 7465288 | PCB-126 (3,3',4,4',5) | 2.300 | UR | R | D |
| 2663680 | PCB-187 (2,2',3,4',5,5',6) | 79.000 | D | | |
| 3380073 | PCB-128 (2,2',3,3',4,4') | 6.300 | R | R | D |
| 5065293 | PCB-180 (2,2',3,4,4',5,5') | 140.000 | D | | |
| 5065306 | PCB-170 (2,2',3,3',4,4',5) | 60.000 | R | R | D |
| 2663782 | PCB-195 (2,2',3,3',4,4',5,6) | 16.000 | R | | |
| 0186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 11.000 | R | | |
| 051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 3.400 | R | | |

OGDEN VALIDATED

LEVEL D

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC192

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**M (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3029

**Sample wt/vol:** 0.0076 Kg **Lab File ID:** 3,1105963,16,1

**% Moisture:** 69.80 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1105963,16,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.900 | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1105962,16,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.980 | | | |
| 7012375 | PCB-28 (2,4,4') | 0.780 | | | |
| 35693993 | PCB-52 (2,2',5,5') | 1.000 | | J | C |
| 41464395 | PCB-44 (2,2',3,5') | 0.180 | J | J | |
| 32598100 | PCB-66 (2,3',4,4') | 1.000 | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 4.500 | | J | C |
| 32598133 | PCB-77 (3,3',4,4') | 0.500 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 10.000 | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 73.000 | E | R | D |
| 325[illegible]4 | PCB-105 (2,3,3',4,4') | 3.200 | | | |
| 350[illegible] | PCB-138 (2,2',3,4,4',5') | 45.000 | E | R | D |
| 574[illegible]8 | PCB-126 (3,3',4,4',5) | 0.410 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 40.000 | E | R | D |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 3.900 | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 67.000 | E | R | D |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 33.000 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 7.200 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 4.300 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.810 | | | |

**OGDEN VALIDATED**

**LEVEL D**

1D
PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC192DL

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT02

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3029DL

Sample wt/vol: 0.0076 Kg Lab File ID: 3,1105963B,3,1

% Moisture: 69.80 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/16/96

Concentrated Extract Volume: 5.0000(mL) Date Analyzed: 11/07/96

Injection Volume: 2 (uL) Dilution Factor: 5.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1105963B,3,1 | | | | |
| 4883437 | PCB-8 (2,4') | 1.100 | UR | R | D |
| Compound from Column: | RTX-5 Lab File ID: 2,1105962B,3,1 | | | | |
| 7680652 | PCB-18 (2,2',5) | 1.400 | UR | R | D |
| 012375 | PCB-28 (2,4,4') | 1.100 | JR | | |
| 5693993 | PCB-52 (2,2',5,5') | 0.800 | JR | | |
| 1464395 | PCB-44 (2,2',3,5') | 1.100 | UR | | |
| 2598100 | PCB-66 (2,3',4,4') | 1.900 | UR | | |
| 7680732 | PCB-101 (2,2',3,5,5') | 5.500 | JR | | |
| 2598133 | PCB-77 (3,3',4,4') | 2.500 | UR | | |
| 1508006 | PCB-118 (2,3',4,4',5) | 13.000 | R | | |
| 5065271 | PCB-153 (2,2',4,4',5,5') | 110.000 | D | | |
| 2598144 | PCB-105 (2,3,3',4,4') | 4.300 | R | R | D |
| 5065282 | PCB-138 (2,2',3,4,4',5') | 59.000 | D | | |
| 7465288 | PCB-126 (3,3',4,4',5) | 2.100 | UR | R | D |
| 2663680 | PCB-187 (2,2',3,4',5,5',6) | 54.000 | D | | |
| 8380073 | PCB-128 (2,2',3,3',4,4') | 4.700 | R | R | D |
| 6065293 | PCB-180 (2,2',3,4,4',5,5') | 85.000 | D | | |
| 5065306 | PCB-170 (2,2',3,3',4,4',5) | 40.000 | R | R | D |
| 2663782 | PCB-195 (2,2',3,3',4,4',5,6) | 9.500 | R | | |
| 0186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 5.400 | R | | |
| 051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.990 | JR | | |

OGDEN VALIDATED

LEVEL D

1D
# PCB ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC194

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3030

**Sample wt/vol:** 0.0088 Kg **Lab File ID:** 3,1105963,17,1

**% Moisture:** 65.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1105963,17,1 | | | | |
| 34883437 | PCB-8 (2,4') | 2.800 | | | |
| Compound from Column: | RTX-5 Lab File ID: 2,1105962,17,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 1.100 | | | |
| 7012375 | PCB-28 (2,4,4') | ~~0.200~~ 0.230 | ~~U~~ | U | + |
| 35693993 | PCB-52 (2,2',5,5') | 5.000 | | J | C |
| 41464395 | PCB-44 (2,2',3,5') | 0.200 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.330 | U | U | |
| 37680732 | PCB-101 (2,2',3,5,5') | 1.900 | | J | C |
| 32598133 | PCB-77 (3,3',4,4') | 0.430 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 1.200 | U | U | |
| 350[illegible]1 | PCB-153 (2,2',4,4',5,5') | 15.000 | | | |
| 325[illegible] | PCB-105 (2,3,3',4,4') | 0.240 | U | U | |
| 350[illegible]2 | PCB-138 (2,2',3,4,4',5') | 7.800 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.360 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 8.000 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.460 | J | J | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 14.000 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 5.900 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 1.800 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 1.300 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.260 | | | |

OGDEN VALIDATED

LEVEL D

12/18/96

1D
# PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC199

Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT02

:trix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3031

:ple wt/vol: 0.0081 Kg Lab File ID: 3,1105963,18,1

:oisture: 68.30 decanted: (Y/N) Date Received: 09/30/96

:action: (SepF/Cont/Sonc) Date Extracted: 10/16/96

:ncentrated Extract Volume: 1.0000(mL) Date Analyzed: 11/05/96

:ction Volume: 2 (uL) Dilution Factor: 1.0000

:C Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/Kg

| :s No: | Compound | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| :mpound from Column: | DB-17 | Lab File ID: 3,1105963,18,1 | | | |
| 383437 | PCB-8 (2,4') | 1.500 | | | |
| :mpound from Column: | RTX-5 | Lab File ID: 2,1105962,18,1 | | | |
| 680652 | PCB-18 (2,2',5) | 1.900 | | | |
| 12375 | PCB-28 (2,4,4') | 4.700 | | | |
| 693993 | PCB-52 (2,2',5,5') | 6.000 | | J | C |
| 464395 | PCB-44 (2,2',3,5') | 3.000 | | | |
| 598100 | PCB-66 (2,3',4,4') | 6.000 | | | |
| 680732 | PCB-101 (2,2',3,5,5') | 14.000 | | J | C |
| 598133 | PCB-77 (3,3',4,4') | 0.470 | U | U | |
| 508006 | PCB-118 (2,3',4,4',5) | 12.000 | | | |
| 065271 | PCB-153 (2,2',4,4',5,5') | 51.000 | E | R | D |
| 598144 | PCB-105 (2,3,3',4,4') | 4.500 | | | |
| 065282 | PCB-138 (2,2',3,4,4',5') | 36.000 | | | |
| 465288 | PCB-126 (3,3',4,4',5) | 0.380 | U | U | |
| 363680 | PCB-187 (2,2',3,4',5,5',6) | 35.000 | | | |
| 380073 | PCB-128 (2,2',3,3',4,4') | 3.700 | | | |
| 065293 | PCB-180 (2,2',3,4,4',5,5') | 51.000 | E | R | D |
| 065306 | PCB-170 (2,2',3,3',4,4',5) | 22.000 | | | |
| 363782 | PCB-195 (2,2',3,3',4,4',5,6) | 5.600 | | | |
| 186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 4.500 | | | |
| 51243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.670 | | | |

OGDEN VALIDATED
LEVEL D

1D
# PCB ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC199DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3031DL

**Sample wt/vol:** 0.0081 Kg **Lab File ID:** 3,1105963B,4,1

**% Moisture:** 68.30 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 2.0000(mL) **Date Analyzed:** 11/07/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 2.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1105963B,4,1 | | | | |
| 34883437 | PCB-8 (2,4') | 1.300 | R | R | D |
| Compound from Column: | RTX-5 Lab File ID: 2,1105962B,4,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 2.000 | R | R | D |
| 7012375 | PCB-28 (2,4,4') | 6.200 | R | | |
| 35693993 | PCB-52 (2,2',5,5') | 6.300 | R | | |
| 41464395 | PCB-44 (2,2',3,5') | 7.000 | R | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.710 | UR | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 14.000 | R | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.940 | UR | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 13.000 | R | | |
| 35[illegible]1 | PCB-153 (2,2',4,4',5,5') | 55.000 | D | | |
| 32[illegible]4 | PCB-105 (2,3,3',4,4') | 4.300 | R | R | D |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 37.000 | D | R | D |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.770 | UR | R | D |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 37.000 | D | R | D |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 3.700 | R | R | D |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 51.000 | D | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 21.000 | R | R | D |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 5.600 | R | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 4.600 | R | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.550 | R | | |

OGDEN VALIDATED

LEVEL D

Revision I 1/13/97

1D
PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC200



b Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

b Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT02

trix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3032

mple wt/vol: 0.0071 Kg Lab File ID: 3,1105963,19,1

Moisture: 72.50 decanted: (Y/N) Date Received: 09/30/96

xtraction: (SepF/Cont/Sonc) Date Extracted: 10/16/96

Concentrated Extract Volume: 1.0000(mL) Date Analyzed: 11/05/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

| as No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | DUAL CODE |
|---|---|---|---|---|---|
| pound from Column: | DB-17 Lab File ID: 3,1105963,19,1 | | | | |
| 37 | PCB-8 (2,4') | 1.200 | | | |
| pound from Column: | RTX-5 Lab File ID: 2,1105962,19,1 | | | | |
| 80652 | PCB-18 (2,2',5) | ~~0.480~~ 0.300 | U,X | U | + |
| 2375 | PCB-28 (2,4,4') | 0.510 | | | |
| 693993 | PCB-52 (2,2',5,5') | 0.540 | | J | c |
| 464395 | PCB-44 (2,2',3,5') | 0.240 | U | U | |
| 2598100 | PCB-66 (2,3',4,4') | 0.350 | J | J | |
| 680732 | PCB-101 (2,2',3,5,5') | 1.200 | J | J | c |
| 2598133 | PCB-77 (3,3',4,4') | 0.540 | U | U | |
| 1508006 | PCB-118 (2,3',4,4',5) | 3.100 | | | |
| 5065271 | PCB-153 (2,2',4,4',5,5') | 14.000 | | | |
| 2598144 | PCB-105 (2,3,3',4,4') | 1.100 | | | |
| 5065282 | PCB-138 (2,2',3,4,4',5') | 11.000 | | | |
| 7465288 | PCB-126 (3,3',4,4',5) | 0.440 | U | U | |
| 2663680 | PCB-187 (2,2',3,4',5,5',6) | 7.700 | | | |
| 3380073 | PCB-128 (2,2',3,3',4,4') | 0.650 | J | J | |
| 5065293 | PCB-180 (2,2',3,4,4',5,5') | 12.000 | | | |
| 5065306 | PCB-170 (2,2',3,3',4,4',5) | 4.500 | | | |
| 2663782 | PCB-195 (2,2',3,3',4,4',5,6) | 1.200 | | | |
| 0186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 1.200 | | | |
| 051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.370 | | | |

**OGDEN VALIDATED**
**LEVEL D**

12/18/96

# PCB ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MC202

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3033

**Sample wt/vol:** 0.0076 Kg **Lab File ID:** 3,1105963A,1,1

**% Moisture:** 71.60 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/06/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1105963A,1,1 | | | | |
| 34883437 | PCB-8 (2,4') | 3.800 | | | |
| Compound from Column: | RTX-5 Lab File ID: 2,1105962A,1,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 2.300 | | | |
| 7012375 | PCB-28 (2,4,4') | 6.200 | | | |
| 35693993 | PCB-52 (2,2',5,5') | 14.000 | | J | C |
| 41464395 | PCB-44 (2,2',3,5') | 4.900 | | | |
| 32598100 | PCB-66 (2,3',4,4') | 5.200 | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 45.000 | E | R | D |
| 32598133 | PCB-77 (3,3',4,4') | 0.510 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 32.000 | | | |
| 3506[illegible] | PCB-153 (2,2',4,4',5,5') | 200.000 | E | R | D |
| 3259[illegible] | PCB-105 (2,3,3',4,4') | 7.900 | | | |
| 3506[illegible] | PCB-138 (2,2',3,4,4',5') | 130.000 | E | R | D |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.410 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 120.000 | E | R | D |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 12.000 | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 150.000 | E | R | D |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 93.000 | E | R | D |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 25.000 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 19.000 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.900 | | | |

OGDEN VALIDATED

LEVEL D

/18/96

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC202DL

ab Name: Arthur D. Little, Inc.
Contract: N62742-90-D-0019
ab Code: ADLMA
Case No.: CTO136
ADL Project No.: 69084
SDG No.: OMIFT02
atrix: (soil/water/tissue) TISSUE
Lab Sample ID: 96B3033DL
ample wt/vol: 0.0076 Kg
Lab File ID: 3,1105963B,5,1
% Moisture: 71.60 decanted: (Y/N)
Date Received: 09/30/96
Extraction: (SepF/Cont/Sonc)
Date Extracted: 10/16/96
Concentrated Extract Volume: 10.0000(mL)
Date Analyzed: 11/07/96
Injection Volume: 2 (uL)
Dilution Factor: 10.0000
GPC Cleanup: (Y/N) Y
pH:
Split Factor: 2.0000
Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/Kg

| Cas No: | Compound | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| ompound from Column: | DB-17 | Lab File ID: 3,1105963B,5,1 | | | |
| 4883437 | PCB-8 (2,4') | 2.900 | R | R | D |
| ompound from Column: | RTX-5 | Lab File ID: 2,1105962B,5,1 | | | |
| 7680652 | PCB-18 (2,2',5) | 2.700 | JR | R | D |
| 012375 | PCB-28 (2,4,4') | 9.000 | R | | |
| 5693993 | PCB-52 (2,2',5,5') | 16.000 | R | | |
| 1464395 | PCB-44 (2,2',3,5') | 5.600 | R | | |
| 2598100 | PCB-66 (2,3',4,4') | 3.800 | UR | | |
| 7680732 | PCB-101 (2,2',3,5,5') | 63.000 | D | J | C |
| 2598133 | PCB-77 (3,3',4,4') | 5.100 | UR | R | D |
| 1508006 | PCB-118 (2,3',4,4',5) | 41.000 | R | | |
| 5065271 | PCB-153 (2,2',4,4',5,5') | 300.000 | R | | |
| 2598144 | PCB-105 (2,3,3',4,4') | 16.000 | R | | |
| 5065282 | PCB-138 (2,2',3,4,4',5') | 180.000 | D | | |
| 7465288 | PCB-126 (3,3',4,4',5) | 4.100 | UR | R | D |
| 2663680 | PCB-187 (2,2',3,4',5,5',6) | 170.000 | D | | |
| 8380073 | PCB-128 (2,2',3,3',4,4') | 13.000 | R | R | D |
| 6065293 | PCB-180 (2,2',3,4,4',5,5') | 250.000 | D | | |
| 5065306 | PCB-170 (2,2',3,3',4,4',5) | 110.000 | D | | |
| 2663782 | PCB-195 (2,2',3,3',4,4',5,6) | 28.000 | R | R | D |
| 0186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 21.000 | R | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.950 | JR | | |

**OGDEN VALIDATED**

**LEVEL D**

Revision I 1/13/97

1D
# PCB ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC206

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3034

**Sample wt/vol:** 0.0077 Kg **Lab File ID:** 3,1105963A,2,1

**% Moisture:** 69.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/06/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL / CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1105963A,2,1 | | | | |
| 34883437 | PCB-8 (2,4') | 4.600 | | 4 | S |
| Compound from Column: | RTX-5 Lab File ID: 2,1105962A,2,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 3.200 | | 4 | S |
| 7012375 | PCB-28 (2,4,4') | 9.500 | | 4 | S |
| 35693993 | PCB-52 (2,2',5,5') | 20.000 | | 4 | C, S |
| 41464395 | PCB-44 (2,2',3,5') | 8.400 | | 4 | S |
| 32598100 | PCB-66 (2,3',4,4') | 14.000 | | 4 | S |
| 37680732 | PCB-101 (2,2',3,5,5') | 94.000 | E | R | D |
| 32598133 | PCB-77 (3,3',4,4') | 0.490 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 99.000 | E | R | D |
| 350[illegible] | PCB-153 (2,2',4,4',5,5') | 390.000 | E | R | D |
| 325[illegible] | PCB-105 (2,3,3',4,4') | 37.000 | | 4 | S |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 320.000 | E | R | D |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.400 | U | ~~R~~ U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 310.000 | E | R | D |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 44.000 | | 4 | S |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 190.000 | E | R | D |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 170.000 | E | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 99.000 | E | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 83.000 | E | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 3.900 | | 4 | S |

**OGDEN VALIDATED**

**LEVEL D**

12/20/96

1D
PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC206DL

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT02

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3034DL

Sample wt/vol: 0.0071 Kg Lab File ID: 3,1113963,7,1

% Moisture: 69.50 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/16/96

Concentrated Extract Volume: 40.0000(mL) Date Analyzed: 11/13/96

Injection Volume: 2 (uL) Dilution Factor: 40.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1113963,7,1 | | | | |
| 1883437 | PCB-8 (2,4') | 9.200 | UR | R | D |
| Compound from Column: | RTX-5 Lab File ID: 2,1113962,7,1 | | | | |
| 7680652 | PCB-18 (2,2',5) | 12.000 | UR | R | D |
| 012375 | PCB-28 (2,4,4') | 12.000 | R | | |
| 5693993 | PCB-52 (2,2',5,5') | 31.000 | R | | |
| 1464395 | PCB-44 (2,2',3,5') | 8.300 | JR | | |
| 2598100 | PCB-66 (2,3',4,4') | 16.000 | UR | | |
| 7680732 | PCB-101 (2,2',3,5,5') | 170.000 | D | | |
| 2598133 | PCB-77 (3,3',4,4') | 21.000 | UR | R | D |
| 1508006 | PCB-118 (2,3',4,4',5) | 150.000 | D | | |
| 5065271 | PCB-153 (2,2',4,4',5,5') | 1,100.000 | D | | |
| 2598144 | PCB-105 (2,3,3',4,4') | 55.000 | R | R | D |
| 5065282 | PCB-138 (2,2',3,4,4',5') | 640.000 | D | | |
| 7465288 | PCB-126 (3,3',4,4',5) | 18.000 | UR | R | D |
| 2663680 | PCB-187 (2,2',3,4',5,5',6) | 750.000 | D | | |
| 3380073 | PCB-128 (2,2',3,3',4,4') | 46.000 | R | R | D |
| 5065293 | PCB-180 (2,2',3,4,4',5,5') | 1,100.000 | D | | |
| 5065306 | PCB-170 (2,2',3,3',4,4',5) | 480.000 | D | | |
| 2663782 | PCB-195 (2,2',3,3',4,4',5,6) | 160.000 | D | | |
| 0186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 120.000 | D | | |
| 051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 4.100 | JR | R | D |

OGDEN VALIDATED

LEVEL D

12/20/96

# 1D
# PCB ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MC207

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3035

**Sample wt/vol:** 0.0071 Kg **Lab File ID:** 3,1105963A,5,1

**% Moisture:** 71.90 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/06/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1105963A,5,1 | | | | |
| 34883437 | PCB-8 (2,4') | 1.300 | | | |
| Compound from Column: | RTX-5 Lab File ID: 2,1105962A,5,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 1.400 | | | |
| 7012375 | PCB-28 (2,4,4') | 4.100 | | | |
| 35693993 | PCB-52 (2,2',5,5') | 9.600 | | J | C |
| 41464395 | PCB-44 (2,2',3,5') | 2.800 | | | |
| 32598100 | PCB-66 (2,3',4,4') | 5.100 | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 36.000 | | J | C |
| 32598133 | PCB-77 (3,3',4,4') | 0.540 | U | U | |
| 315[illegible]6 | PCB-118 (2,3',4,4',5) | 52.000 | E | R | D |
| 35[illegible]1 | PCB-153 (2,2',4,4',5,5') | 330.000 | E | R | D |
| 325[illegible]4 | PCB-105 (2,3,3',4,4') | 17.000 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 260.000 | E | R | D |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.440 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 220.000 | E | R | D |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 25.000 | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 180.000 | | R | D |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 150.000 | E | R | ~~R~~ D |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 53.000 | E | R | D |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 28.000 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 1.200 | | | |

**OGDEN VALIDATED**

**LEVEL D**

Revision I 1/13/97 12/20/96

1D
PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC207DL

.ab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

.ab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT02

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3035DL

Sample wt/vol: 0.0071 Kg Lab File ID: 3,1105963B,7,1

% Moisture: 71.90 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/16/96

Concentrated Extract Volume: 20.0000(mL) Date Analyzed: 11/07/96

Injection Volume: 2 (uL) Dilution Factor: 20.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | Qual Code |
|---|---|---|---|---|---|
| ompound from Column: | DB-17 Lab File ID: 3,1105963B,7,1 | | | | |
| 1883437 | PCB-8 (2,4') | 4.600 | UR | R | D |
| ompound from Column: | RTX-5 Lab File ID: 2,1105962B,7,1 | | | | |
| 7680652 | PCB-18 (2,2',5) | 6.000 | UR | R | D |
| )12375 | PCB-28 (2,4,4') | 4.700 | JR | | |
| 693993 | PCB-52 (2,2',5,5') | 12.000 | R | | |
| 464395 | PCB-44 (2,2',3,5') | 1.700 | JR | | |
| 598100 | PCB-66 (2,3',4,4') | 8.100 | UR | | |
| 680732 | PCB-101 (2,2',3,5,5') | 56.000 | R | | |
| 598133 | PCB-77 (3,3',4,4') | 11.000 | UR | | |
| 1508006 | PCB-118 (2,3',4,4',5) | 79.000 | D | | |
| 5065271 | PCB-153 (2,2',4,4',5,5') | 660.000 | D | | |
| 2598144 | PCB-105 (2,3,3',4,4') | 31.000 | R | R | D |
| 5065282 | PCB-138 (2,2',3,4,4',5') | 410.000 | D | | |
| 7465288 | PCB-126 (3,3',4,4',5) | 8.800 | UR | R | D |
| 2663680 | PCB-187 (2,2',3,4',5,5',6) | 370.000 | D | | |
| 3380073 | PCB-128 (2,2',3,3',4,4') | 31.000 | R | R | D |
| 5065293 | PCB-180 (2,2',3,4,4',5,5') | 660.000 | D | | |
| 5065306 | PCB-170 (2,2',3,3',4,4',5) | 300.000 | D | | |
| 2663782 | PCB-195 (2,2',3,3',4,4',5,6) | 71.000 | D | | |
| )186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 37.000 | R | R | D |
| )51243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 1.300 | JR | R | D |

OGDEN VALIDATED

LEVEL D

# PCB ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MC213

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3037

**Sample wt/vol:** 0.0084 Kg **Lab File ID:** 3,1105963A,6,1

**% Moisture:** 67.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/06/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1105963A,6,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.930 | | | |
| Compound from Column: | RTX-5 Lab File ID: 2,1105962A,6,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.790 | | | |
| 7012375 | PCB-28 (2,4,4') | 0.670 | | | |
| 35693993 | PCB-52 (2,2',5,5') | 0.690 | | J | C |
| 41464395 | PCB-44 (2,2',3,5') | 0.200 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.800 | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 2.600 | | J | C |
| 32598133 | PCB-77 (3,3',4,4') | 0.450 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 8.900 | | | |
| 350[illegible] | PCB-153 (2,2',4,4',5,5') | 55.000 | E | R | D |
| 325[illegible] | PCB-105 (2,3,3',4,4') | 2.900 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 34.000 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.370 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 30.000 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 3.200 | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 48.000 | E | R | D |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 24.000 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 5.900 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 3.700 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.600 | | | |

**OGDEN VALIDATED**

**LEVEL D**

# PCB ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MC213DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3037DL

**Sample wt/vol:** 0.0084 Kg **Lab File ID:** 3,1113963,8,1

**% Moisture:** 67.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 2.0000(mL) **Date Analyzed:** 11/13/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 2.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| ompound from Column: | DB-17 Lab File ID: 3,1113963,8,1 | | | | |
| 4883437 | PCB-8 (2,4') | 0.530 | R | R | D |
| ompound from Column: | RTX-5 Lab File ID: 2,1113962,8,1 | | | | |
| 7680652 | PCB-18 (2,2',5) | 0.510 | UR | R | D |
| 012375 | PCB-28 (2,4,4') | 0.750 | R | | |
| 5693993 | PCB-52 (2,2',5,5') | 0.440 | JR | | |
| 1464395 | PCB-44 (2,2',3,5') | 0.410 | UR | | |
| 2598100 | PCB-66 (2,3',4,4') | 0.680 | UR | | |
| 7680732 | PCB-101 (2,2',3,5,5') | 2.800 | R | | |
| 2598133 | PCB-77 (3,3',4,4') | 0.910 | UR | | |
| 1508006 | PCB-118 (2,3',4,4',5) | 9.600 | R | R | D |
| 5065271 | PCB-153 (2,2',4,4',5,5') | 63.000 | D | | |
| 2598144 | PCB-105 (2,3,3',4,4') | 3.500 | R | R | D |
| 5065282 | PCB-138 (2,2',3,4,4',5') | 37.000 | R | | |
| 7465288 | PCB-126 (3,3',4,4',5) | 0.740 | UR | | |
| 2663680 | PCB-187 (2,2',3,4',5,5',6) | 32.000 | R | | |
| 8380073 | PCB-128 (2,2',3,3',4,4') | 3.300 | R | R | D |
| 6065293 | PCB-180 (2,2',3,4,4',5,5') | 52.000 | D | | |
| 5065306 | PCB-170 (2,2',3,3',4,4',5) | 25.000 | R | R | D |
| 2663782 | PCB-195 (2,2',3,3',4,4',5,6) | 5.900 | R | | |
| )186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 4.000 | R | | |
| 051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.630 | R | | |

**OGDEN VALIDATED**

**LEVEL D**

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC214

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**La[illegible]e:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3038

**Sample wt/vol:** 0.0082 Kg **Lab File ID:** 3,1105963A,7,1

**% Moisture:** 68.40 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/06/96

**Injection Volume.** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1105963A,7,1 | | | | |
| 34883437 | PCB-8 (2,4') | 5.700 | | | |
| Compound from Column: | RTX-5 Lab File ID: 2,1105962A,7,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.260 | U | U | |
| 7012375 | PCB-28 (2,4,4') | ~~0.450~~ 0.250 | ~~UJ~~ | U | + |
| 35693993 | PCB-52 (2,2',5,5') | 0.450 | U | UJ | C |
| 41464395 | PCB-44 (2,2',3,5') | 0.210 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.350 | U | UJ | |
| 37680732 | PCB-101 (2,2',3,5,5') | 1.500 | | J | C |
| 32598133 | PCB-77 (3,3',4,4') | 0.470 | U | UJ | |
| 31508006 | PCB-118 (2,3',4,4',5) | 1.000 | J | J | |
| 350[illegible] | PCB-153 (2,2',4,4',5,5') | 13.000 | | | |
| 325[illegible] | PCB-105 (2,3,3',4,4') | 0.860 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 7.200 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.380 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 11.000 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.440 | J | J | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 12.000 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 4.300 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 1.400 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 1.400 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.250 | | | |

**OGDEN VALIDATED**

**LEVEL D**

12/18/96

1D
PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC215



**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3039

**Sample wt/vol:** 0.0097 Kg **Lab File ID:** 3,1105963A,8,1

**% Moisture:** 63.60 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/17/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/06/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| ompound from Column: | DB-17 Lab File ID: 3,1105963A,8,1 | | | | |
| 4883437 | PCB-8 (2,4') | 2.400 | | | |
| ompound from Column: | RTX-5 Lab File ID: 2,1105962A,8,1 | | | | |
| 7680652 | PCB-18 (2,2',5) | 0.220 | U | U | |
| 012375 | PCB-28 (2,4,4') | 0.210 | U | U | |
| 5693993 | PCB-52 (2,2',5,5') | 0.380 | U | UJ | C |
| 1464395 | PCB-44 (2,2',3,5') | 0.180 | U | U | |
| 2598100 | PCB-66 (2,3',4,4') | ~~0.350~~ ~~0.350~~ 0.300 | U~~J~~ | U | + |
| 7680732 | PCB-101 (2,2',3,5,5') | 2.300 | | J | C |
| 2598133 | PCB-77 (3,3',4,4') | 0.390 | U | U | |
| 1508006 | PCB-118 (2,3',4,4',5) | 2.500 | | | |
| 5065271 | PCB-153 (2,2',4,4',5,5') | 15.000 | | | |
| 2598144 | PCB-105 (2,3,3',4,4') | 0.720 | | | |
| 5065282 | PCB-138 (2,2',3,4,4',5') | 8.000 | | | |
| 7465288 | PCB-126 (3,3',4,4',5) | 0.320 | U | U | |
| 2663680 | PCB-187 (2,2',3,4',5,5',6) | 11.000 | | | |
| 8380073 | PCB-128 (2,2',3,3',4,4') | 0.510 | J | J | |
| 6065293 | PCB-180 (2,2',3,4,4',5,5') | 17.000 | | | |
| 5065306 | PCB-170 (2,2',3,3',4,4',5) | 5.200 | | | |
| 2663782 | PCB-195 (2,2',3,3',4,4',5,6) | 1.600 | | | |
| 0186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 2.700 | | | |
| 051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.660 | | | |

OGDEN VALIDATED

LEVEL D

12/18/96

1D
# PCB ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC216

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3040

**Sample wt/vol:** 0.0085 Kg **Lab File ID:** 3,1105963A,9,1

**% Moisture:** 66.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/17/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/06/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1105963A,9,1 | | | | |
| 14883437 | PCB-8 (2,4') | 1.600 | | | |
| Compound from Column: | RTX-5 Lab File ID: 2,1105962A,9,1 | | | | |
| 17680652 | PCB-18 (2,2',5) | 1.000 | | | |
| 7012375 | PCB-28 (2,4,4') | 0.240 | U | U | |
| 15693993 | PCB-52 (2,2',5,5') | 0.440 | U | UJ | C |
| 1464395 | PCB-44 (2,2',3,5') | 0.200 | U | U | |
| 12598100 | PCB-66 (2,3',4,4') | 0.340 | U | U | |
| 17680732 | PCB-101 (2,2',3,5,5') | 1.100 | | J | C |
| 12598133 | PCB-77 (3,3',4,4') | 0.450 | U | U | |
| 11508006 | PCB-118 (2,3',4,4',5) | 0.970 | J | J | |
| 15065[illegible] | PCB-153 (2,2',4,4',5,5') | 8.000 | | | |
| 125[illegible] | PCB-105 (2,3,3',4,4') | 0.420 | | | |
| 15065[illegible]2 | PCB-138 (2,2',3,4,4',5') | 4.600 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.370 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 5.800 | | | |
| 18380073 | PCB-128 (2,2',3,3',4,4') | 0.200 | J | J | |
| 16065293 | PCB-180 (2,2',3,4,4',5,5') | 7.300 | | | |
| 15065306 | PCB-170 (2,2',3,3',4,4',5) | 2.400 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.800 | | | |
| 10186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 1.100 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.340 | | | |

OGDEN VALIDATED

LEVEL D

1D
PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC219



Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT02

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3041

Sample wt/vol: 0.0076 Kg Lab File ID: 3,1105963A,10,1

% Moisture: 70.70 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/17/96

Concentrated Extract Volume: 1.0000(mL) Date Analyzed: 11/06/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/Kg

| Cas No: | Compound | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1105963A,10,1 | | | |
| 1883437 | PCB-8 (2,4') | 1.100 | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1105962A,10,1 | | | |
| 680652 | PCB-18 (2,2',5) | 0.280 | U | U | |
| 2375 | PCB-28 (2,4,4') | 0.270 | U | U | |
| 593993 | PCB-52 (2,2',5,5') | 0.230 | J | J | C |
| 464395 | PCB-44 (2,2',3,5') | 0.230 | U | U | |
| 598100 | PCB-66 (2,3',4,4') | 0.380 | U | U | |
| 580732 | PCB-101 (2,2',3,5,5') | 0.940 | J | J | C |
| 598133 | PCB-77 (3,3',4,4') | 0.500 | U | U | |
| 508006 | PCB-118 (2,3',4,4',5) | 2.500 | | | |
| 065271 | PCB-153 (2,2',4,4',5,5') | 13.000 | | | |
| 598144 | PCB-105 (2,3,3',4,4') | 0.530 | | | |
| 065282 | PCB-138 (2,2',3,4,4',5') | 7.000 | | | |
| 7465288 | PCB-126 (3,3',4,4',5) | 0.410 | U | U | |
| 2663680 | PCB-187 (2,2',3,4',5,5',6) | 7.000 | | | |
| 3380073 | PCB-128 (2,2',3,3',4,4') | 0.680 | | | |
| 5065293 | PCB-180 (2,2',3,4,4',5,5') | 11.000 | | | |
| 5065306 | PCB-170 (2,2',3,3',4,4',5) | 4.800 | | | |
| 2663782 | PCB-195 (2,2',3,3',4,4',5,6) | 1.500 | | | |
| 0186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 1.200 | | | |
| 051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.340 | | | |

OGDEN VALIDATED

LEVEL D

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC221

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3042

**Sample wt/vol:** 0.0076 Kg **Lab File ID:** 3,1105963A,11,1

**% Moisture:** 70.10 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/17/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/06/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL / CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1105963A,11,1 | | | | |
| 34883437 | PCB-8 (2,4') | 2.800 | | | |
| Compound from Column: | RTX-5 Lab File ID: 2,1105962A,11,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.910 | | | |
| 7012375 | PCB-28 (2,4,4') | 0.270 | U | u | |
| 35693993 | PCB-52 (2,2',5,5') | 0.490 | U | uJ | C |
| 41464395 | PCB-44 (2,2',3,5') | 0.230 | U | u | |
| 32598100 | PCB-66 (2,3',4,4') | 0.380 | U | u | |
| 37680732 | PCB-101 (2,2',3,5,5') | 1.300 | | J | C |
| 32598133 | PCB-77 (3,3',4,4') | 0.500 | U | u | |
| 31508006 | PCB-118 (2,3',4,4',5) | 1.300 | U | u | |
| 350[illegible] | PCB-153 (2,2',4,4',5,5') | 8.100 | | | |
| 325[illegible] | PCB-105 (2,3,3',4,4') | 0.370 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 4.500 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.410 | U | u | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 7.000 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | ~~0.230~~ 0.660 | UJ | u | + |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 8.300 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 2.800 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.940 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 1.100 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.150 | J | J | |

OGDEN VALIDATED

LEVEL D

12/18/96

1D
# PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.

MC227

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT02

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3043

Sample wt/vol: 0.0078 Kg Lab File ID: 3,1105963A,12,1

% Moisture: 69.30 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/17/96

Concentrated Extract Volume: 1.0000(mL) Date Analyzed: 11/06/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/Kg

| Cas No: | Compound | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1105963A,12,1 | | | |
| 383437 | PCB-8 (2,4') | 2.000 | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1105962A,12,1 | | | |
| 80652 | PCB-18 (2,2',5) | 0.680 | | | |
| 12375 | PCB-28 (2,4,4') | 1.100 | | | |
| 593993 | PCB-52 (2,2',5,5') | 0.870 | | J | C |
| 464395 | PCB-44 (2,2',3,5') | 0.220 | U | U | |
| 598100 | PCB-66 (2,3',4,4') | 1.000 | | | |
| 680732 | PCB-101 (2,2',3,5,5') | 7.000 | | J | C |
| 598133 | PCB-77 (3,3',4,4') | 0.490 | U | U | |
| 508006 | PCB-118 (2,3',4,4',5) | 6.800 | | | |
| 065271 | PCB-153 (2,2',4,4',5,5') | 50.000 | E | R | D |
| 598144 | PCB-105 (2,3,3',4,4') | 2.200 | | | |
| 5065282 | PCB-138 (2,2',3,4,4',5') | 28.000 | | | |
| 465288 | PCB-126 (3,3',4,4',5) | 0.400 | U | U | |
| 63680 | PCB-187 (2,2',3,4',5,5',6) | 34.000 | | | |
| 80073 | PCB-128 (2,2',3,3',4,4') | 1.900 | | | |
| 65293 | PCB-180 (2,2',3,4,4',5,5') | 51.000 | E | R | D |
| 65306 | PCB-170 (2,2',3,3',4,4',5) | 20.000 | | | |
| 63782 | PCB-195 (2,2',3,3',4,4',5,6) | 5.900 | | | |
| 186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 5.100 | | | |
| 51243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.550 | | | |

OGDEN VALIDATED

LEVEL D

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC227DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3043DL

**Sample wt/vol:** 0.0078 Kg **Lab File ID:** 3,1113963,9,1

**% Moisture:** 69.30 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/17/96

**Concentrated Extract Volume:** 2.0000(mL) **Date Analyzed:** 11/13/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 2.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1113963,9,1 | | | | |
| 34883437 | PCB-8 (2,4') | 1.500 | R | R | D |
| Compound from Column: | RTX-5 Lab File ID: 2,1113962,9,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.870 | R | R | D |
| 7012375 | PCB-28 (2,4,4') | 1.100 | R | ↓ | ↓ |
| 35693993 | PCB-52 (2,2',5,5') | 1.000 | R | ↓ | ↓ |
| 41464395 | PCB-44 (2,2',3,5') | 0.440 | UR | ↓ | ↓ |
| 32598100 | PCB-66 (2,3',4,4') | 0.740 | UR | ↓ | ↓ |
| 37680732 | PCB-101 (2,2',3,5,5') | 7.400 | R | ↓ | ↓ |
| 32598133 | PCB-77 (3,3',4,4') | 0.980 | UR | ↓ | ↓ |
| 31508006 | PCB-118 (2,3',4,4',5) | 11.000 | R | ↓ | ↓ |
| 3506[illegible] | PCB-153 (2,2',4,4',5,5') | 56.000 | D | | |
| 325[illegible] | PCB-105 (2,3,3',4,4') | 3.500 | R | R | D |
| 3506[illegible]2 | PCB-138 (2,2',3,4,4',5') | 29.000 | R | ↓ | ↓ |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.800 | UR | ↓ | ↓ |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 37.000 | R | ↓ | ↓ |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 2.000 | R | ↓ | ↓ |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 54.000 | D | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 21.000 | R | R | D |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 5.400 | R | ↓ | ↓ |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 5.500 | R | ↓ | ↓ |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.530 | R | ↓ | ↓ |

**OGDEN VALIDATED**

**LEVEL D**

1D
# PCB ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC232

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3044

**Sample wt/vol:** 0.0096 Kg **Lab File ID:** 3,1105963A,13,1

**% Moisture:** 62.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/17/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/06/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | |
|---|---|---|---|---|---|
| ompound from Column: | DB-17 Lab File ID: 3,1105963A,13,1 | | | | |
| 4883437 | PCB-8 (2,4') | 2.200 | | J | R S |
| ompound from Column: | RTX-5 Lab File ID: 2,1105962A,13,1 | | | | |
| 7680652 | PCB-18 (2,2',5) | 14.000 | | J | C,S |
| 012375 | PCB-28 (2,4,4') | 30.000 | E | R | D |
| 5693993 | PCB-52 (2,2',5,5') | 53.000 | E | R | D |
| 1464395 | PCB-44 (2,2',3,5') | 15.000 | | J ~~J~~ | R S |
| 2598100 | PCB-66 (2,3',4,4') | 56.000 | E | R | D |
| 7680732 | PCB-101 (2,2',3,5,5') | 200.000 | E | R | D |
| 2598133 | PCB-77 (3,3',4,4') | 0.400 | U | U | |
| 1508006 | PCB-118 (2,3',4,4',5) | 170.000 | E | R | D |
| 5065271 | PCB-153 (2,2',4,4',5,5') | 380.000 | E | ↓ | ↓ |
| 2598144 | PCB-105 (2,3,3',4,4') | 60.000 | E | ↓ | ↓ |
| 5065282 | PCB-138 (2,2',3,4,4',5') | 300.000 | E | ↓ | ↓ |
| 7465288 | PCB-126 (3,3',4,4',5) | 0.320 | U | U R | ~~D~~ |
| 2663680 | PCB-187 (2,2',3,4',5,5',6) | 290.000 | E | R | D |
| 8380073 | PCB-128 (2,2',3,3',4,4') | 82.000 | E | ↓ | ↓ |
| 6065293 | PCB-180 (2,2',3,4,4',5,5') | 250.000 | E | ↓ | ↓ |
| 5065306 | PCB-170 (2,2',3,3',4,4',5) | 150.000 | E | ↓ | ↓ |
| 2663782 | PCB-195 (2,2',3,3',4,4',5,6) | 100.000 | E | ↓ | ↓ |
| 0186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 83.000 | E | R ~~J~~ ~~J~~ R | ~~J~~ ~~*11~~ D |
| 051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 5.400 | | J | R S |

12/20/96

**OGDEN VALIDATED**

**LEVEL D**

# PCB ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MC232DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3044DL

**Sample wt/vol:** 0.0096 Kg **Lab File ID:** 3,1113963,10,1

**% Moisture:** 62.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/17/96

**Concentrated Extract Volume:** 200.0000(mL) **Date Analyzed:** 11/13/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 200.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1113963,10,1 | | | | |
| 34883437 | PCB-8 (2,4') | 34.000 | UR | R | D |
| Compound from Column: | RTX-5 Lab File ID: 2,1113962,10,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 22.000 | JR | R | D |
| 7012375 | PCB-28 (2,4,4') | 44.000 | D | | |
| 35693993 | PCB-52 (2,2',5,5') | 130.000 | D | J | C |
| 41464395 | PCB-44 (2,2',3,5') | 21.000 | JR | R | D |
| 32598100 | PCB-66 (2,3',4,4') | 79.000 | D | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 630.000 | D | | |
| 32598133 | PCB-77 (3,3',4,4') | 79.000 | UR | R | D |
| 31508006 | PCB-118 (2,3',4,4',5) | 420.000 | D | | |
| 3506[illegible] | PCB-153 (2,2',4,4',5,5') | 4,800.000 | D | | |
| 325[illegible] | PCB-105 (2,3,3',4,4') | 190.000 | D | | |
| 3506[illegible] | PCB-138 (2,2',3,4,4',5') | 2,400.000 | D | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 65.000 | UR | R | D |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 2,800.000 | D | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 120.000 | D | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 4,800.000 | D | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 1,900.000 | D | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 600.000 | D | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 420.000 | D | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 7.000 | JR | ~~J~~ R | * ~~N~~ D |
| ~~PCB-103~~ 120196 | ~~PCB-103 (2,2',4,5',6)~~ | ~~62.000~~ | ~~JS~~ | * | |

**OGDEN VALIDATED**

**LEVEL D**

* Analysis not validated

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MA713

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT02

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3047

Sample wt/vol: 0.0083 Kg Lab File ID: 3,1105963A,14,1

% Moisture: 67.80 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/17/96

Concentrated Extract Volume: 1.0000(mL) Date Analyzed: 11/07/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) | ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| ompound from Column: | DB-17 Lab File ID: 3,1105963A,14,1 | | | | | |
| 19846 | alpha-BHC | 0.200000 | | J | J | |
| 424826 | 2,4'-DDE | 0.730000 | | | | |
| 59988 | Endosulfan I | 0.590000 | | U | U | |
| npound from Column: | RTX-5 Lab File ID: 2,1105962A,14,1 | | | | | |
| 3741 | Hexachlorobenzene | 0.120000 | | J | J | |
| 9857 | beta-BHC | 0.220000 | | U | U | |
| 899 | gamma-BHC (Lindane) | 0.063000 | | J | J | |
| 9868 | delta-BHC | ~~0.400000~~ | 0.180000 | ~~UN~~ | UJ | C,+ |
| 5448 | Heptachlor | 0.150000 | | U | U | |
| 09002 | Aldrin | 0.800000 | | U | ↓ | |
| 03742 | gamma-Chlordane | 0.790000 | | U | | |
| 03719 | alpha-Chlordane | 0.450000 | | U | | |
| 03731 | cis-Nonachlor | 0.420000 | | U | * | |
| 9765805 | trans-Nonachlor | 0.420000 | | U | U | |
| 024573 | Heptachlor epoxide | 0.280000 | | U | U | |
| 0571 | Dieldrin | 0.290000 | | U | U | |
| 2559 | 4,4'-DDE | ~~0.170000~~ | 1.900000 | ~~UJ~~ | U | + |
| 3190 | 2,4'-DDD | 0.350000 | | J | J | |
| 2208 | Endrin | 0.084000 | | J | J | |
| 2548 | 4,4'-DDD | 1.200000 | | U | U | |
| 39026 | 2,4'-DDT | 0.290000 | | U | ↓ | |
| 3216659 | Endosulfan II | 0.590000 | | U | | |
| 031078 | Endosulfan sulfate | 0.590000 | | U | | |
| 0293 | 4,4'-DDT | 0.43000~~0~~ | ~~0.440000~~ ~~4.300000~~ | U | | |
| 421934 | Endrin aldehyde | 0.400000 | | U | | |
| 3494705 | Endrin ketone | 0.400000 | | U | | |
| 2435 | Methoxychlor | 0.340000 | | U | ↓ | |
| 385855 | Mirex | 0.140000 | | J | J | |

OGDEN VALIDATED

*Analysis Not Validated

LEVEL D

12/18/96

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MA714

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3048

**Sample wt/vol:** 0.0075 Kg **Lab File ID:** 3,1105963A,17,1

**% Moisture:** 70.30 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/17/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/07/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup:** (Y/N) **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) | ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1105963A,17,1 | | | | |
| 319846 | alpha-BHC | | 0.150000 | J | J | |
| 3424826 | 2,4'-DDE | | 0.950000 | | | |
| 959988 | Endosulfan I | | 0.650000 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1105962A,17,1 | | | | |
| 118741 | Hexachlorobenzene | | 0.200000 | | | |
| 319857 | beta-BHC | | ~~0.074000~~ 0.240000 | ~~UNJ~~ | U | + |
| 58899 | gamma-BHC (Lindane) | | 0.130000 | J | J | |
| 319868 | delta-BHC | | ~~0.320000~~ 0.200000 | ~~UN~~ | UJ | C,+ |
| 76448 | Heptachlor | | 0.170000 | U | U | |
| 309002 | Aldrin | | 0.890000 | U | | |
| 51[illegible] | gamma-Chlordane | | 0.870000 | U | | |
| 51[illegible] | alpha-Chlordane | | 0.490000 | U | | |
| 510[illegible] | cis-Nonachlor | | 0.460000 | U | | |
| 39765805 | trans-Nonachlor | | 0.300000 | J | J | |
| 1024573 | Heptachlor epoxide | | 0.300000 | U | U | |
| 60571 | Dieldrin | | 0.320000 | U | U | |
| 72559 | 4,4'-DDE | | 2.100000 | J | J | |
| 53190 | 2,4'-DDD | | 0.540000 | U | U | |
| 72208 | Endrin | | 0.180000 | U | U | |
| 72548 | 4,4'-DDD | | 1.300000 | U | U | |
| 789026 | 2,4'-DDT | | 0.540000 | | | |
| 33216659 | Endosulfan II | | 0.650000 | U | U | |
| 1031078 | Endosulfan sulfate | | 0.650000 | U | U | |
| 50293 | 4,4'-DDT | 0.460000 | ~~0.460000~~ ~~4.80000~~ | ~~JNJ~~ | J | |
| 7421934 | Endrin aldehyde | | 0.450000 | U | U | |
| 53494705 | Endrin ketone | | ~~0.036000~~ 0.450000 | ~~UNJ~~ | U | + |
| 72435 | Methoxychlor | | 0.380000 | U | U | |
| 2385855 | Mirex | | 0.240000 | J | J | |

**OGDEN VALIDATED**

***Analysis Not Validated**

**LEVEL D**

12/18/96

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA718

ab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

ab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT02

atrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3049

ample wt/vol: 0.0071 Kg Lab File ID: 3,1105963A,18,1

% Moisture: 72.30 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/16/96

Concentrated Extract Volume: 1.0000(mL) Date Analyzed: 11/07/96

njection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

| as No: | Compound | Concentration Units: (ug/L or ug/Kg) | ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| ompound from Column: | DB-17 | Lab File ID: 3,1105963A,18,1 | | | | |
| 9846 | alpha-BHC | | 0.300000 | J | J | |
| 24826 | 2,4'-DDE | | 0.520000 | U | U | |
| 9988 | Endosulfan I | | 0.690000 | U | U | |
| ompound from Column: | RTX-5 | Lab File ID: 2,1105962A,18,1 | | | | |
| 8741 | Hexachlorobenzene | | 0.140000 | J | J | |
| 9857 | beta-BHC | | 0.260000 | U | U | |
| 899 | gamma-BHC (Lindane) | | ~~0.120000~~ 0.260000 | ~~UNJ~~ | U | + |
| 9868 | delta-BHC | | ~~0.420000~~ 0.210000 | ~~UN~~ | UJ | C,+ |
| 448 | Heptachlor | | 0.170000 | U | U | |
| 09002 | Aldrin | | ~~0.071000~~ 0.930000 | U ~~NJ~~ | U | + |
| 103742 | gamma-Chlordane | | 0.920000 | U | U | |
| 103719 | alpha-Chlordane | | 0.520000 | U | U | |
| 103731 | cis-Nonachlor | | 0.480000 | U | ~~+~~ | |
| 9765805 | trans-Nonachlor | | 0.480000 | U | U | |
| 024573 | Heptachlor epoxide | | 0.320000 | U | U | |
| 0571 | Dieldrin | | 0.340000 | U | U | |
| 2559 | 4,4'-DDE | | ~~0.190000~~ 2.200000 | U ~~NJ~~ | U | + |
| 3190 | 2,4'-DDD | | 0.570000 | U | U | |
| 2208 | Endrin | | 0.190000 | U | U | |
| 2548 | 4,4'-DDD | | 1.400000 | U | U | |
| 39026 | 2,4'-DDT | | 0.370000 | | | |
| 3216659 | Endosulfan II | | 0.690000 | U | U | |
| 031078 | Endosulfan sulfate | 0.510000 | 0.690000 | U | | |
| 0293 | 4,4'-DDT | | ~~0.510000~~ ~~5.100000~~ | U | | |
| 421934 | Endrin aldehyde | | 0.470000 | U | | |
| 3494705 | Endrin ketone | | 0.470000 | U | | |
| 2435 | Methoxychlor | | 0.400000 | U | | |
| 385855 | Mirex | | 0.190000 | J | J | |

OGDEN VALIDATED

LEVEL D

*Analysis Not Validated

12/18/96

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MC190

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3027

**Sample wt/vol:** 0.0082 Kg **Lab File ID:** 3,1105963,14,1

**% Moisture:** 67.20 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) | ug/Kg | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|---|
| ompound from Column: | DB-17 Lab File ID: 3,1105963,14,1 | | | | | |
| 19846 | alpha-BHC | 0.470000 | | | | |
| 424826 | 2,4'-DDE | 1.500000 | | | | |
| 103731 | cis-Nonachlor | 0.360000 | | J~~J~~ | * | |
| 59988 | Endosulfan I | 0.590000 | | U | U | |
| ompound from Column: | RTX-5 Lab File ID: 2,1105962,14,1 | | | | | |
| 18741 | Hexachlorobenzene | 0.390000 | | | | |
| 19857 | beta-BHC | ~~0.140000~~ | 0.220000 | U~~NJ~~ | U | + |
| 8899 | gamma-BHC (Lindane) | 1.700000 | | | | |
| 19868 | delta-BHC | ~~1.400000~~ | 0.180000 | U~~N~~ | UJ | C,+ |
| 6448 | Heptachlor | ~~0.160000~~ | 0.150000 | U~~N~~ | U | + |
| 090 | Aldrin | 0.800000 | | U | U | |
| 103 | gamma-Chlordane | 0.390000 | | J | J | |
| 103719 | alpha-Chlordane | 1.500000 | | | | |
| 9765805 | trans-Nonachlor | 2.000000 | | | | |
| 024573 | Heptachlor epoxide | 0.280000 | | U | U | |
| 0571 | Dieldrin | 0.290000 | | U | U | |
| 2559 | 4,4'-DDE | 38.000000 | | | | |
| 3190 | 2,4'-DDD | 5.200000 | | | | |
| 2208 | Endrin | 0.160000 | | U | U | |
| 2548 | 4,4'-DDD | 4.800000 | | | | |
| 89026 | 2,4'-DDT | ~~6.200000~~ | 0.280000 | U~~N~~ | U | + |
| 3216659 | Endosulfan II | 0.590000 | | U | U | |
| 031078 | Endosulfan sulfate | 0.590000 | | U | U | |
| 0293 | 4,4'-DDT | 5.800000 | | | | |
| 421934 | Endrin aldehyde | 0.410000 | | U | U | |
| 3494705 | Endrin ketone | 0.410000 | | U | U | |
| 2435 | Methoxychlor | 0.340000 | | U | U | |
| 385855 | Mirex | 0.500000 | | | | |

OGDEN VALIDATED

*Analysis Not Validated

12/18/96

LEVEL D

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC190DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3027DL

**Sample wt/vol:** 0.0082 Kg **Lab File ID:** 3,1105963B,1,1

**% Moisture:** 67.20 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 10.0000(mL) **Date Analyzed:** 11/07/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 10.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1105963B,1,1 | | | | | |
| 319846 | alpha-BHC | | 2.800000 | UR | R | D |
| 3424826 | 2,4'-DDE | | 1.100000 | JR | ↓ | ↓ |
| 959988 | Endosulfan I | | 5.900000 | UR | ↓ | ↓ |
| Compound from Column: | RTX-5 Lab File ID: 2,1105962B,1,1 | | | | | |
| 118741 | Hexachlorobenzene | | 0.160000 | JR | R | D |
| 319857 | beta-BHC | | 2.200000 | UR | | |
| 58899 | gamma-BHC (Lindane) | | 0.970000 | JR | | |
| 319868 | delta-BHC | | 1.500000 | JR | | |
| 6448 | Heptachlor | | 1.500000 | UR | | |
| 09002 | Aldrin | | 8.000000 | UR | | |
| 103742 | gamma-Chlordane | | 7.900000 | UR | | |
| 103719 | alpha-Chlordane | | 1.300000 | JR | | |
| 103731 | cis-Nonachlor | | 3.100000 | JR | * | |
| 9765805 | trans-Nonachlor | | 2.100000 | JR | | |
| 524573 | Heptachlor epoxide | | 2.800000 | UR | | |
| 571 | Dieldrin | | 2.900000 | UR | | |
| 2559 | 4,4'-DDE | | 29.000000 | R | | |
| 190 | 2,4'-DDD | | 5.900000 | R | | |
| 208 | Endrin | | 1.600000 | UR | | |
| 548 | 4,4'-DDD | | 5.200000 | JR | | |
| 9026 | 2,4'-DDT | | 7.100000 | R | | |
| 216659 | Endosulfan II | | 5.900000 | UR | | |
| 31078 | Endosulfan sulfate | | 5.900000 | UR | | |
| 0293 | 4,4'-DDT | 4.400000 | ~~4.400000~~ ~~44.000000~~ | UR | | |
| 421934 | Endrin aldehyde | | 4.100000 | UR | | |
| 53494705 | Endrin ketone | | 7.200000 | R | | |
| 72435 | Methoxychlor | | 3.400000 | UR | | |
| 2385855 | Mirex | | 2.800000 | UR | | |

**OGDEN VALIDATED**

*Analysis Not Validated

12/18/96

**LEVEL D**

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC191

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3028

**Sample wt/vol:** 0.0069 Kg **Lab File ID:** 3,1105963,15,1

**% Moisture:** 73.40 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) | ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1105963,15,1 | | | | |
| 319846 | alpha-BHC | | 0.360000 | | | |
| 3424826 | 2,4'-DDE | | ~~0.430000~~ 0.540000 | UNJ | U | + |
| 5103731 | cis-Nonachlor | | 0.200000 | | * | |
| 959988 | Endosulfan I | | 0.710000 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1105962,15,1 | | | | |
| 118741 | Hexachlorobenzene | | 0.450000 | | | |
| 319857 | beta-BHC | | 0.190000 | J | J | |
| 58899 | gamma-BHC (Lindane) | | 0.140000 | J | J | |
| 319868 | delta-BHC | | ~~0.640000~~ 0.210000 | UNJ | UJ | c, + |
| 76448 | Heptachlor | | 0.180000 | U | U | |
| 309[illegible] | Aldrin | | 0.960000 | U | U | |
| 510[illegible] | gamma-Chlordane | | ~~0.270000~~ 0.950000 | UJ | U | + |
| 5103[illegible] | alpha-Chlordane | | 0.500000 | J | J | |
| 39765805 | trans-Nonachlor | | 0.850000 | | | |
| 1024573 | Heptachlor epoxide | | 0.330000 | U | U | |
| 60571 | Dieldrin | | 0.350000 | U | U | |
| 72559 | 4,4'-DDE | | 24.000000 | | | |
| 53190 | 2,4'-DDD | | 1.700000 | | | |
| 72208 | Endrin | | 0.200000 | U | U | |
| 72548 | 4,4'-DDD | | 1.800000 | | | |
| 789026 | 2,4'-DDT | | ~~6.200000~~ 0.340000 | UNJ | U | + |
| 33216659 | Endosulfan II | | 0.710000 | U | U | |
| 1031078 | Endosulfan sulfate | | 0.710000 | U | U | |
| 50293 | 4,4'-DDT | 1.800000 | ~~1.800000~~ ~~5.200000~~ | ~~UC~~ | | |
| 7421934 | Endrin aldehyde | | 0.490000 | U | U | |
| 53494705 | Endrin ketone | | 0.490000 | U | U | |
| 72435 | Methoxychlor | | 0.410000 | U | U | |
| 2385855 | Mirex | | 0.590000 | | | |

**OGDEN VALIDATED**

**LEVEL D**

*Analysis Not Validated

12/18/96

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC191DL

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT02

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3028DL

Sample wt/vol: 0.0069 Kg Lab File ID: 3,1105963B,2,1

% Moisture: 73.40 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/16/96

Concentrated Extract Volume: 5.0000(mL) Date Analyzed: 11/07/96

Injection Volume: 2 (uL) Dilution Factor: 5.0000

GPC Cleanup: (Y/N) pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/Kg

| Cas No: | Compound | | ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1105963B,2,1 | | | | |
| 319846 | alpha-BHC | | 0.370000 | JR | R | D |
| 3424826 | 2,4'-DDE | | 2.700000 | UR | | |
| 3959988 | Endosulfan I | | 3.600000 | UR | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1105962B,2,1 | | | | |
| 118741 | Hexachlorobenzene | | 0.490000 | JR | R | D |
| 319857 | beta-BHC | | 1.300000 | UR | | |
| 33899 | gamma-BHC (Lindane) | | 1.400000 | UR | | |
| 319868 | delta-BHC | | 0.810000 | JR | | |
| 36448 | Heptachlor | | 0.900000 | UR | | |
| 309002 | Aldrin | | 4.800000 | UR | | |
| 3103742 | gamma-Chlordane | | 4.800000 | UR | | |
| 3103719 | alpha-Chlordane | | 2.700000 | UR | | |
| 3103731 | cis-Nonachlor | | 2.500000 | UR | * | |
| 39765805 | trans-Nonachlor | | 0.850000 | JR | | |
| 3024573 | Heptachlor epoxide | | 1.700000 | UR | | |
| 30571 | Dieldrin | | 1.800000 | UR | | |
| 32559 | 4,4'-DDE | | 22.000000 | R | | |
| 3190 | 2,4'-DDD | | 2.000000 | JR | | |
| 32208 | Endrin | | 0.980000 | UR | | |
| 32548 | 4,4'-DDD | | 2.200000 | JR | | |
| 339026 | 2,4'-DDT | | 7.400000 | R | | |
| 33216659 | Endosulfan II | | 3.600000 | UR | | |
| 3031078 | Endosulfan sulfate | | 3.600000 | UR | | |
| 30293 | 4,4'-DDT | 1.300000 | ~~1.300000~~ ~~26.000000~~ | ~~UR~~ JR | | |
| 37421934 | Endrin aldehyde | | 2.400000 | UR | | |
| 33494705 | Endrin ketone | | 5.200000 | R | | |
| 372435 | Methoxychlor | | 2.100000 | UR | | |
| 32385855 | Mirex | | 0.690000 | JR | | |

OGDEN VALIDATED

LEVEL 3

*Analysis Not Validated

12/18/96

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC192

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3029

**Sample wt/vol:** 0.0076 Kg **Lab File ID:** 3,1105963,16,1

**% Moisture:** 69.80 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) | ug/Kg | Q | REV QUAL | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1105963,16,1 | | | | |
| 319846 | alpha-BHC | | 0.210000 | J | J | |
| 3424826 | 2,4'-DDE | | 0.490000 | U | U | |
| 5103731 | cis-Nonachlor | | 0.130000 | J | * | |
| 959988 | Endosulfan I | | 0.640000 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1105962,16,1 | | | | |
| 118741 | Hexachlorobenzene | | 0.170000 | J | J | |
| 319857 | beta-BHC | | 0.130000 | J | J | |
| 58899 | gamma-BHC (Lindane) | | 0.140000 | J | J | |
| 319868 | delta-BHC | | ~~0.450000~~ 0.190000 | ~~UN~~ | UJ | +, C |
| 76448 | Heptachlor | | 0.160000 | U | U | |
| 309[illegible] | Aldrin | | 0.870000 | U | U | |
| 510[illegible] | gamma-Chlordane | | 0.860000 | U | U | |
| 510[illegible] | alpha-Chlordane | | 0.260000 | J | J | |
| 39765805 | trans-Nonachlor | | 0.590000 | | | |
| 1024573 | Heptachlor epoxide | | 0.300000 | U | U | |
| 60571 | Dieldrin | | 0.320000 | U | U | |
| 72559 | 4,4'-DDE | | 11.000000 | | | |
| 53190 | 2,4'-DDD | | 0.530000 | U | U | |
| 72208 | Endrin | | 0.180000 | U | U | |
| 72548 | 4,4'-DDD | | 0.970000 | J | J | |
| 789026 | 2,4'-DDT | | ~~4.600000~~ 0.310000 | ~~UN~~ | U | + |
| 33216659 | Endosulfan II | | 0.640000 | U | U | |
| 1031078 | Endosulfan sulfate | | 0.640000 | U | U | |
| 50293 | 4,4'-DDT | 0.470000 | ~~1.900000~~ ~~4.70000~~ | ~~UN~~ | U | + |
| 7421934 | Endrin aldehyde | | 0.440000 | U | U | |
| 53494705 | Endrin ketone | | 0.440000 | U | U | |
| 72435 | Methoxychlor | | 0.370000 | U | U | |
| 2385855 | Mirex | | 0.240000 | J | J | |

**OGDEN VALIDATED**

***Analysis Not Validated**

**LEVEL D**

12/18/96

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MC192DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3029DL

**Sample wt/vol:** 0.0076 Kg **Lab File ID:** 3,1105963B,3,1

**% Moisture:** 69.80 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 5.0000(mL) **Date Analyzed:** 11/07/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 5.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) | ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| ompound from Column: | DB-17 Lab File ID: 3,1105963B,3,1 | | | | | |
| 19846 | alpha-BHC | | 1.500000 | UR | R | D |
| 424826 | 2,4'-DDE | | 2.400000 | UR | | |
| 59988 | Endosulfan I | | 3.200000 | UR | | |
| ompound from Column: | RTX-5 Lab File ID: 2,1105962B,3,1 | | | | | |
| 18741 | Hexachlorobenzene | | 0.120000 | JR | R | D |
| 19857 | beta-BHC | | 0.130000 | JR | | |
| 8899 | gamma-BHC (Lindane) | | 1.200000 | UR | | |
| 19868 | delta-BHC | | 0.590000 | JR | | |
| 6448 | Heptachlor | | 0.820000 | UR | | |
| 09002 | Aldrin | | 4.400000 | UR | | |
| 103742 | gamma-Chlordane | | 4.300000 | UR | | |
| 103719 | alpha-Chlordane | | 2.400000 | UR | | |
| 103731 | cis-Nonachlor | | 2.300000 | UR | * | |
| 9765805 | trans-Nonachlor | | 0.620000 | JR | | |
| 024573 | Heptachlor epoxide | | 1.500000 | UR | | |
| 571 | Dieldrin | | 1.600000 | UR | | |
| 559 | 4,4'-DDE | | 11.000000 | R | | |
| 3190 | 2,4'-DDD | | 2.700000 | UR | | |
| 2208 | Endrin | | 0.890000 | UR | | |
| 2548 | 4,4'-DDD | | 1.300000 | JR | | |
| 29026 | 2,4'-DDT | | 5.500000 | R | | |
| 216659 | Endosulfan II | | 3.200000 | UR | | |
| 31078 | Endosulfan sulfate | | 3.200000 | UR | | |
| 293 | 4,4'-DDT | 1.500000 | ~~1.500000~~ ~~4.700000~~ | ~~UR~~ JR | | |
| 21934 | Endrin aldehyde | | 2.200000 | UR | | |
| 3494705 | Endrin ketone | | 3.400000 | R | | |
| 435 | Methoxychlor | | 1.900000 | UR | | |
| 85855 | Mirex | | 0.270000 | JR | | |

**OGDEN VALIDATED**

**LEVEL D**

***Analysis Not Validated**

12/18/96

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MC194

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3030

**Sample wt/vol:** 0.0088 Kg **Lab File ID:** 3,1105963,17,1

**% Moisture:** 65.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1105963,17,1 | | | | |
| 319846 | alpha-BHC | 0.850000 | | | |
| 3424826 | 2,4'-DDE | 0.630000 | | | |
| 959988 | Endosulfan I | 0.560000 | U | u | |
| Compound from Column: | RTX-5 Lab File ID: 2,1105962,17,1 | | | | |
| 118741 | Hexachlorobenzene | 0.430000 | | | |
| 319857 | beta-BHC | ~~0.570000~~ 0.210000 | ~~UN~~ | u | + |
| 58899 | gamma-BHC (Lindane) | 2.300000 | | | |
| 319868 | delta-BHC | ~~1.100000~~ 0.170000 | ~~UN~~ | uJ | c,+ |
| 76448 | Heptachlor | 0.140000 | U | u | |
| 309002 | Aldrin | 0.760000 | U | ↓ | |
| 51[illegible] | gamma-Chlordane | 0.740000 | U | ↓ | |
| 51[illegible] | alpha-Chlordane | ~~0.180000~~ 0.420000 | ~~U~~ | u | + |
| 5103731 | cis-Nonachlor | 0.390000 | U | * | |
| 39765805 | trans-Nonachlor | 4.400000 | | | |
| 1024573 | Heptachlor epoxide | 1.600000 | | | |
| 60571 | Dieldrin | 0.280000 | U | u | |
| 72559 | 4,4'-DDE | 1.700000 | J | J | |
| 53190 | 2,4'-DDD | ~~25.000000~~ 0.460000 | ~~UN~~ | u | + |
| 72208 | Endrin | 0.150000 | U | u | |
| 72548 | 4,4'-DDD | 0.750000 | J | J | |
| 789026 | 2,4'-DDT | 0.270000 | U | u | |
| 33216659 | Endosulfan II | 0.560000 | U | u | |
| 1031078 | Endosulfan sulfate | 0.560000 | U | u | |
| 50293 | 4,4'-DDT | 10.000000 | | | |
| 7421934 | Endrin aldehyde | 0.380000 | U | u | |
| 53494705 | Endrin ketone | 0.380000 | U | u | |
| 72435 | Methoxychlor | 0.320000 | U | u | |
| 2385855 | Mirex | 0.970000 | | | |

OGDEN VALIDATED

LEVEL D

*Analysis Not Validated

12/18/96

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MC199

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3031

**Sample wt/vol:** 0.0081 Kg **Lab File ID:** 3,1105963,18,1

**% Moisture:** 68.30 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV QUAL | Qual Code |
|---|---|---|---|---|---|---|
| ompound from Column: | DB-17 | Lab File ID: 3,1105963,18,1 | | | | |
| 19846 | alpha-BHC | 0.240000 | | J | 44 | |
| 424826 | 2,4'-DDE | 0.200000 | | J | | |
| 103731 | cis-Nonachlor | 1.000000 | | | * | |
| 59988 | Endosulfan I | 0.600000 | | U | u | |
| ompound from Column: | RTX-5 | Lab File ID: 2,1105962,18,1 | | | | |
| 18741 | Hexachlorobenzene | 0.570000 | | | | |
| 19857 | beta-BHC | ~~0.350000~~ | 0.220000 | UN | u | + |
| 8899 | gamma-BHC (Lindane) | 1.000000 | | | | |
| 19868 | delta-BHC | ~~0.770000~~ | 0.180000 | UN | uJ | c,+ |
| 6448 | Heptachlor | 0.150000 | | U | u | |
| 09002 | Aldrin | 0.820000 | | U | u | |
| 103742 | gamma-Chlordane | 0.650000 | | J | J | |
| 103719 | alpha-Chlordane | 1.900000 | | | | |
| 9765805 | trans-Nonachlor | 4.100000 | | | | |
| 024573 | Heptachlor epoxide | 0.280000 | | U | u | |
| 0571 | Dieldrin | ~~0.880000~~ | 0.300000 | UN | u | + |
| 2559 | 4,4'-DDE | 37.000000 | | | | |
| 3190 | 2,4'-DDD | 1.500000 | | | | |
| 2208 | Endrin | 0.170000 | | U | u | |
| 2548 | 4,4'-DDD | 3.800000 | | | | |
| 89026 | 2,4'-DDT | ~~2.300000~~ | 0.290000 | UN | u | + |
| 3216659 | Endosulfan II | 0.600000 | | U | u | |
| 031078 | Endosulfan sulfate | 0.600000 | | U | u | |
| 0293 | 4,4'-DDT | 9.300000 | | | | |
| 421934 | Endrin aldehyde | 0.410000 | | U | u | |
| 3494705 | Endrin ketone | 0.410000 | | U | u | |
| 2435 | Methoxychlor | 0.350000 | | U | u | |
| 385855 | Mirex | 0.590000 | | | | |

**OGDEN VALIDATED**

**LEVEL D**

*Analysis Not Validated

12/18/96

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MC199DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3031DL

**Sample wt/vol:** 0.0081 Kg **Lab File ID:** 3,1105963B,4,1

**% Moisture:** 68.30 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 2.0000(mL) **Date Analyzed:** 11/07/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 2.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: DB-17 Lab File ID: 3,1105963B,4,1 | | | | | |
| 319846 | alpha-BHC | 0.250000 | JR | R | D |
| 3424826 | 2,4'-DDE | 0.150000 | JR | ↓ | ↓ |
| 959988 | Endosulfan I | 1.200000 | UR | ↓ | ↓ |
| Compound from Column: RTX-5 Lab File ID: 2,1105962B,4,1 | | | | | |
| 118741 | Hexachlorobenzene | 0.610000 | R | R | D |
| 319857 | beta-BHC | 0.470000 | R | ↓ | ↓ |
| 58899 | gamma-BHC (Lindane) | 0.900000 | R | ↓ | ↓ |
| 319868 | delta-BHC | 0.790000 | R | ↓ | ↓ |
| 76448 | Heptachlor | 0.310000 | UR | ↓ | ↓ |
| 309002 | Aldrin | 1.600000 | UR | ↓ | ↓ |
| 5103 | gamma-Chlordane | 0.630000 | JR | ↓ | ↓ |
| 5103 | alpha-Chlordane | 1.700000 | R | ↓ | ↓ |
| 5103 | cis-Nonachlor | 0.850000 | UR | ↓ | ↓ |
| 39765805 | trans-Nonachlor | 3.800000 | R | R | D |
| 1024573 | Heptachlor epoxide | 0.560000 | UR | ↓ | ↓ |
| 60571 | Dieldrin | 0.600000 | UR | ↓ | ↓ |
| 72559 | 4,4'-DDE | 32.000000 | R | ↓ | ↓ |
| 53190 | 2,4'-DDD | 1.400000 | R | ↓ | ↓ |
| 72208 | Endrin | 0.330000 | UR | ↓ | ↓ |
| 72548 | 4,4'-DDD | 4.000000 | R | ↓ | ↓ |
| 789026 | 2,4'-DDT | 2.200000 | R | ↓ | ↓ |
| 33216659 | Endosulfan II | 1.200000 | UR | ↓ | ↓ |
| 1031078 | Endosulfan sulfate | 1.200000 | UR | ↓ | ↓ |
| 50293 | 4,4'-DDT | 5.200000 | R | ↓ | ↓ |
| 7421934 | Endrin aldehyde | 0.820000 | UR | ↓ | ↓ |
| 53494705 | Endrin ketone | 1.100000 | R | ↓ | ↓ |
| 72435 | Methoxychlor | 0.700000 | UR | ↓ | ↓ |
| 2385855 | Mirex | 0.710000 | R | ↓ | ↓ |

**OGDEN VALIDATED**

**LEVEL D**

*Analysis Not Validated

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC200

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3032

**Sample wt/vol:** 0.0071 Kg **Lab File ID:** 3,1105963,19,1

**% Moisture:** 72.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1105963,19,1 | | | | |
| 319846 | alpha-BHC | 0.310000 | | J | J | |
| 3424826 | 2,4'-DDE | 0.520000 | | U | U | |
| 959988 | Endosulfan I | 0.690000 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1105962,19,1 | | | | |
| 118741 | Hexachlorobenzene | 0.550000 | | | | |
| 319857 | beta-BHC | ~~0.260000~~ | 0.260000 | U~~J~~ | U | + |
| 58899 | gamma-BHC (Lindane) | ~~0.390000~~ | 0.260000 | U~~J~~ | U | + |
| 319868 | delta-BHC | ~~0.690000~~ | 0.210000 | U~~J~~ | UJ | C,+ |
| 76448 | Heptachlor | 0.170000 | | U | U | |
| 309002 | Aldrin | 0.930000 | | U | U | |
| 5103742 | gamma-Chlordane | ~~0.230000~~ | 0.930000 | U~~J~~ | U | + |
| 5103719 | alpha-Chlordane | 0.380000 | | J | J | |
| 5103731 | cis-Nonachlor | 0.160000 | | J | J | |
| 9765805 | trans-Nonachlor | 0.740000 | | | | |
| 024573 | Heptachlor epoxide | 0.320000 | | U | U | |
| 0571 | Dieldrin | ~~0.300000~~ | 0.340000 | U~~J~~ | U | + |
| 2559 | 4,4'-DDE | 5.100000 | | | | |
| 3190 | 2,4'-DDD | 0.380000 | | J | J | |
| 2208 | Endrin | 0.190000 | | U | U | |
| 2548 | 4,4'-DDD | 0.890000 | | J | J | |
| 39026 | 2,4'-DDT | 1.400000 | | | | |
| 3216659 | Endosulfan II | 0.690000 | | U | U | |
| 031078 | Endosulfan sulfate | 0.690000 | | U | U | |
| 0293 | 4,4'-DDT | 2.800000 | | | | |
| 421934 | Endrin aldehyde | 0.470000 | | U | U | |
| 3494705 | Endrin ketone | 0.470000 | | U | U | |
| 2435 | Methoxychlor | 0.400000 | | U | U | |
| 2385855 | Mirex | 0.430000 | | | | |

OGDEN VALIDATED

LEVEL D

*Analysis Not Validated

12/18/96

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC202

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3033

**Sample wt/vol:** 0.0076 Kg **Lab File ID:** 3,1105963A,1,1

**% Moisture:** 71.60 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/06/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: DB-17 Lab File ID: 3,1105963A,1,1 | | | | | | |
| 319846 | alpha-BHC | 0.840000 | | | | |
| 3424826 | 2,4'-DDE | 2.100000 | | | | |
| 5103731 | cis-Nonachlor | 0.190000 | | J | * | |
| 959988 | Endosulfan I | 0.650000 | | U | u | |
| Compound from Column: RTX-5 Lab File ID: 2,1105962A,1,1 | | | | | | |
| 118741 | Hexachlorobenzene | 0.420000 | | | | |
| 319857 | beta-BHC | ~~0.290000~~ | 0.240000 | u,~~J~~ | u | + |
| 58899 | gamma-BHC (Lindane) | 1.600000 | | | | |
| 319868 | delta-BHC | ~~0.770000~~ | 0.190000 | u,~~J~~ | uJ | c,+ |
| 76448 | Heptachlor | 0.160000 | | U | u | |
| 309[illegible] | Aldrin | 0.880000 | | U | u | |
| 510[illegible] | gamma-Chlordane | 0.370000 | | J | J | |
| 5103[illegible] | alpha-Chlordane | 1.100000 | | | | |
| 39765805 | trans-Nonachlor | 1.700000 | | | | |
| 1024573 | Heptachlor epoxide | 0.300000 | | U | u | |
| 60571 | Dieldrin | 0.320000 | | U | u | |
| 72559 | 4,4'-DDE | 45.000000 | | | | |
| 53190 | 2,4'-DDD | 6.900000 | | | | |
| 72208 | Endrin | 0.180000 | | U | u | |
| 72548 | 4,4'-DDD | 8.700000 | | | | |
| 789026 | 2,4'-DDT | ~~8.300000~~ | 0.310000 | u,~~J~~ | u | + |
| 33216659 | Endosulfan II | 0.650000 | | U | u | |
| 1031078 | Endosulfan sulfate | 0.650000 | | U | u | |
| 50293 | 4,4'-DDT | 8.600000 | | | | |
| 7421934 | Endrin aldehyde | 0.440000 | | U | u | |
| 53494705 | Endrin ketone | 0.440000 | | U | u | |
| 72435 | Methoxychlor | 0.370000 | | U | u | |
| 2385855 | Mirex | 0.230000 | | J | J | |

OGDEN VALIDATED

LEVEL D

*Analysis Not Validated

12/18/96

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MC202DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3033DL

**Sample wt/vol:** 0.0076 Kg **Lab File ID:** 3,1105963B,5,1

**% Moisture:** 71.60 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 10.0000(mL) **Date Analyzed:** 11/07/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 10.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1105963B,5,1 | | | | |
| 19846 | alpha-BHC | 0.600000 | JR | R | D |
| 424826 | 2,4'-DDE | 2.400000 | JR | | |
| 59988 | Endosulfan I | 6.500000 | UR | | |
| Compound from Column: | RTX-5 Lab File ID: 2,1105962B,5,1 | | | | |
| 18741 | Hexachlorobenzene | 0.230000 | JR | R | D |
| 19857 | beta-BHC | 1.300000 | JR | | |
| 899 | gamma-BHC (Lindane) | 1.100000 | JR | | |
| 9868 | delta-BHC | 0.570000 | JR | | |
| 6448 | Heptachlor | 1.600000 | UR | | |
| 9002 | Aldrin | 8.800000 | UR | | |
| 103742 | gamma-Chlordane | 8.600000 | UR | | |
| 103719 | alpha-Chlordane | 4.900000 | UR | | |
| 103731 | cis-Nonachlor | 3.900000 | JR | * | |
| 9765805 | trans-Nonachlor | 1.500000 | JR | R | D |
| 024573 | Heptachlor epoxide | 3.000000 | UR | | |
| 50571 | Dieldrin | 3.200000 | UR | | |
| 72559 | 4,4'-DDE | 36.000000 | R | | |
| 53190 | 2,4'-DDD | 8.000000 | R | | |
| 72208 | Endrin | 1.800000 | UR | | |
| 72548 | 4,4'-DDD | 8.600000 | JR | | |
| 789026 | 2,4'-DDT | 9.800000 | R | | |
| 33216659 | Endosulfan II | 6.500000 | UR | | |
| 1031078 | Endosulfan sulfate | 6.500000 | UR | | |
| 50293 | 4,4'-DDT | 4.000000 | JR | | |
| 7421934 | Endrin aldehyde | 4.400000 | UR | | |
| 53494705 | Endrin ketone | 7.100000 | R | | |
| 72435 | Methoxychlor | 3.700000 | UR | | |
| 2385855 | Mirex | 0.380000 | JR | | |

OGDEN VALIDATED

LEVEL D

*Analysis Not Validated

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC206

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3034

**Sample wt/vol:** 0.0077 Kg **Lab File ID:** 3,1105963A,2,1

**% Moisture:** 69.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/06/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1105963A,2,1 | | | | | |
| 319846 | alpha-BHC | 0.500000 | | | | |
| 3424826 | 2,4'-DDE | ~~4.800000~~ | 0.480000 | UN | U | + |
| 5103731 | cis-Nonachlor | 0.560000 | | | * | |
| 959988 | Endosulfan I | 0.630000 | | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,1105962A,2,1 | | | | | |
| 118741 | Hexachlorobenzene | 0.310000 | | | J | S |
| 319857 | beta-BHC | ~~0.097000~~ | 0.240000 | UNJ | UJ | + |
| 58899 | gamma-BHC (Lindane) | 2.800000 | | | J | S |
| 319868 | delta-BHC | ~~1.500000~~ | 0.190000 | UN | UJ | +, C |
| 7644[illegible] | Heptachlor | ~~0.120000~~ | 0.160000 | UNJ | U | + |
| 309[illegible] | Aldrin | ~~2.400000~~ | 0.850000 | UN | U | + |
| 510[illegible] | gamma-Chlordane | 0.300000 | | J | J | S |
| 5103719 | alpha-Chlordane | 1.400000 | | | ↓ | ↓ |
| 39765805 | trans-Nonachlor | 3.400000 | | | | |
| 1024573 | Heptachlor epoxide | 0.290000 | | U | U | |
| 60571 | Dieldrin | 0.310000 | | U | U | |
| 72559 | 4,4'-DDE | 100.000000 | | E | R | D |
| 53190 | 2,4'-DDD | 11.000000 | | | J | S |
| 72208 | Endrin | 3.100000 | | | ↓ | ↓ |
| 72548 | 4,4'-DDD | 14.000000 | | | | |
| 789026 | 2,4'-DDT | ~~23.000000~~ | 0.300000 | UN | U | + |
| 33216659 | Endosulfan II | 0.630000 | | U | U | |
| 1031078 | Endosulfan sulfate | 0.630000 | | U | U | |
| 50293 | 4,4'-DDT | 14.000000 | | | J | S |
| 7421934 | Endrin aldehyde | 0.430000 | | U | U | |
| 53494705 | Endrin ketone | 0.430000 | | U | U | |
| 72435 | Methoxychlor | ~~0.071000~~ | 0.370000 | UNJ | UJ | + |
| 2385855 | Mirex | 1.300000 | | | J | S |

OGDEN VALIDATED

LEVEL D

*Analysis Not Validated

12/18/96

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MC206DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3034DL

**Sample wt/vol:** 0.0071 Kg **Lab File ID:** 3,1113963,7,1

**% Moisture:** 69.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 40.0000(mL) **Date Analyzed:** 11/13/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 40.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| ompound from Column: | DB-17 Lab File ID: 3,1113963,7,1 | | | | |
| 19846 | alpha-BHC | 13.000000 | UR | R | D |
| 424826 | 2,4'-DDE | 21.000000 | UR | | |
| 59988 | Endosulfan I | 28.000000 | UR | | |
| ompound from Column: | RTX-5 Lab File ID: 2,1113962,7,1 | | | | |
| 18741 | Hexachlorobenzene | 8.500000 | UR | R | D |
| 19857 | beta-BHC | 10.000000 | UR | | |
| 3899 | gamma-BHC (Lindane) | 11.000000 | UR | | |
| 19868 | delta-BHC | 8.400000 | UR | | |
| 6448 | Heptachlor | 7.000000 | UR | | |
| 09002 | Aldrin | 37.000000 | UR | | |
| 03742 | gamma-Chlordane | 37.000000 | UR | | |
| 03719 | alpha-Chlordane | 21.000000 | UR | | |
| 03731 | cis-Nonachlor | 6.500000 | JR | * | |
| 765805 | trans-Nonachlor | 19.000000 | UR | R | D |
| 24573 | Heptachlor epoxide | 13.000000 | UR | R | D |
| 571 | Dieldrin | 14.000000 | UR | R | D |
| 559 | 4,4'-DDE | 72.000000 | DJ | J | *11 |
| 90 | 2,4'-DDD | 15.000000 | JR | R | D |
| 08 | Endrin | 7.600000 | UR | | |
| 548 | 4,4'-DDD | 11.000000 | JR | | |
| 9026 | 2,4'-DDT | 29.000000 | R | | |
| 216659 | Endosulfan II | 28.000000 | UR | | |
| 31078 | Endosulfan sulfate | 28.000000 | UR | | |
| 293 | 4,4'-DDT | 20.000000 | UR | | |
| 21934 | Endrin aldehyde | 19.000000 | UR | | |
| 494705 | Endrin ketone | 19.000000 | UR | | |
| 2435 | Methoxychlor | 16.000000 | UR | | |
| 385855 | Mirex | 13.000000 | UR | | |

**OGDEN VALIDATED**

**LEVEL D**

*Analysis Not Validated

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MC207

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3035

**Sample wt/vol:** 0.0071 Kg **Lab File ID:** 3,1105963A,5,1

**% Moisture:** 71.90 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/06/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1105963A,5,1 | | | | |
| 319846 | alpha-BHC | 0.270000 | J | J | |
| 3424826 | 2,4'-DDE | ~~1.600000~~ ~~0.48~~ 0.520000 | U,~~N~~ | U | + |
| 5103731 | cis-Nonachlor | 0.320000 | J | * | |
| 959988 | Endosulfan I | 0.690000 | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,1105962A,5,1 | | | | |
| 118741 | Hexachlorobenzene | 0.290000 | | | |
| 319857 | beta-BHC | 0.150000 | J | J | |
| 58899 | gamma-BHC (Lindane) | 0.140000 | J | J | |
| 319868 | delta-BHC | ~~0.460000~~ 0.210000 | ~~UN~~ | UJ | c, + |
| 76448 | Heptachlor | 0.170000 | U | U | |
| 309002 | Aldrin | 0.930000 | U | U | |
| 5103 | gamma-Chlordane | 0.530000 | J | J | |
| 5103 | alpha-Chlordane | 1.200000 | | | |
| 39765805 | trans-Nonachlor | 1.900000 | | | |
| 1024573 | Heptachlor epoxide | 0.320000 | U | U | |
| 60571 | Dieldrin | 0.340000 | U | U | |
| 72559 | 4,4'-DDE | 54.000000 | | | |
| 53190 | 2,4'-DDD | 5.300000 | | | |
| 72208 | Endrin | 0.190000 | U | U | |
| 72548 | 4,4'-DDD | 4.400000 | | | |
| 789026 | 2,4'-DDT | 20.000000 | | | |
| 33216659 | Endosulfan II | 0.690000 | U | U | |
| 1031078 | Endosulfan sulfate | 0.690000 | U | U | |
| 50293 | 4,4'-DDT | 5.300000 | | | |
| 7421934 | Endrin aldehyde | 0.470000 | U | U | |
| 53494705 | Endrin ketone | 0.470000 | U | U | |
| 72435 | Methoxychlor | 0.400000 | U | U | |
| 2385855 | Mirex | 1.400000 | | | |

OGDEN VALIDATED

LEVEL D

*Analysis Not Validated

12/18/96

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MC207DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3035DL

**Sample wt/vol:** 0.0071 Kg **Lab File ID:** 3,1105963B,7,1

**% Moisture:** 71.90 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 20.0000(mL) **Date Analyzed:** 11/07/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 20.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1105963B,7,1 | | | | |
| 319846 | alpha-BHC | 6.400000 | UR | R | D |
| 3424826 | 2,4'-DDE | 10.000000 | UR | ↓ | ↓ |
| 959988 | Endosulfan I | 14.000000 | UR | ↓ | ↓ |
| Compound from Column: | RTX-5 Lab File ID: 2,1105962B,7,1 | | | | |
| 18741 | Hexachlorobenzene | 0.180000 | JR | R | D |
| 319857 | beta-BHC | 5.100000 | UR | ↓ | ↓ |
| 58899 | gamma-BHC (Lindane) | 5.300000 | UR | ↓ | ↓ |
| 319868 | delta-BHC | 4.200000 | UR | ↓ | ↓ |
| 76448 | Heptachlor | 3.500000 | UR | ↓ | ↓ |
| 309002 | Aldrin | 19.000000 | UR | ↓ | ↓ |
| 5103742 | gamma-Chlordane | 18.000000 | UR | ↓ | ↓ |
| 5103719 | alpha-Chlordane | 10.000000 | UR | ↓ | ↓ |
| 5103731 | cis-Nonachlor | 4.600000 | JR | * | |
| 39765805 | trans-Nonachlor | 2.000000 | JR | R | D |
| 1024573 | Heptachlor epoxide | 6.400000 | UR | ↓ | ↓ |
| 60571 | Dieldrin | 6.800000 | UR | ↓ | ↓ |
| 72559 | 4,4'-DDE | 44.000000 | JR | ↓ | ↓ |
| 53190 | 2,4'-DDD | 5.800000 | JR | ↓ | ↓ |
| 72208 | Endrin | 3.800000 | UR | ↓ | ↓ |
| 72548 | 4,4'-DDD | 4.800000 | JR | ↓ | ↓ |
| 789026 | 2,4'-DDT | 26.000000 | R | ↓ | ↓ |
| 33216659 | Endosulfan II | 14.000000 | UR | ↓ | ↓ |
| 1031078 | Endosulfan sulfate | 14.000000 | UR | ↓ | ↓ |
| 50293 | 4,4'-DDT | 10.000000 | UR | ↓ | ↓ |
| 7421934 | Endrin aldehyde | 9.400000 | UR | ↓ | ↓ |
| 53494705 | Endrin ketone | 23.000000 | R | ↓ | ↓ |
| 72435 | Methoxychlor | 8.000000 | UR | ↓ | ↓ |
| 2385855 | Mirex | 0.870000 | JR | ↓ | ↓ |

OGDEN VALIDATED

LEVEL D

*Analysis Not Validated

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC213

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3037

**Sample wt/vol:** 0.0084 Kg **Lab File ID:** 3,1105963A,6,1

**% Moisture:** 67.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/06/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1105963A,6,1 | | | | |
| 319846 | alpha-BHC | 0.300000 | | | |
| 3424826 | 2,4'-DDE | 0.440000 | U | U | |
| 959988 | Endosulfan I | 0.580000 | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,1105962A,6,1 | | | | |
| 118741 | Hexachlorobenzene | 0.400000 | | | |
| 319857 | beta-BHC | 0.170000 | J | J | |
| 58899 | gamma-BHC (Lindane) | 0.280000 | | | |
| 319868 | delta-BHC | ~~0.510000~~ 0.170000 | UX | UJ | C, + |
| 76448 | Heptachlor | 0.150000 | U | U | |
| 309002 | Aldrin | 0.790000 | U | U | |
| 5103742 | gamma-Chlordane | ~~0.160000~~ 0.780000 | UXJ | U | + |
| 510[illegible] | alpha-Chlordane | 0.360000 | J | J | |
| 510[illegible] | cis-Nonachlor | 0.360000 | J | * | |
| 39765805 | trans-Nonachlor | 1.200000 | | | |
| 1024573 | Heptachlor epoxide | 0.270000 | U | U | |
| 60571 | Dieldrin | 0.290000 | U | U | |
| 72559 | 4,4'-DDE | 13.000000 | | | |
| 53190 | 2,4'-DDD | 0.430000 | J | J | |
| 72208 | Endrin | 0.160000 | U | U | |
| 72548 | 4,4'-DDD | 0.900000 | J | J | |
| 789026 | 2,4'-DDT | ~~3.700000~~ 0.280000 | UX | U | + |
| 33216659 | Endosulfan II | 0.580000 | U | U | |
| 1031078 | Endosulfan sulfate | 0.580000 | U | U | |
| 50293 | 4,4'-DDT | 2.700000 | | | |
| 7421934 | Endrin aldehyde | 0.400000 | U | U | |
| 53494705 | Endrin ketone | 0.400000 | U | U | |
| 72435 | Methoxychlor | 0.340000 | U | U | |
| 2385855 | Mirex | 0.500000 | | | |

OGDEN VALIDATED

*Analysis Not Validated

LEVEL D

12/18/96

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MC213DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3037DL

**Sample wt/vol:** 0.0084 Kg **Lab File ID:** 3,1113963,8,1

**% Moisture:** 67.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 2.0000(mL) **Date Analyzed:** 11/13/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 2.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1113963,8,1 | | | | |
| 319846 | alpha-BHC | 0.220000 | JR | R | D |
| 3424826 | 2,4'-DDE | 0.880000 | UR | | |
| 959988 | Endosulfan I | 1.200000 | UR | | |
| Compound from Column: | RTX-5 Lab File ID: 2,1113962,8,1 | | | | |
| 118741 | Hexachlorobenzene | 0.440000 | R | R | D |
| 319857 | beta-BHC | 0.280000 | JR | | |
| 58899 | gamma-BHC (Lindane) | 0.240000 | JR | | |
| 319868 | delta-BHC | 0.370000 | R | | |
| 76448 | Heptachlor | 0.290000 | UR | | |
| 309002 | Aldrin | 1.600000 | UR | | |
| 5103742 | gamma-Chlordane | 1.600000 | UR | | |
| 5103719 | alpha-Chlordane | 0.380000 | JR | | |
| 5103731 | cis-Nonachlor | 0.660000 | JR | * | |
| 39765805 | trans-Nonachlor | 1.200000 | R | R | D |
| 1024573 | Heptachlor epoxide | 0.540000 | UR | | |
| 60571 | Dieldrin | 0.570000 | UR | | |
| 72559 | 4,4'-DDE | 11.000000 | R | | |
| 53190 | 2,4'-DDD | 0.960000 | UR | | |
| 72208 | Endrin | 0.320000 | UR | | |
| 72548 | 4,4'-DDD | 1.000000 | JR | | |
| 789026 | 2,4'-DDT | 3.700000 | R | | |
| 33216659 | Endosulfan II | 1.200000 | UR | | |
| 1031078 | Endosulfan sulfate | 1.200000 | UR | | |
| 50293 | 4,4'-DDT | 2.200000 | R | | |
| 7421934 | Endrin aldehyde | 0.790000 | UR | | |
| 53494705 | Endrin ketone | 0.790000 | UR | | |
| 72435 | Methoxychlor | 0.670000 | UR | | |
| 2385855 | Mirex | 0.490000 | JR | | |

OGDEN VALIDATED

LEVEL D

*Analysis Not Validated

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC214

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3038

**Sample wt/vol:** 0.0082 Kg **Lab File ID:** 3,1105963A,7,1

**% Moisture:** 68.40 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/16/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/06/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/Kg

| Cas No: | Compound | | | Q | REV QUAL | QUAL / CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1105963A,7,1 | | | | |
| 319846 | alpha-BHC | 0.890000 | | | | |
| 3424826 | 2,4'-DDE | 0.450000 | | U | U | |
| 959988 | Endosulfan I | 0.600000 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1105962A,7,1 | | | | |
| 118741 | Hexachlorobenzene | 0.440000 | | | | |
| 319857 | beta-BHC | ~~0.170000~~ | 0.220000 | U ~~NJ~~ | U | + |
| 58899 | gamma-BHC (Lindane) | 1.900000 | | | | |
| 319868 | delta-BHC | 0.180000 | | U | UJ | C |
| 76448 | Heptachlor | 0.150000 | | U | U | |
| 309002 | Aldrin | 0.810000 | | U | | |
| 510[illegible] | gamma-Chlordane | 0.800000 | | U | | |
| 510[illegible] | alpha-Chlordane | 0.099000 | | J | J | |
| 5103731 | cis-Nonachlor | 0.420000 | | U | ~~J~~ U | |
| 39765805 | trans-Nonachlor | ~~1.100000~~ | 0.420000 | U ~~N~~ | U | + |
| 1024573 | Heptachlor epoxide | 0.730000 | | | | |
| 60571 | Dieldrin | 0.300000 | | U | U | |
| 72559 | 4,4'-DDE | 2.100000 | | | | |
| 53190 | 2,4'-DDD | 4.400000 | | | | |
| 72208 | Endrin | 0.160000 | | U | U | |
| 72548 | 4,4'-DDD | 1.200000 | | U | | |
| 789026 | 2,4'-DDT | ~~1.700000~~ | 0.280000 | U ~~N~~ | | + |
| 33216659 | Endosulfan II | 0.600000 | | U | | |
| 1031078 | Endosulfan sulfate | 0.600000 | | U | U | |
| 50293 | 4,4'-DDT | 2.100000 | | | | |
| 7421934 | Endrin aldehyde | 0.410000 | | U | U | |
| 53494705 | Endrin ketone | 0.410000 | | U | U | |
| 72435 | Methoxychlor | 0.350000 | | U | U | |
| 2385855 | Mirex | 2.700000 | | | | |

OGDEN VALIDATED

*Analysis Not Validated

12/18/96

LEVEL D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MC215

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3039

**Sample wt/vol:** 0.0097 Kg **Lab File ID:** 3,1105963A,8,1

**% Moisture:** 63.60 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/17/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/06/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1105963A,8,1 | | | | |
| 19846 | alpha-BHC | 0.540000 | | | | |
| 424826 | 2,4'-DDE | 0.049000 | | J | J | |
| 59988 | Endosulfan I | ~~0.360000~~ | 0.500000 | ~~UNJ~~ | U | + |
| Compound from Column: | RTX-5 | Lab File ID: 2,1105962A,8,1 | | | | |
| 18741 | Hexachlorobenzene | 0.440000 | | | | |
| 19857 | beta-BHC | ~~0.140000~~ | 0.190000 | ~~UNJ~~ | U | + |
| 8899 | gamma-BHC (Lindane) | 2.600000 | | | | |
| 19868 | delta-BHC | 0.150000 | | U | UJ | C |
| 6448 | Heptachlor | 0.130000 | | U | U | |
| 09002 | Aldrin | 0.680000 | | U | U | |
| 103742 | gamma-Chlordane | 0.230000 | | J | J | |
| 103719 | alpha-Chlordane | ~~0.230000~~ | 0.380000 | ~~UNJ~~ | U | + |
| 103731 | cis-Nonachlor | 0.092000 | | J | * | |
| 9765805 | trans-Nonachlor | 0.800000 | | | | |
| 024573 | Heptachlor epoxide | 0.230000 | | U | U | |
| 0571 | Dieldrin | ~~0.260000~~ | 0.250000 | ~~UNJ~~ | U | + |
| 2559 | 4,4'-DDE | 8.200000 | | | | |
| 3190 | 2,4'-DDD | 0.420000 | | J | J | |
| 2208 | Endrin | 0.140000 | | U | U | |
| 2548 | 4,4'-DDD | 0.970000 | | J | J | |
| 89026 | 2,4'-DDT | ~~0.780000~~ | 0.240000 | ~~UNJ~~ | U | + |
| 3216659 | Endosulfan II | 0.500000 | | U | U | |
| 031078 | Endosulfan sulfate | 0.500000 | | U | U | |
| 0293 | 4,4'-DDT | 3.000000 | | | | |
| 421934 | Endrin aldehyde | 0.340000 | | U | U | |
| 3494705 | Endrin ketone | 0.340000 | | U | U | |
| 2435 | Methoxychlor | 0.290000 | | U | U | |
| 385855 | Mirex | 0.280000 | | | | |

**OGDEN VALIDATED**

*Analysis Not Validated

**LEVEL D**

12/18/96

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC216

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3040

**Sample wt/vol:** 0.0085 Kg **Lab File ID:** 3,1105963A,9,1

**% Moisture:** 66.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/17/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/06/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1105963A,9,1 | | | |
| 319846 | alpha-BHC | 0.530000 | | | |
| 3424826 | 2,4'-DDE | 0.430000 | U | u | |
| 959988 | Endosulfan I | ~~1.100000~~ 0.570000 | UN | u | + |
| Compound from Column: | RTX-5 | Lab File ID: 2,1105962A,9,1 | | | |
| 118741 | Hexachlorobenzene | 0.630000 | | | |
| 319857 | beta-BHC | ~~0.260000~~ 0.210000 | UN | u | + |
| 58899 | gamma-BHC (Lindane) | 1.700000 | | | |
| 319868 | delta-BHC | ~~0.720000~~ 0.170000 | UN | uJ | C,+ |
| 76448 | Heptachlor | 0.150000 | U | u | |
| 309002 | Aldrin | 0.780000 | U | u | |
| 5103[illegible] | gamma-Chlordane | ~~0.230000~~ 0.770000 | UN | u | + |
| 510[illegible] | alpha-Chlordane | 0.430000 | U | u | |
| 5103[illegible] | cis-Nonachlor | 0.400000 | U | u | |
| 39765805 | trans-Nonachlor | ~~0.790000~~ 0.400000 | UN | u | + |
| 1024573 | Heptachlor epoxide | 0.270000 | U | u | |
| 60571 | Dieldrin | ~~0.280000~~ 0.290000 | UN | u | + |
| 72559 | 4,4'-DDE | 5.300000 | | | |
| 53190 | 2,4'-DDD | 0.610000 | | | |
| 72208 | Endrin | 0.160000 | U | u | |
| 72548 | 4,4'-DDD | 0.870000 | J | J | |
| 789026 | 2,4'-DDT | ~~0.930000~~ 0.270000 | UN | u | + |
| 33216659 | Endosulfan II | 0.570000 | U | u | |
| 1031078 | Endosulfan sulfate | 0.570000 | U | u | |
| 50293 | 4,4'-DDT | 3.000000 | | | |
| 7421934 | Endrin aldehyde | 0.390000 | U | u | |
| 53494705 | Endrin ketone | 0.390000 | U | u | |
| 72435 | Methoxychlor | 0.330000 | U | u | |
| 2385855 | Mirex | 0.490000 | | | |

**OGDEN VALIDATED**

*Analysis Not Validated

12/18/96

**LEVEL D**

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MC219

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3041

**Sample wt/vol:** 0.0076 Kg **Lab File ID:** 3,1105963A,10,1

**% Moisture:** 70.70 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/17/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/06/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup:** (Y/N) **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1105963A,10,1 | | | | |
| 319846 | alpha-BHC | 0.170000 | J | J | |
| 3424826 | 2,4'-DDE | 0.490000 | U | U | |
| 959988 | Endosulfan I | 0.650000 | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,1105962A,10,1 | | | | |
| 118741 | Hexachlorobenzene | 0.600000 | | | |
| 319857 | beta-BHC | 0.120000 | J | J | |
| 58899 | gamma-BHC (Lindane) | ~~0.072000~~ 0.250000 | ~~UNJ~~ | U | + |
| 319868 | delta-BHC | ~~0.720000~~ 0.190000 | ~~UN~~ | UJ | C,+ |
| 76448 | Heptachlor | 0.160000 | U | U | |
| 309002 | Aldrin | 0.880000 | U | U | |
| 5103742 | gamma-Chlordane | 0.860000 | U | U | |
| 5103719 | alpha-Chlordane | ~~0.170000~~ 0.490000 | ~~UJ~~ | U | + |
| 5103731 | cis-Nonachlor | 0.450000 | U | * | |
| 39765805 | trans-Nonachlor | 0.520000 | | | |
| 1024573 | Heptachlor epoxide | 0.300000 | U | U | |
| 60571 | Dieldrin | 0.320000 | U | U | |
| 72559 | 4,4'-DDE | 9.900000 | | | |
| 53190 | 2,4'-DDD | 0.450000 | J | J | |
| 72208 | Endrin | 0.180000 | U | U | |
| 72548 | 4,4'-DDD | 2.000000 | | | |
| 789026 | 2,4'-DDT | 0.310000 | U | U | |
| 3216659 | Endosulfan II | 0.650000 | U | U | |
| 1031078 | Endosulfan sulfate | 0.650000 | U | U | |
| 10293 | 4,4'-DDT | 3.400000 | | | |
| 7421934 | Endrin aldehyde | 0.440000 | U | U | |
| 3494705 | Endrin ketone | 0.440000 | U | U | |
| 72435 | Methoxychlor | 0.370000 | U | U | |
| 385855 | Mirex | 0.400000 | | | |

OGDEN VALIDATED

*Analysis Not Validated

12/18/96

LEVEL D

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC221

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3042

**Sample wt/vol:** 0.0076 Kg **Lab File ID:** 3,1105963A,11,1

**% Moisture:** 70.10 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/17/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/06/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) | ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1105963A,11,1 | | | | |
| 319846 | alpha-BHC | 0.540000 | | | | |
| 3424826 | 2,4'-DDE | 0.490000 | | U | U | |
| 959988 | Endosulfan I | 0.640000 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1105962A,11,1 | | | | |
| 118741 | Hexachlorobenzene | 0.540000 | | | | |
| 319857 | beta-BHC | ~~0.200000~~ | 0.240000 | U ~~NJ~~ | U | + |
| 58899 | gamma-BHC (Lindane) | 1.600000 | | | | |
| 319868 | delta-BHC | ~~1.200000~~ | 0.190000 | U ~~NJ~~ | UJ | C,+ |
| 76448 | Heptachlor | 0.200000 | | | | |
| 309[illegible] | Aldrin | 0.870000 | | U | U | |
| 510[illegible] | gamma-Chlordane | 0.860000 | | U | U | |
| 510[illegible] | alpha-Chlordane | 0.490000 | | U | U | |
| 5103731 | cis-Nonachlor | 0.450000 | | U | ~~U~~ * | |
| 39765805 | trans-Nonachlor | 0.910000 | | | | |
| 1024573 | Heptachlor epoxide | 0.300000 | | U | U | |
| 60571 | Dieldrin | ~~0.370000~~ | 0.320000 | U ~~NJ~~ | U | + |
| 72559 | 4,4'-DDE | 2.100000 | | | | |
| 53190 | 2,4'-DDD | 1.400000 | | | | |
| 72208 | Endrin | 0.320000 | | | | |
| 72548 | 4,4'-DDD | 1.300000 | | U | U | |
| 789026 | 2,4'-DDT | 1.000000 | | | | |
| 33216659 | Endosulfan II | 0.640000 | | U | U | |
| 1031078 | Endosulfan sulfate | 0.640000 | | U | | |
| 50293 | 4,4'-DDT | 0.470000 | | U | | |
| 7421934 | Endrin aldehyde | 0.440000 | | U | | |
| 53494705 | Endrin ketone | 0.440000 | | U | | |
| 72435 | Methoxychlor | 0.370000 | | U | U | |
| 2385855 | Mirex | 0.490000 | | | | |

OGDEN VALIDATED

12/18/96

*Analysis Not Validated

LEVEL D

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC227

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019
Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT02
Matrix: (soil/water/tissue) TISSUE Lab Sample ID:, 96B3043
Sample wt/vol: 0.0078 Kg Lab File ID: 3,1105963A,12,1
% Moisture: 69.30 decanted: (Y/N) Date Received: 09/30/96
Extraction: (SepF/Cont/Sonc) Date Extracted: 10/17/96
Concentrated Extract Volume: 1.0000(mL) Date Analyzed: 11/06/96
Injection Volume: 2 (uL) Dilution Factor: 1.0000
GPC Cleanup: (Y/N) pH: Split Factor: 2.0000
Sulfur Cleanup: (Y/N) N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) | ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1105963A,12,1 | | | | |
| 19846 | alpha-BHC | 0.430000 | | | | |
| 124826 | 2,4'-DDE | 0.240000 | | J | J | |
| 59988 | Endosulfan I | 0.630000 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1105962A,12,1 | | | | |
| 18741 | Hexachlorobenzene | 0.510000 | | | | |
| 19857 | beta-BHC | ~~0.150000~~ | 0.230000 | U~~NJ~~ | U | + |
| 3899 | gamma-BHC (Lindane) | 1.300000 | | | | |
| 19868 | delta-BHC | ~~0.880000~~ | 0.190000 | U~~N~~ | UJ | c,+ |
| 5448 | Heptachlor | 0.160000 | | U | U | |
| 09002 | Aldrin | 0.850000 | | U | U | |
| 103742 | gamma-Chlordane | 0.840000 | | U | U | |
| 103719 | alpha-Chlordane | 0.370000 | | J | J | |
| 103731 | cis-Nonachlor | 0.440000 | | U | ~~X~~ | |
| 3765805 | trans-Nonachlor | 1.900000 | | | | |
| 024573 | Heptachlor epoxide | 0.290000 | | U | U | |
| 0571 | Dieldrin | ~~0.430000~~ | 0.310000 | U~~N~~ | U | + |
| 2559 | 4,4'-DDE | 18.000000 | | | | |
| 3190 | 2,4'-DDD | 3.000000 | | | | |
| 2208 | Endrin | 0.170000 | | U | U | |
| 2548 | 4,4'-DDD | 1.500000 | | | | |
| 39026 | 2,4'-DDT | ~~2.200000~~ | 0.300000 | U~~N~~ | U | + |
| 3216659 | Endosulfan II | 0.630000 | | U | U | |
| 031078 | Endosulfan sulfate | 0.630000 | | U | U | |
| 0293 | 4,4'-DDT | 2.700000 | | | | |
| 421934 | Endrin aldehyde | 0.430000 | | U | U | |
| 3494705 | Endrin ketone | 0.430000 | | U | U | |
| 2435 | Methoxychlor | 0.360000 | | U | U | |
| 385855 | Mirex | 1.000000 | | | | |

OGDEN VALIDATED

12/18/96

LEVEL D

*Analysis Not Validated

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MC227DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3043DL

**Sample wt/vol:** 0.0078 Kg **Lab File ID:** 3,1113963,9,1

**% Moisture:** 69.30 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/17/96

**Concentrated Extract Volume:** 2.0000(mL) **Date Analyzed:** 11/13/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 2.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1113963,9,1 | | | | |
| 319846 | alpha-BHC | 0.270000 | JR | R | D |
| 3424826 | 2,4'-DDE | 0.950000 | UR | ↓ | ↓ |
| 959988 | Endosulfan I | 1.300000 | UR | ↓ | ↓ |
| Compound from Column: | RTX-5 Lab File ID: 2,1113962,9,1 | | | | |
| 118741 | Hexachlorobenzene | 0.480000 | R | R | D |
| 319857 | beta-BHC | 0.300000 | JR | ↓ | ↓ |
| 58899 | gamma-BHC (Lindane) | 0.730000 | R | ↓ | ↓ |
| 319868 | delta-BHC | 0.790000 | R | ↓ | ↓ |
| 76448 | Heptachlor | 0.320000 | UR | ↓ | ↓ |
| 309002 | Aldrin | 1.700000 | UR | ↓ | ↓ |
| 510[illegible] | gamma-Chlordane | 1.700000 | UR | ↓ | ↓ |
| 510[illegible] | alpha-Chlordane | 0.310000 | JR | ↓ | ↓ |
| 5103[illegible] | cis-Nonachlor | 0.880000 | UR | * | |
| 39765805 | trans-Nonachlor | 1.800000 | R | R | D |
| 1024573 | Heptachlor epoxide | 0.580000 | UR | ↓ | ↓ |
| 60571 | Dieldrin | 0.620000 | UR | ↓ | ↓ |
| 72559 | 4,4'-DDE | 14.000000 | R | ↓ | ↓ |
| 53190 | 2,4'-DDD | 3.300000 | R | ↓ | ↓ |
| 72208 | Endrin | 0.350000 | UR | ↓ | ↓ |
| 72548 | 4,4'-DDD | 1.500000 | JR | ↓ | ↓ |
| 789026 | 2,4'-DDT | 2.100000 | R | ↓ | ↓ |
| 33216659 | Endosulfan II | 1.300000 | UR | ↓ | ↓ |
| 1031078 | Endosulfan sulfate | 1.300000 | UR | ↓ | ↓ |
| 50293 | 4,4'-DDT | 2.800000 | R | ↓ | ↓ |
| 7421934 | Endrin aldehyde | 0.860000 | UR | ↓ | ↓ |
| 53494705 | Endrin ketone | 0.860000 | UR | ↓ | ↓ |
| 72435 | Methoxychlor | 0.730000 | UR | ↓ | ↓ |
| 2385855 | Mirex | 0.880000 | R | ↓ | ↓ |

OGDEN VALIDATED

LEVEL D

*Analysis Not Validated

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MC232

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3044

**Sample wt/vol:** 0.0096 Kg **Lab File ID:** 3,1105963A,13,1

**% Moisture:** 62.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/17/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/06/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1105963A,13,1 | | | | |
| 19846 | alpha-BHC | 0.190000 | | J | J | S |
| 424826 | 2,4'-DDE | 28.000000 | | | J | S |
| 103731 | cis-Nonachlor | 1.900000 | | | * | |
| 89026 | ~~2,4'-DDT~~ | 3.900000 | | | J | S |
| 59988 | Endosulfan I | 0.510000 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1105962A,13,1 | | | | |
| 18741 | Hexachlorobenzene | 0.430000 | | | J | S |
| 19857 | beta-BHC | 0.110000 | | J | ↓ | ↓ |
| 8899 | gamma-BHC (Lindane) | 0.260000 | | | | |
| 19868 | delta-BHC | ~~0.380000~~ | 0.150000 | ~~UN~~ | UJ | C, + |
| 6448 | Heptachlor | 0.130000 | | U | U | |
| 09002 | Aldrin | 0.690000 | | U | U | |
| 103742 | gamma-Chlordane | 2.000000 | | | J | S |
| 103719 | alpha-Chlordane | 6.800000 | | | ↓ | ↓ |
| 9765805 | trans-Nonachlor | 11.000000 | | | | |
| 024573 | Heptachlor epoxide | 0.240000 | | U | U | |
| 0571 | Dieldrin | ~~5.300000~~ | 0.250000 | ~~UN~~ | U | + |
| 2559 | 4,4'-DDE | 200.000000 | | E | R | D |
| 3190 | 2,4'-DDD | 62.000000 | | E | R | D |
| 2208 | Endrin | 0.140000 | | U | U | |
| 2548 | 4,4'-DDD | 65.000000 | | E | R | D |
| 3216659 | Endosulfan II | 0.510000 | | U | U | |
| 031078 | ~~Endosulfan sulfate~~ | 0.510000 | | U | U | |
| 0293 | 4,4'-DDT | 16.000000 | | | J | S |
| 421934 | Endrin aldehyde | 0.350000 | | U | U | |
| 3494705 | Endrin ketone | ~~55.000000~~ | 0.350000 | ~~UN~~ | U | + |
| 2435 | Methoxychlor | 0.290000 | | U | U | |
| 385855 | Mirex | 4.400000 | | | J | S |

OGDEN VALIDATED

*Analysis Not Validated

12-18-96

LEVEL D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MC232DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIFT02

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3044DL

**Sample wt/vol:** 0.0096 Kg **Lab File ID:** 3,1113963,10,1

**% Moisture:** 62.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/17/96

**Concentrated Extract Volume:** 200.0000(mL) **Date Analyzed:** 11/13/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 200.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: DB-17 | Lab File ID: 3,1113963,10,1 | | | | |
| 319846 | alpha-BHC | 47.000000 | UR | R | D |
| 3424826 | 2,4'-DDE | 44.000000 | JR | ↓ | ↓ |
| 959988 | Endosulfan I | 100.000000 | UR | ↓ | ↓ |
| Compound from Column: RTX-5 | Lab File ID: 2,1113962,10,1 | | | | |
| 118741 | Hexachlorobenzene | 31.000000 | UR | R | D |
| 319857 | beta-BHC | 38.000000 | UR | ↓ | ↓ |
| 58899 | gamma-BHC (Lindane) | 39.000000 | UR | ↓ | ↓ |
| 319868 | delta-BHC | 31.000000 | UR | ↓ | ↓ |
| 76448 | Heptachlor | 26.000000 | UR | ↓ | ↓ |
| 309002 | Aldrin | 140.000000 | UR | ↓ | ↓ |
| 51[illegible] | gamma-Chlordane | 140.000000 | UR | ↓ | ↓ |
| 51[illegible] | alpha-Chlordane | 77.000000 | UR | ↓ | ↓ |
| 5103[illegible]1 | cis-Nonachlor | 72.000000 | UR | * | |
| 39765805 | trans-Nonachlor | 72.000000 | UR | R | D |
| 1024573 | Heptachlor epoxide | 47.000000 | UR | ↓ | ↓ |
| 60571 | Dieldrin | 50.000000 | UR | ↓ | ↓ |
| 72559 | 4,4'-DDE | 230.000000 | DJ | J | *11 |
| 53190 | 2,4'-DDD | 140.000000 | D | | |
| 72208 | Endrin | 28.000000 | UR | R | D |
| 72548 | 4,4'-DDD | 52.000000 | DJ | J | *11 |
| 789026 | 2,4'-DDT | 150.000000 | NR | R | D |
| 33216659 | Endosulfan II | 100.000000 | UR | ↓ | ↓ |
| 1031078 | Endosulfan sulfate | 100.000000 | UR | ↓ | ↓ |
| 50293 | 4,4'-DDT | 75.000000 | UR | ↓ | ↓ |
| 7421934 | Endrin aldehyde | 70.000000 | UR | ↓ | ↓ |
| 53494705 | Endrin ketone | 70.000000 | UR | ↓ | ↓ |
| ~~PCB-103~~ | ~~PCB-103 (2,2',4,5',6)~~ | ~~62.000000~~ | ~~JS~~ | * | |
| 72435 | Methoxychlor | 59.000000 | UR | R | D |
| 2385855 | Mirex | 48.000000 | UR | R | D |

OGDEN VALIDATED

LEVEL D

*Analysis Not Validated

OGDEN

# DATA VALIDATION REPORT

CLEAN CONTRACT TASK ORDER #136
NAF Midway Site Investigations

ANALYSIS: PESTICIDES/PCB CONGENERS
SAMPLE DELIVERY GROUP: OMIFT04

Prepared by

Ogden—Denver Operations
550 South Wadsworth Boulevard, Suite 500
Lakewood, Colorado 80226

# CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

Ogden Environmental and Energy Services Co., Inc.
550 South Wadsworth Boulevard
Suite 500
Lakewood, CO 80226

Package ID: C136PP64
Task Order: 1101901.36
SDG No.: OMIFT04
No. of Analyses: 11

Laboratory: A. D. Little
Reviewer: H. White
Analysis/Method: Pesticides/PCB Congeners

Date: 1-7-97
Reviewer's Signature: Heidi A. White

| ACTION ITEMS[a] | |
|---|---|
| 1. **Case Narrative Deficiencies** | |
| 2. **Out of Scope Analyses** | |
| 3. **Analyses Not Conducted** | |
| 4. **Missing Hardcopy Deliverables** | |
| 5. **Incorrect Hardcopy Deliverables** | |
| 6. **Deviations from Analysis Protocol, e.g.,** | - Qualifications assigned for calibration deficiencies for delta-BHC and PCB-52. |
| Holding Times | |
| GC/MS Tune/Inst. Perform | - Qualifications assigned for 1 sample for surrogate deficiencies |
| Calibrations | |
| Blanks | |
| Surrogates | |
| Matrix Spike/Dup LCS | - False positives detected in samples |
| Field QC | |
| Internal Standard Performance | |
| Compound Identification and Quantitation | |
| System Performance | |

| COMMENTS[b] | |
|---|---|
| | |

[a] Subcontracted analytical laboratory is not meeting contract and/or method requirements.
[b] Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.

# 1. INTRODUCTION

| | |
|---|---|
| Task Order Title: | NAF Midway Site Investigations |
| CLEAN Contract Task Order #: | 0136 |
| SDG#: | OMIFT04 |
| CTO Manager: | J. Cotter |
| Project Contact: | M. Medeiros |
| Matrix: | Tissue |
| Analysis: | Pesticides/PCB Congeners |
| NEESA QC Level: | D |
| No. of Samples: | 11 |
| No. of Reanalyses/Dilutions: | 2 |
| Reviewer: | H. White |
| Date of Review: | January 3, 1997 |

The samples listed in Table 1 were validated based on the NOAA National Status and Trends Analytical Protocols, data validation procedure for Levels C and D pesticides/PCBs (DVP-4, Rev. 2) and the *National Functional Guidelines For Organic Data Review* (2/94). These protocols vary from the CLP Protocols upon which the Navy CLEAN data validation procedures were based. Instances where quality control parameters vary from the CLP Data Validation procedures are documented in the text of this report and should be noted with respect to the overall data quality objectives of this project. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in estimated value were not denoted by a qualification code since the data had already been rejected.

**Table 1. Sample identification**

| Client ID | EPA ID | Laboratory ID | Matrix | COC Method |
|---|---|---|---|---|
| M99MT03S05 | MV019 | 96B2999 | tissue | STIV141C/E |
| M99MT03D05 | MV020 | 96B3000 | tissue | STIV141C/E |
| M99MT04S05 | MV024 | 96B3002 | tissue | STIV141C/E |
| M99MT04S05 | MV024RE | 96B3002REF | tissue | STIV141C/E |
| M99MT01S05 | MV029 | 96B3004 | tissue | STIV141C/E |
| M99MT02S05 | MV042 | 9BB3010 | tissue | STIV141C/E |
| M00MT04S05 | MA719 | 96B3014 | tissue | STIV141C/E |
| M00MT04D05 | MA720 | 96B3015 | tissue | STIV141C/E |
| M00MT02S06 | MA726 | 96B3018 | tissue | STIV141C/E |
| M00MT03S05 | MA729 | 96B3021 | tissue | STIV141C/E |
| M00MT03S06 | MA730 | 96B3022 | tissue | STIV141C/E |
| M01MT01S05 | MC233 | 96B3045 | tissue | STIV141C/E |
| M01MT01S05 | MC233DL | 96B3045DL | tissue | STIV141C/E |

# 2. DATA VALIDATION FINDINGS

## 2.1 SAMPLE MANAGEMENT

The following are findings associated with sample management:

### 2.1.1 Sample Preservation, Handling, and Transport

No preservations were required for pesticide/PCB analysis. Samples in this SDG were received by the laboratory below temperature limits established in NEESA 20.2-047B; however, Status and Trends protocols require tissue samples to be frozen and therefore, no qualifications were assigned. No sample containers were noted to be broken upon arrival at the laboratory. No qualifications were required.

### 2.1.2 Chain of Custody

All COCs were legible and complete. All COCs were signed by laboratory and field personnel. Other questions regarding sample conditions were answered on the COCs. The case narrative identified the SDG as OMIAT04, while the Form Is identified the SDG as OMIFT04. For the data validation, the SDG from the Form Is was used. No qualifications were required based on sample receipt information.

### 2.1.3 Holding Times

All samples in this SDG were extracted and analyzed within the prescribed six month holding time for tissues; therefore, no qualifications were required.

## 2.2 PESTICIDES INSTRUMENT PERFORMANCE

No percent resolution or endrin/4,4'-DDT degradation analyses were performed by the laboratory, as required by the CLP SOW (3/90). These analyses have not been established in the Status and Trends protocols; therefore, no evaluation was given to the data based on percent resolution or breakdown degradation. PCBs 103 and 198 were used as the surrogates for this SDG, while tetrachloro-m-xylene served as the internal standard. All target analytes were quantified versus the internal standard recovery. No surrogate or internal standard retention time window was specified in the Status and Trends protocols. The laboratory established a window of $\pm$0.075 or 0.15 minutes. Based on professional judgement, the reviewer considered this an acceptable range. The surrogate and internal standard compounds were within the absolute retention time windows established with initial calibration standards. The retention time for all target compounds was established by the laboratory at $\pm$0.075 minutes, although some windows were reduced or expanded for proper peak identification. In these instances, the reviewer deemed the retention time windows to be acceptable. All continuing calibration standards had retention times within the retention time windows established with the initial calibration standards. No qualifications of the data were required.

## 2.3 CALIBRATION

### 2.3.1 Analytical Sequence

The laboratory modified the analytical sequence from the Status and Trends protocols. The laboratory analyzed an initial five-point calibration with subsequent mid-level calibration standards analyzed for every ten field samples, and at the end of each sequence. Status and Trends protocols suggested a four-point calibration be interspersed with samples and no more than six samples be analyzed in between calibration standards. The laboratory modifications were considered acceptable by the reviewer; therefore, no qualifications were required.

### 2.3.2 Initial Calibration

The NOAA Status and Trends used a correlation coefficient (r) to determine the linearity of initial calibrations. The laboratory deviated from the protocols by measuring the %RSDs from relative response factors for each initial calibration. The laboratory established the %RSD must be less than or equal to 25% for 90% of all compounds and less than or equal to 35% for all compounds. The reviewer used a QC criterion of 25% for all compounds for the %RSDs.

Delta-BHC and PCB-52 exceeded the QC limits on the RTX-5 column for the initial calibration performed on 11/22/96. In addition, delta-BHC exceeded the QC limits for the RTX-5 column and delta-BHC and alpha-BHC exceeded the QC limits on the DB-17 column for the initial calibration performed on 11/25/96. Detects for delta-BHC and PCB-52were qualified "J" and nondetects "UJ" in all samples. Alpha-BHC was rejected in the associated samples; therefore, no qualifications were assigned for alpha-BHC.

PCB-101, alpha-BHC, delta-BHC, and 4,4'-DDT exceeded the QC limits for the initial calibration performed on 12/19/96. The associated sample, MV024REF, was rejected due to surrogate performance; therefore, no further qualifications were assigned for calibration deficiencies.

### 2.3.3 Continuing Calibration

No QC limits have been established for continuing calibration standards by the Status and Trends protocols. The laboratory established a %D less than or equal to 25% for 90% of the target compounds and less than or equal to 35% for all compounds. For validation purposes, the reviewer used a QC criterion of 25% for the %Ds. All continuing calibration standard %Ds reported from the RTX-5 column and DB-17 column were within the QC limits, with the exception of 4,4'-DDT on the DB-17 column performed on 12/20/96 at 18:35. The reanalysis associated with the continuing calibration was rejected in favor of the initial analysis; therefore, no qualifications were assigned.

## 2.4 BLANKS

### 2.4.1 Instrument Blanks

No instrument blanks were analyzed for this SDG. NOAA Status and Trends protocols do not suggest the analysis of instrument blanks; therefore, no evaluation of the data was given based on instrument blanks.

### 2.4.2 Method Blanks

NOAA Status and Trends protocols suggested method blanks were acceptable if no target compound detects were found 3X above the MDLs. The laboratory further qualified the QC limits for blanks, stating that no more than 2 target analytes could exceed 3X the MDLs. Because the reporting limits and the MDLs were the same for this SDG (see Section 2.11), the reviewer chose a more conservative QC criteria. The CLP SOW (3/90) criteria for method blanks was used to evaluate the data. Validation procedures were based on the Ogden DVP-4, Revision 2, which states no target compounds above the reporting limits.

One tissue method blank was analyzed with this SDG. PCB-138 was detected in the method blank at 0.420 $\mu$g/kg. The detects for PCB-138 reported below the MDL in samples MV024, MA729, and MA730 were qualified "U" and the concentrations raised to the MDL. No further qualifications were required.

## 2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

The laboratory analyzed one SRM in lieu of a blank spike/blank spike duplicate. The QC criteria established to evaluate the matrix spike/ matrix spike duplicate was used by the laboratory for the LCS. Because the Status and Trends protocols did not address LCSs and the established limits were stricter than those in the CLP SOW (3/90), the reviewer deemed the limits acceptable. All target analytes met the QC criteria; therefore, no qualifications were required.

## 2.6 SURROGATE RECOVERY

The laboratory established surrogate recovery QC limits that were stricter than those applied in the Status and Trends protocols. Surrogate recoveries were calculated and reported for the RTX-5 column only; therefore, surrogate recovery evaluation was limited to the data from the RTX-5 column.
In addition to surrogates PCB-103 and PCB-198, the laboratory identified an additional surrogate, 4,4'-dibromo-octafluoro-biphenyl (DBOFB). Percent recoveries for DBOFB were reported in the raw data, but not on the summary forms. No historical data or QC limits were provided for DBOFB; therefore, recoveries for DBOFB were not evaluated by the reviewer. The QC limits for tissues were changed from 50 to 125 percent to 45 to 125 percent for the second round of sampling. Surrogate recoveries were within QC limits for all samples except MV024. The surrogate recovery for PCB-103 was below the QC limits.

The laboratory reanalyzed sample MV024, with acceptable surrogate recoveries; however, results varied between the initial and reanalysis results. The split factor was 4× greater in the reanalysis resulting in elevated detection limits. As a result, detects that were present in the initial analysis were not present in the reanalysis. Based on professional judgement, the reviewer determined that estimated results were better than elevated detection limits; therefore, the reanalysis results (MV024REF) were rejected, "R," and detects in the initial analysis (MV024) were qualified "J" and nondetects "UJ."

## 2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

The MS/MSD analyses were performed on sample MV019. Matrix spike recoveries were recalculated from the raw data. No transcription or calculation errors were noted. The recoveries for all fortified PCB compounds, mirex, and trans-Nonachlor exceeded the established QC limits of 50 to 125 percent for the MS and MSD. The sample concentrations for all fortified compounds were greater than 5× the spike concentration. In addition, the SRM showed acceptable recoveries; therefore, no qualifications were assigned. The reviewer noted that the QC limits for MS/MSD results were stricter than those in the Status and Trends protocols.

## 2.8 SAMPLE CLEANUP PERFORMANCE

GPC cleanup was performed for all samples in this SDG. No QC criteria has been established for cleanup procedures by NOAA Status and Trends. Samples were evaluated based on surrogate recoveries, matrix spike recoveries, and SRM recoveries. The GPC cleanups were deemed acceptable and no qualifications were required.

## 2.9 FIELD QC SAMPLES

Field QC samples are evaluated, and if necessary, qualified based only on method blanks. Any remaining detects are used to evaluate the associated samples. The following are findings associated with field QC samples:

### 2.9.1 Field Blanks and Equipment Rinsates

The CTO 136 Analytical Summary Table identify samples MV011, MV012, and MV013 (from SDG OMISW01) as the equipment rinsates and sample MV010 (from SDG OMISW01) as the field blank. Target compounds were identified in the field blank and equipment rinsates; however, target compound detects in the samples were greater than 5× the concentrations in the field QC and no qualifications were required.

### 2.9.2 Field Duplicates

Samples MV019/MV020 and MA719/MA720 were the field duplicate pairs associated with this SDG. Several target compounds for all duplicate pairs were detected in one sample only. In addition, some RPDs exceeded 100%. No qualifications are assigned to the data based on field duplicate results.

## 2.10 COMPOUND IDENTIFICATION

Compound identification was performed by the reviewer. Possible false negative detects were eliminated upon examination of the chromatograms and quantitation sheets by the reviewer. All detected analytes were confirmed by second column confirmation. Some samples exhibited elevated baselines occurring after 65 minutes into the run. Based on the surrogate recovery for PCB 198 and a comparison of raw data to chromatograms from low level standards, the reviewer determined that target analyte peaks, if present, could be identified.

The laboratory quantitated several compounds without second column confirmation. These compounds were qualified by the laboratory as "NJ" or "N." In addition, several compounds were reported below the reporting limit and at levels less than ½ the MDL. These compounds were qualified by the laboratory as "J." Using ½ the MDL as a basis for professional judgement, the reviewer identified all compounds quantified from a single column and several "J" compounds reported by the laboratory as false positives. The reporting concentrations were changed to the reporting limits and the qualifiers changed to nondetects, "U."

Cis-nonachlor was reported on the Form Is for all samples; however, cis-nonachlor was not identified as a target compound. As a result, the cis-nonachlor was not validated. No qualifications were required.

## 2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantification was verified in the samples in this SDG. No %Ds between the two columns were calculated or reported for target analyte detects. The RTX-5 column served as the primary column for all target compounds, with the exception of PCB 8, alpha-BHC, endosulfan I, 2,4'-DDE and in some cases, PCB-138 and PCB-52, which were quantified from the DB-17 column. The confirmation column was used for confirmation of analytes and no quantification occurred from the column. Review of the raw data confirmed that target analytes were present on both columns and quantification was performed on the correct primary column; therefore no evaluation was given to the inter-column %D information. Several compound were detected but at a level less than the reporting limits and above the MDL. Raw data was reviewed to eliminate the potential for false positives. These compounds were qualified as estimated "J."

Due to high concentrations of target analytes, MC233 were reanalyzed at dilutions. All target compounds exceeding the linear range in the samples were rejected, "R" in the initial analysis and were reported from the dilution results. Target compounds reported from the initial analysis were rejected, "R," in the dilution.

Because no CRQL limits have been established for these methods, CRQLs were determined by an MDL study performed by the laboratory. Copies of the MDL study were included with the raw data. Verification of the raw data confirmed the correct CRQLs were applied. No qualifications were required.

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV024RE

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT07

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3002REF

**Sample wt/vol:** 0.0056 Kg **Lab File ID:** 3,1219963,8,1

**% Moisture:** 77.80 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/30/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/20/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 8.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1219963,8,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.590 | U | R | D |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 1.400 | J | R | D |
| Compound from Column: | RTX-5 Lab File ID: 2,1219962,8,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.760 | U | R | D |
| 7012375 | PCB-28 (2,4,4') | 0.730 | U | | |
| 35693993 | PCB-52 (2,2',5,5') | ~~2.900~~ 0.330 | UN | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.610 | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 1.000 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 3.200 | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 1.400 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 3.700 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 3.600 | J | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.760 | U | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 1.100 | U | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 2.300 | J | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 1.800 | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 2.300 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 1.100 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.490 | J | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.570 | J | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 4.600 | | R | D |

**OGDEN VALIDATED**

**LEVEL D**

0200156

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV024RE

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT07

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3002REF

**Sample wt/vol:** 0.0056 Kg **Lab File ID:** 3,1219963,8,1

**% Moisture:** 77.80 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/30/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/20/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 8.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) | ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1219963,8,1 | | | | |
| 319846 | alpha-BHC | ~~0.550000~~ | 0.200000 | ~~UNJ~~ | R | D |
| 3424826 | 2,4'-DDE | 1.300000 | | U | ↓ | ↓ |
| 959988 | Endosulfan I | 1.700000 | | U | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1219962,8,1 | | | | |
| 118741 | Hexachlorobenzene | 0.270000 | | J | R | D |
| 319857 | beta-BHC | 0.650000 | | U | ↓ | ↓ |
| 58899 | gamma-BHC (Lindane) | 0.670000 | | U | | |
| 319868 | delta-BHC | 0.530000 | | U | | |
| 76448 | Heptachlor | 0.440000 | | U | | |
| 309002 | Aldrin | 2.400000 | | U | | |
| 5103742 | gamma-Chlordane | 2.300000 | | U | ↓ | ↓ |
| 5[illegible]719 | alpha-Chlordane | 1.300000 | | U | R | D |
| [illegible]31 | cis-Nonachlor | 1.200000 | | U | * | |
| 3[illegible]305 | trans-Nonachlor | 1.200000 | | U | R | D |
| 1024573 | Heptachlor epoxide | 0.810000 | | U | ↓ | ↓ |
| 60571 | Dieldrin | 0.860000 | | U | | |
| 72559 | 4,4'-DDE | 5.700000 | | U | | |
| 53190 | 2,4'-DDD | 1.400000 | | U | | |
| 72208 | Endrin | 0.480000 | | U | | |
| 72548 | 4,4'-DDD | 3.500000 | | U | | |
| 789026 | 2,4'-DDT | 0.840000 | | U | | |
| 33216659 | Endosulfan II | 1.700000 | | U | | |
| 1031078 | Endosulfan sulfate | 1.700000 | | U | | |
| 50293 | 4,4'-DDT | 1.300000 | | U | | |
| 7421934 | Endrin aldehyde | 1.200000 | | U | | |
| 53494705 | Endrin ketone | 1.200000 | | U | | |
| 72435 | Methoxychlor | 1.000000 | | U | ↓ | ↓ |
| 2385855 | Mirex | 0.820000 | | U | R | D |

**OGDEN VALIDATED**

**LEVEL D**

*Analysis Not Validated

/10/96

# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MV019

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT04

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 9682999

Sample wt/vol: 0.0035 Kg Lab File ID: 3,1122963,11,1

% Moisture: 86.40 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/30/96

Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 11/23/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/Kg

| Cas No: | Compound | | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1122963,11,1 | | | |
| 4883437 | PCB-8 (2,4') | 6.900 | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1122962,11,1 | | | |
| 7680652 | PCB-18 (2,2',5) | 0.710 | | | |
| 012375 | PCB-28 (2,4,4') | 7.100 | | | |
| 5693993 | PCB-52 (2,2',5,5') | 17.000 | | H | C |
| 1464395 | PCB-44 (2,2',3,5') | 0.250 | U | U | |
| 2598100 | PCB-66 (2,3',4,4') | 0.410 | U | U | |
| 7680732 | PCB-101 (2,2',3,5,5') | 12.000 | | | |
| 2598133 | PCB-77 (3,3',4,4') | 0.550 | U | U | |
| 1508006 | PCB-118 (2,3',4,4',5) | 0.930 | J | | |
| 5065271 | PCB-153 (2,2',4,4',5,5') | 16.000 | | | |
| 2598144 | PCB-105 (2,3,3',4,4') | 1.500 | | | |
| 5065282 | PCB-138 (2,2',3,4,4',5') | 5.900 | | | |
| 7465288 | PCB-126 (3,3',4,4',5) | 9.700 | | | |
| 2663680 | PCB-187 (2,2',3,4',5,5',6) | 6.500 | | | |
| 8380073 | PCB-128 (2,2',3,3',4,4') | 7.900 | | | |
| 6065293 | PCB-180 (2,2',3,4,4',5,5') | 17.000 | | | |
| 5065906 | PCB-170 (2,2',3,3',4,4',5) | 4.900 | | | |
| 2663782 | PCB-195 (2,2',3,3',4,4',5,6) | 1.200 | | | |
| 0186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 9.400 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 20.000 | | | |

**OGDEN VALIDATED**

**LEVEL D**

1D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MV019

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTD136 ADL Project No.: 69084 SDG No.: OMIFT04

M[illegible] (soil/water/tissue) TISSUE Lab Sample ID: 9682999

Sample wt/vol: 0.0095 Kg Lab File ID: 3,1122963,11,1

% Moisture: 86.40 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/30/96

Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 11/23/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1122963,11,1 | | | | |
| 319846 | alpha-BHC | 0.510000 | | | | |
| 3424826 | 2,4'-DDE | 0.530000 | | U | U | |
| 959988 | Endosulfan I | 0.700000 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1122962,11,1 | | | | |
| 118741 | Hexachlorobenzene | 0.140000 | | J | J | |
| 319857 | beta-BHC | 0.420000 | | | | |
| 58899 | gamma-BHC (Lindane) | 6.200000 | | | | |
| 319868 | delta-BHC | 0.680000 | | | J | C |
| 76448 | Heptachlor | 8.600000 | | | | |
| 309002 | Aldrin | 0.950000 | | U | U | |
| 5103742 | gamma-Chlordane | ~~2.000000~~ | 0.940000 | UN | U | + |
| 510[illegible]9 | alpha-Chlordane | 0.530000 | | U | U | |
| 51[illegible] | cis-Nonachlor | 0.490000 | | U | * | |
| 39[illegible]5 | trans-Nonachlor | 7.100000 | | | | |
| 1024573 | Heptachlor epoxide | 0.390000 | | U | U | |
| 60571 | Dieldrin | 5.500000 | | | | |
| 72559 | 4,4'-DDE | ~~0.570000~~ | 2.200000 | UJ | U | + |
| 53190 | 2,4'-DDD | 3.100000 | | | | |
| 72208 | Endrin | 0.190000 | | U | U | |
| 72548 | 4,4'-DDD | 1.400000 | | U | U | |
| 789026 | 2,4'-DDT | 10.000000 | | | | |
| 33216659 | Endosulfan II | 0.700000 | | U | U | |
| 1031078 | Endosulfan sulfate | 0.700000 | | U | U | |
| 50293 | 4,4'-DDT | 0.510000 | | U | U | |
| 7421934 | Endrin aldehyde | 0.700000 | | | | |
| 53494705 | Endrin ketone | 0.480000 | | U | U | |
| 72435 | Methoxychlor | 0.410000 | | U | U | |
| 2385855 | Mirex | 7.500000 | | | | |

OGDEN VALIDATED

LEVEL D

*Analysis Not Validated

HD 13 97

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV020

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019
Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT04
Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3000
Sample wt/vol: 0.0030 Kg Lab File ID: 3,1122963,13,1
% Moisture: 87.90 decanted: (Y/N) Date Received: 09/30/96
Extraction: (SepF/Cont/Sonc) Date Extracted: 10/30/96
Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 11/23/96
Injection Volume: 2 (uL) Dilution Factor: 1.0000
GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000
Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/Kg

| Cas No: | Compound | | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1122963,13,1 | | | | |
| 34883437 | PCB-8 (2,4') | | 0.270 | U | u | |
| 35693993 | PCB-52 (2,2',5,5') | | 2.300 | | J | c |
| Compound from Column: | RTX-5 | Lab File ID: 2,1122962,13,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | | 2.000 | | | |
| 7012375 | PCB-28 (2,4,4') | | 0.340 | U | u | |
| 41464395 | PCB-44 (2,2',3,5') | 0.290 | ~~0.970~~ ~~0.670~~ | UN | u | + |
| 32598100 | PCB-66 (2,3',4,4') | | 0.470 | U | u | |
| 37680732 | PCB-101 (2,2',3,5,5') | | 2.900 | | | |
| 32598133 | PCB-77 (3,3',4,4') | | 0.630 | U | u | |
| 31508006 | PCB-118 (2,3',4,4',5) | | 2.100 | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | | 6.700 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | | 2.500 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.520 | 3.600 ~~0.590~~ ~~1.000~~ | UN | u | + |
| 57465288 | PCB-126 (3,3',4,4',5) | | | | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | | 10.000 ~~0.280~~ 0.830 | UJ | u | + |
| 38380073 | PCB-128 (2,2',3,3',4,4') | | | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | | 5.500 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | | 1.800 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | | 0.430 | J | J | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | | 1.500 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | | 7.100 | | | |

**OGDEN VALIDATED**

**LEVEL D**

1-3-97

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MV020

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT04

Matrix (soil/water/tissue) TISSUE Lab Sample ID: 96B3000

Sample wt/vol: 0.0030 Kg Lab File ID: 3,1122963,13,1

% Moisture: 87.90 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/30/96

Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 11/23/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/Kg

| Cas No: | Compound | | | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1122963,13,1 | | | | |
| 319846 | alpha-BHC | | 1.600000 | | | |
| 3424826 | 2,4'-DDE | | 0.610000 | U | U | |
| 959988 | Endosulfan I | | 0.560000 | J | J | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1122962,13,1 | | | | |
| 118741 | Hexachlorobenzene | 0.250000 | ~~0.140000~~ ~~0.510000~~ | UNJ | U | + |
| 319857 | beta-BHC | | 0.670000 | | | |
| 58899 | gamma-BHC (Lindane) | | 0.320000 | | | |
| 319868 | delta-BHC | | 0.750000 | | J | C |
| 76448 | Heptachlor | | 0.200000 | U | U | |
| 309002 | Aldrin | | 1.100000 | U | U | |
| 5103742 | gamma-Chlordane | 1.100000 | ~~2.100000~~ ~~2.2000~~ | UN | U | + |
| 51[illegible] | alpha-Chlordane | | ~~0.440000~~ 0.620000 | UNJ | U | + |
| 51[illegible] | cis-Nonachlor | | 0.570000 | U | * | |
| 39765805 | trans-Nonachlor | | 0.270000 | J | J | |
| 1024573 | Heptachlor epoxide | | ~~0.009300~~ 0.380000 | UJ | U | + |
| 60571 | Dieldrin | | 0.400000 | U | U | |
| 72559 | 4,4'-DDE | | ~~0.540000~~ 2.600000 | UJ | U | + |
| 53190 | 2,4'-DDD | | 0.910000 | | | |
| 72208 | Endrin | | 0.220000 | U | U | |
| 72548 | 4,4'-DDD | | ~~0.370000~~ 1.700000 | UNJ | U | + |
| 789026 | 2,4'-DDT | | 0.390000 | U | U | |
| 33216659 | Endosulfan II | | 0.800000 | U | | |
| 1031078 | Endosulfan sulfate | | 0.800000 | U | | |
| 50293 | 4,4'-DDT | | 0.590000 | U | | |
| 7421934 | Endrin aldehyde | | 1.100000 | | | |
| 53494705 | Endrin ketone | | 0.550000 | U | U | |
| 72435 | Methoxychlor | | 0.470000 | U | U | |
| 2385855 | Mirex | | 3.600000 | | | |

OGDEN VALIDATED

*Analysis Not Validated

LEVEL D

1/3/97

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV024

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT04

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 95B3002

Sample wt/vol: 0.0056 Kg Lab File ID: 3,1122963,14,1

% Moisture: 77.80 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/30/96

Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 11/23/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/Kg

| Cas No: | Compound | | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1122963,14,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.150 | U | UJ | S |
| 35693993 | PCB-52 (2,2',5,5') | 0.430 | | J | C, S |
| Compound from Column: | RTX-5 | Lab File ID: 2,1122962,14,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.600 | | J | S |
| 7012375 | PCB-28 (2,4,4') | 0.180 | U | UJ | S |
| 41464395 | PCB-44 (2,2',3,5') | ~~0.760~~ 0.150 | UM | UJ | +, S |
| 32598100 | PCB-66 (2,3',4,4') | 0.260 | U | UJ | S |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.910 | | J | S |
| 32598133 | PCB-77 (3,3',4,4') | 0.340 | U | UJ | S |
| 31508006 | PCB-118 (2,3',4,4',5) | ~~0.320~~ 0.900 | UNJ | UJ | +, S |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 3.300 | | J | S |
| 32598144 | PCB-105 (2,3,3',4,4') | ~~0.860~~ 0.190 | UM | UJ | +, S |
| 35065282 | PCB-138 (2,2',3,4,4',5') | ~~1.700~~ 1.800 | J | UJ | S, B |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.280 | U | UJ | S |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 3.200 | | J | S |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.450 | U | UJ | S |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 2.400 | | J | S |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.660 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.390 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.450 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 4.100 | | | |

**OGDEN VALIDATED**

**LEVEL D**

1-3-97

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV024

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT04

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3002

Sample wt/vol: 0.0056 Kg Lab File ID: 3,1122963,14,1

% Moisture: 77.80 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/30/96

Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 11/23/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/Kg

| Cas No: | Compound | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1122963,14,1 | | | |
| 319846 | alpha-BHC | 0.410000 | | J | S |
| 3424826 | 2,4'-DDE | 0.330000 | U | UJ | |
| 959988 | Endosulfan I | 0.440000 | U | UJ | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1122962,14,1 | | | |
| 118741 | Hexachlorobenzene | 0.130000 | U | UJ | S |
| 319857 | beta-BHC | 0.120000 | J | J | |
| 58899 | gamma-BHC (Lindane) | 0.130000 | J | J | |
| 319868 | delta-BHC | 0.340000 | | J | C, S |
| 76448 | Heptachlor | 0.280000 | | J | S |
| 309002 | Aldrin | 0.590000 | U | UJ | S |
| 5103742 | gamma-Chlordane | ~~0.430000~~ 0.590000 | UNJ | UJ | +, S |
| 51[illegible] | alpha-Chlordane | 0.330000 | U | UJ | S |
| 51[illegible] | cis-Nonachlor | 0.310000 | U | * | |
| 39765805 | trans-Nonachlor | 0.310000 | U | | |
| 1024573 | Heptachlor epoxide | 0.200000 | U | | |
| 60571 | Dieldrin | 0.220000 | U | | |
| 72559 | 4,4'-DDE | 0.150000 | J | J | S |
| 53190 | 2,4'-DDD | ~~0.330000~~ 0.360000 | UNJ | UJ | +, S |
| 72208 | Endrin | 0.120000 | U | UJ | S |
| 72548 | 4,4'-DDD | 0.150000 | J | J | |
| 789026 | 2,4'-DDT | 0.160000 | J | J | |
| 33216659 | Endosulfan II | 0.440000 | U | UJ | S |
| 1031078 | Endosulfan sulfate | 0.440000 | U | | |
| 50293 | 4,4'-DDT | 0.320000 | U | | |
| 7421934 | Endrin aldehyde | 0.300000 | U | | |
| 53494705 | Endrin ketone | 0.300000 | U | | |
| 72435 | Methoxychlor | 0.250000 | U | | |
| 2385855 | Mirex | 0.380000 | | J | S |

OGDEN VALIDATED

1-3-97

*Analysis Not Validated

LEVEL D

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV029

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT04

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3004

Sample wt/vol: 0.0021 Kg Lab File ID: 3,1122963,15,1

% Moisture: 91.65 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/30/96

Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 11/23/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/Kg

| Cas No: | Compound | | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1122963,15,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.390 | U | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1122962,15,1 | | | |
| 37680652 | PCB-18 (2,2',5) | ~~2.200~~ 0.510 | U~~N~~ | U | + |
| 7012375 | PCB-28 (2,4,4') | 0.490 | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | ~~34.000~~ 0.890 | U~~N~~ | UJ | +, C |
| 41464395 | PCB-44 (2,2',3,5') | 0.410 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.680 | U | U | |
| 37680732 | PCB-101 (2,2',3,5,5') | 22.000 | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.900 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 2.400 | U | U | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | ~~8.300~~ 3.900 | U~~N~~ | U | + |
| 32598144 | PCB-105 (2,3,3',4,4') | ~~2.600~~ 0.510 | U~~N~~ | U | + |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 4.600 | J | J | |
| 57465288 | PCB-126 (3,3',4,4',5) | ~~0.570~~ 0.750 | U~~NJ~~ | U | + |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | ~~15.000~~ 1.700 | U~~N~~ | U | + |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 1.200 | U | U | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 7.000 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 3.200 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 4.500 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 6.600 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 64.000 | | | |

OGDEN VALIDATED

LEVEL D

1-3-97

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV029

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT04

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3004

Sample wt/vol: 0.0021 Kg Lab File ID: 3,1122963,15,1

% Moisture: 91.65 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/30/96

Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 11/23/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/Kg

| Cas No: | Compound | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1122963,15,1 | | | |
| 319846 | alpha-BHC | 1.700000 | | | |
| 3424826 | 2,4'-DDE | 0.870000 | U | U | |
| 959988 | Endosulfan I | 8.200000 | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1122962,15,1 | | | |
| 118741 | Hexachlorobenzene | 0.360000 | U | U | |
| 319857 | beta-BHC | ~~0.850000~~ 0.430000 | ~~UN~~ | U | + |
| 58899 | gamma-BHC (Lindane) | ~~1.000000~~ 0.450000 | ~~UN~~ | U | + |
| 319868 | delta-BHC | 1.300000 | | J | C |
| 76448 | Heptachlor | 0.290000 | U | U | |
| 309002 | Aldrin | 1.600000 | U | U | |
| 5[illegible]42 | gamma-Chlordane | 1.500000 | U | U | |
| 5[illegible] | alpha-Chlordane | ~~2.700000~~ 0.880000 | ~~UN~~ | U | + |
| 5[illegible]1 | cis-Nonachlor | 0.810000 | U | ~~*U~~ | |
| 39765805 | trans-Nonachlor | 0.810000 | U | U | |
| 1024573 | Heptachlor epoxide | 0.540000 | U | U | |
| 60571 | Dieldrin | 0.570000 | U | U | |
| 72559 | 4,4'-DDE | 6.800000 | | | |
| 53190 | 2,4'-DDD | 0.960000 | U | U | |
| 72208 | Endrin | 0.320000 | U | U | |
| 72548 | 4,4'-DDD | 4.900000 | | | |
| 789026 | 2,4'-DDT | 3.900000 | | | |
| 33216659 | Endosulfan II | 1.200000 | U | U | |
| 1031078 | Endosulfan sulfate | 1.200000 | U | U | |
| 50293 | 4,4'-DDT | 42.000000 | | | |
| 7421934 | Endrin aldehyde | 0.790000 | U | U | |
| 53494705 | Endrin ketone | 0.790000 | U | U | |
| 72435 | Methoxychlor | 0.670000 | U | U | |
| 2385855 | Mirex | 1.800000 | | | |

OGDEN VALIDATED

*Analysis Not Validated

1-3-97

LEVEL D

2/10/96

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV042

Lab Name: Arthur D. Little, Inc.
Contract: N62742-90-D-0019
Lab Code: ADLMA
Case No.: CTO136
ADL Project No.: 69084
SDG No.: OMIFT04
Matrix: (soil/water/tissue) TISSUE
Lab Sample ID: 96B3010
Sample wt/vol: 0.0026 Kg
Lab File ID: 3,1122963,16,1
% Moisture: 89.80 decanted: (Y/N)
Date Received: 09/30/96
Extraction: (SepF/Cont/Sonc)
Date Extracted: 10/30/96
Concentrated Extract Volume: 0.5000(mL)
Date Analyzed: 11/23/96
Injection Volume: 2 (uL)
Dilution Factor: 1.0000
GPC Cleanup: (Y/N) Y pH:
Split Factor: 2.0000
Sulfur Cleanup: (Y/N) N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1122963,16,1 | | | |
| 34883437 | ~~PCB-8 (2,4')~~ | ~~0.820~~ 0.310 | ~~UJ~~ | U | + |
| Compound from Column: | RTX-5 | Lab File ID: 2,1122962,16,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 1.900 | | | |
| 7012375 | PCB-28 (2,4,4') | 0.400 | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | ~~31.000~~ 0.720 | ~~UJ~~ | UJ | +, C |
| 41464395 | PCB-44 (2,2',3,5') | ~~2.700~~ 0.330 | ~~UJ~~ | U | + |
| 32598100 | PCB-66 (2,3',4,4') | 0.560 | U | U | |
| 37680732 | PCB-101 (2,2',3,5,5') | 23.000 | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.750 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 1.700 | J | J | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 12.000 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 5.100 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 6.200 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.610 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 7.700 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.510 | J | J | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 9.100 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 3.400 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 1.600 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 1.900 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 12.000 | | | |

**OGDEN VALIDATED**

**LEVEL D**

1-3-97

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV042

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT04

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3010

Sample wt/vol: 0.0026 Kg Lab File ID: 3,1122963,16,1

% Moisture: 89.80 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/30/96

Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 11/23/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/Kg

| Cas No: | Compound | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1122963,16,1 | | | |
| 319846 | alpha-BHC | ~~1.200000~~ 0.440000 | UN | U | + |
| 3424826 | 2,4'-DDE | 0.720000 | U | U | |
| 959988 | Endosulfan I | 0.520000 | J | J | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1122962,16,1 | | | |
| 118741 | Hexachlorobenzene | ~~0.190000~~ 0.290000 | UN | U | + |
| 319857 | beta-BHC | 1.400000 | | | |
| 58899 | gamma-BHC (Lindane) | 0.550000 | | | |
| 319868 | delta-BHC | 0.410000 | | J | C |
| 76448 | Heptachlor | ~~0.590000~~ 0.230000 | UN | U | + |
| 309002 | Aldrin | 1.300000 | U | U | |
| 51[illegible]12 | gamma-Chlordane | 1.300000 | U | U | |
| 5[illegible] | alpha-Chlordane | 0.720000 | U | U | |
| 51[illegible]31 | cis-Nonachlor | 0.670000 | U | U* | |
| 39765805 | trans-Nonachlor | 0.670000 | U | U | |
| 1024573 | Heptachlor epoxide | 0.440000 | U | U | |
| 60571 | Dieldrin | 0.470000 | U | U | |
| 72559 | 4,4'-DDE | 1.200000 | J | J | |
| 53190 | 2,4'-DDD | 2.300000 | | | |
| 72208 | Endrin | 0.260000 | U | U | |
| 72548 | 4,4'-DDD | 0.510000 | J | J | |
| 789026 | 2,4'-DDT | 0.460000 | U | U | |
| 33216659 | Endosulfan II | 0.950000 | U | | |
| 1031078 | Endosulfan sulfate | 0.950000 | U | | |
| 50293 | 4,4'-DDT | 0.700000 | U | | |
| 7421934 | Endrin aldehyde | 2.400000 | | | |
| 53494705 | Endrin ketone | 0.650000 | U | U | |
| 72435 | Methoxychlor | 0.550000 | U | U | |
| 2385855 | Mirex | 1.400000 | | | |

OGDEN VALIDATED

*Analysis Not Validated

LEVEL D

1-3-97

1D
PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA719

/96

Contract: N62742-90-D-0019

Name: Arthur D. Little, Inc.

Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT04

trix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3014

mple wt/vol: 0.0048 Kg Lab File ID: 3,1122963,17,1

Moisture: 81.00 decanted: (Y/N) Date Received: 09/30/96

traction: (SepF/Cont/Sonc) Date Extracted: 10/30/96

oncentrated Extract Volume: 0.5000(mL) Date Analyzed: 11/23/96

jection Volume: 2 (uL) Dilution Factor: 1.0000

PC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/Kg

| as No: | Compound | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| mpound from Column: | DB-17 | Lab File ID: 3,1122963,17,1 | | | |
| 883437 | PCB-8 (2,4') | ~~2.700~~ 0.170 | UN | U | + |
| ompound from Column: | RTX-5 | Lab File ID: 2,1122962,17,1 | | | |
| 7680652 | PCB-18 (2,2',5) | 0.220 | U | U | |
| 012375 | PCB-28 (2,4,4') | 0.220 | U | U | |
| 5693993 | PCB-52 (2,2',5,5') | ~~30.000~~ 0.390 | UN | UJ | +, C |
| 1464395 | PCB-44 (2,2',3,5') | 0.180 | U | U | |
| 2598100 | PCB-66 (2,3',4,4') | ~~1.600~~ 0.300 | UN | U | + |
| 7680732 | PCB-101 (2,2',3,5,5') | 0.930 | U | U | |
| 2598133 | PCB-77 (3,3',4,4') | 0.400 | U | U | |
| 1508006 | PCB-118 (2,3',4,4',5) | ~~5.800~~ 1.100 | UN | U | + |
| 5065271 | PCB-153 (2,2',4,4',5,5') | 1.700 | U | U | |
| 2598144 | PCB-105 (2,3,3',4,4') | 1.300 | | | |
| 5065262 | PCB-138 (2,2',3,4,4',5') | ~~3.300~~ | | | |
| 7465288 | PCB-126 (3,3',4,4',5) | 12.000 | | | |
| 2663680 | PCB-187 (2,2',3,4',5,5',6) | 0.760 | U | U | |
| 8380073 | PCB-128 (2,2',3,3',4,4') | 0.530 | U | U | |
| 6065293 | PCB-180 (2,2',3,4,4',5,5') | 0.560 | | | |
| 5065306 | PCB-170 (2,2',3,3',4,4',5) | 0.360 | | | |
| 2663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.670 | | | |
| 0186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 2.600 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | ~~0.790~~ 0.170 | UN | U | + |

OGDEN VALIDATED

LEVEL D

1-3-97

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA719

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT04

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3014

Sample wt/vol: 0.0048 Kg Lab File ID: 3,1122963,17,1

% Moisture: 81.00 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/30/96

Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 11/23/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/Kg

| Cas No: | Compound | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: DB-17 | Lab File ID: 3,1122963,17,1 | | | | |
| 319846 | ~~alpha-BHC~~ | ~~1.700000~~ 0.240000 | UM | U | + |
| 3424826 | 2,4'-DDE | 4.700000 | | | |
| 5103731 | cis-Nonachlor | 0.410000 | | * | |
| 959988 | Endosulfan I | 1.300000 | | | |
| Compound from Column: RTX-5 | Lab File ID: 2,1122962,17,1 | | | | |
| 118741 | ~~Hexachlorobenzene~~ | 0.160000 | U | U | |
| 319857 | ~~beta-BHC~~ | 0.190000 | U | U | |
| 58899 | ~~gamma-BHC (Lindane)~~ | ~~0.890000~~ 0.200000 | UM | U | + |
| 319868 | ~~delta-BHC~~ | ~~0.160000~~ | U | UJ | C |
| 76448 | Heptachlor | 0.130000 | U | U | |
| 309002 | Aldrin | 0.700000 | U | U | |
| 5[illegible] | ~~gamma-Chlordane~~ | ~~0.690000~~ | U | U | |
| 5[illegible] | alpha-Chlordane | ~~1.600000~~ 0.380000 | UM | U | + |
| 39765805 | ~~trans-Nonachlor~~ | 0.360000 | U | U | |
| 1024573 | ~~Heptachlor epoxide~~ | 0.240000 | U | | |
| 60571 | ~~Dieldrin~~ | 0.250000 | U | | |
| 72559 | 4,4'-DDE | 1.700000 | U | | |
| 53190 | ~~2,4'-DDD~~ | 0.430000 | U | | |
| 72208 | ~~Endrin~~ | ~~2.000000~~ 0.140000 | UM | U | + |
| 72548 | 4,4'-DDD | 1.000000 | U | U | |
| 789026 | 2,4'-DDT | 0.250000 | U | | |
| 33216659 | Endosulfan II | 0.510000 | U | | |
| 1031078 | Endosulfan sulfate | 0.510000 | U | | |
| 50293 | 4,4'-DDT | ~~3.500000~~ 0.370000 | UM | U | + |
| 7421934 | Endrin aldehyde | 0.350000 | U | U | |
| 53494705 | Endrin ketone | 0.350000 | U | U | |
| 72435 | ~~Methoxychlor~~ | 0.300000 | U | U | |
| 2385855 | Mirex | 1.800000 | | | |

*Analysis Not Validated

OGDEN VALIDATED

LEVEL D

1-3-97

1D
PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MA720

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT04

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3015

Sample wt/vol: 0.0024 Kg Lab File ID: 3,1122963,20,1

% Moisture: 90.69 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/30/96

Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 11/24/96

Injection Volume: 2 (µL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/Kg

| Cas No: | Compound | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1122963,20,1 | | | |
| 34883437 | PCB-8 (2,4') | ~~6.700~~ 0.340 | UN | U | + |
| Compound from Column: | RTX-5 | Lab File ID: 2,1122962,20,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.450 | U | U | |
| 7012375 | PCB-28 (2,4,4') | 0.430 | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | ~~34.000~~ 0.780 | UN | UJ | +, C |
| 41464395 | PCB-44 (2,2',3,5') | 0.360 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | ~~2.400~~ 0.600 | UN | U | + |
| 37680732 | PCB-101 (2,2',3,5,5') | 1.900 | U | U | |
| 32598133 | PCB-77 (3,3',4,4') | ~~15.000~~ 0.790 | UN | U | + |
| 31508006 | PCB-118 (2,3',4,4',5) | 2.200 | U | U | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 3.400 | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.450 | U | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 4.300 | U | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 23.000 | | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 1.500 | U | U | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 1.100 | U | U | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.850 | U | U | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 1.400 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.950 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 1.600 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | ~~0.550~~ 0.340 | UN | U | + |

OGDEN VALIDATED
LEVEL D

1-3-97

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA720

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT04

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3015

Sample wt/vol: 0.0024 Kg Lab File ID: 3,1122963,20,1

% Moisture: 90.69 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/30/96

Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 11/24/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/Kg

| Cas No: | Compound | | ug/Kg | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1122963,20,1 | | | | |
| 319846 | alpha-BHC | | ~~2.200000~~ 0.470000 | UM | U | + |
| 3424826 | 2,4'-DDE | | 4.700000 | | | |
| 959988 | Endosulfan I | | 1.000000 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1122962,20,1 | | | | |
| 118741 | Hexachlorobenzene | | 0.320000 | U | U | |
| 319857 | beta-BHC | | 0.390000 | U | | |
| 58899 | gamma-BHC (Lindane) | | 0.400000 | U | | |
| 319868 | delta-BHC | | 0.320000 | U | UJ | C |
| 76448 | Heptachlor | | 0.260000 | U | | |
| 309002 | Aldrin | | 1.400000 | U | | |
| 5103742 | gamma-Chlordane | | ~~4.500000~~ 1.400000 | UM | U | + |
| 51[illegible] | alpha-Chlordane | | ~~2.900000~~ 0.770000 | UM | U | + |
| 51[illegible] | cis-Nonachlor | | 0.730000 | U | * K | |
| 39765805 | trans-Nonachlor | 0.720000 | ~~2.300000~~ ~~0.720000~~ | UM | U | + |
| 1024573 | Heptachlor epoxide | | 0.480000 | U | U | |
| 60571 | Dieldrin | | 0.510000 | U | U | |
| 72559 | 4,4'-DDE | | 3.400000 | U | U | |
| 53190 | 2,4'-DDD | | ~~16.000000~~ 0.840000 | UM | U | + |
| 72208 | Endrin | | 0.290000 | U | U | |
| 72548 | 4,4'-DDD | | 2.100000 | U | | |
| 789026 | 2,4'-DDT | | 0.500000 | U | | |
| 33216659 | Endosulfan II | | 1.000000 | U | | |
| 1031078 | Endosulfan sulfate | | 1.000000 | U | | |
| 50293 | 4,4'-DDT | | 7.900000 | | | |
| 7421934 | Endrin aldehyde | | 0.710000 | U | U | |
| 53494705 | Endrin ketone | | 0.710000 | U | U | |
| 72435 | Methoxychlor | | 0.600000 | U | U | |
| 2385855 | Mirex | | 2.200000 | | | |

1-3-97

*Analysis Not Validated

OGDEN VALIDATED
LEVEL D

Revision I 1-9-96

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA726

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT04

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3018

Sample wt/vol: 0.0038 Kg Lab File ID: 3,1122963,21,1

% Moisture: 66.00 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/30/96

Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 11/24/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ~~ug/Kg~~

| Cas No: | Compound | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1122963,21,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.220 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1122962,21,1 | | | |
| 37680652 | PCB-18 (2,2',5) | ~~2.200~~ 0.280 | UJ | U | + |
| 7012375 | PCB-28 (2,4,4') | 0.270 | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | 0.500 | U | UJ | C |
| 41464395 | PCB-44 (2,2',3,5') | 0.230 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.380 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 1.200 | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.510 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 1.400 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 2.100 | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | ~~0.280~~ | U | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 2.700 | U | | |
| 57465288 | PCB-126 (3,3',4,4',5) | ~~0.380~~ 0.410 | UJ | U | + |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.960 | U | U | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.670 | U | U | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.530 | U | U | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.310 | J | J | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.470 | U | U | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.390 | U | U | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.220 | U | U | |

**OGDEN VALIDATED**

**LEVEL D**

1-3-97

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA726

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTD136 ADL Project No.: 69084 SDG No.: OMIFT04

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3018

Sample wt/vol: 0.0038 Kg Lab File ID: 3,1122963,21,1

% Moisture: 66.00 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/30/96

Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 11/24/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/Kg

| Cas No: | Compound | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1122963,21,1 | | | |
| 319846 | alpha-BHC | 2.000000 | | | |
| 3424826 | 2,4'-DDE | 0.490000 | U | U | |
| 959988 | Endosulfan I | ~~1.290000~~ 0.640000 | UN | U | + |
| Compound from Column: | RTX-5 | Lab File ID: 2,1122962,21,1 | | | |
| 118741 | Hexachlorobenzene | 0.200000 | U | U | |
| 319857 | beta-BHC | ~~0.330000~~ 0.240000 | UN | U | + |
| 58899 | gamma-BHC (Lindane) | ~~1.000000~~ 0.250000 | UN | U | + |
| 319868 | delta-BHC | 0.160000 | J | J | C |
| 76448 | Heptachlor | 0.170000 | U | U | |
| 309002 | Aldrin | 0.880000 | U | | |
| 5103[illegible] | gamma-Chlordane | 0.870000 | U | | |
| 510[illegible] | alpha-Chlordane | 0.490000 | U | | |
| 510[illegible] | cis-Nonachlor | 0.460000 | U | | |
| 39765805 | trans-Nonachlor | 0.460000 | U | U | |
| 1024573 | Heptachlor epoxide | 1.000000 | | | |
| 60571 | Dieldrin | 0.320000 | U | U | |
| 72559 | 4,4'-DDE | ~~0.660000~~ 2.100000 | UNJ | U | + |
| 53190 | 2,4'-DDD | 21.000000 | | | |
| 72208 | Endrin | ~~0.095000~~ 0.180000 | UNJ | U | + |
| 72548 | 4,4'-DDD | 1.300000 | U | U | |
| 789026 | 2,4'-DDT | 0.310000 | U | | |
| 33216659 | Endosulfan II | 0.650000 | U | | |
| 1031078 | Endosulfan sulfate | 0.650000 | U | | |
| 50293 | 4,4'-DDT | 0.480000 | U | | |
| 7421934 | Endrin aldehyde | 0.450000 | U | | |
| 53494705 | Endrin ketone | 0.450000 | U | | |
| 72435 | Methoxychlor | 0.380000 | U | | |
| 2385855 | Mirex | 12.000000 | | | |

**OGDEN VALIDATED**

**LEVEL D**

*Analysis Not Validated

dd 1-3-97

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA729

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT04

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3021

Sample wt/vol: 0.0023 Kg Lab File ID: 3,1122963,22,1

% Moisture: 90.89 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/30/96

Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 11/24/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/Kg

| Cas No: | Compound | | | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1122963,22,1 | | | | | |
| 34883437 | PCB-8 (2,4') | | 0.350 | | U | u | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | | ~~0.800~~ 4.400 | | J~~U~~ | u | A, B |
| Compound from Column: | RTX-5 | Lab File ID: 2,1122962,22,1 | | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.460 | ~~1.200~~ | ~~0.460~~ | U~~N~~ | u | + |
| 7012375 | PCB-28 (2,4,4') | | 0.440 | | U | u | |
| 35693993 | PCB-52 (2,2',5,5') | 0.810 | ~~3.500~~ | ~~0.490~~ | U~~N~~ | UJ | +, C |
| 41464395 | PCB-44 (2,2',3,5') | | 0.370 | | U | u | |
| 32598100 | PCB-66 (2,3',4,4') | | 0.620 | | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | | 1.900 | | U | | |
| 32598133 | PCB-77 (3,3',4,4') | | 0.820 | | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | | 2.200 | | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | | 3.400 | | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | | 2.300 | | ~~U~~ | | |
| 57465288 | PCB-126 (3,3',4,4',5) | | 9.400 | | | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | | 1.500 | | U | u | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | | 1.100 | | U | u | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | | 2.300 | | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | | 0.570 | | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | | ~~0.130~~ | 0.770 | U~~J~~ | u | + |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | | 1.600 | | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | ~~0.350~~ | ~~0.340~~ | ~~0.210~~ 0.350 | U~~NJ~~ | u | + |

**OGDEN VALIDATED**

**LEVEL D**

1-3-97

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA729

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT04

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3021

Sample wt/vol: 0.0023 Kg Lab File ID: 3,1122963,22,1

% Moisture: 90.89 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/30/96

Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 11/24/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/Kg

| Cas No: | Compound | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: DB-17 | Lab File ID: 3,1122963,22,1 | | | | |
| 319846 | alpha-BHC | 1.300000 | | | |
| 3424826 | 2,4'-DDE | 5.100000 | | | |
| 5103731 | cis-Nonachlor | 0.270000 | J | * | |
| 959988 | Endosulfan I | 1.000000 | U | u | |
| Compound from Column: RTX-5 | Lab File ID: 2,1122962,22,1 | | | | |
| 118741 | Hexachlorobenzene | ~~0.250000~~ 0.330000 | UNJ | u | + |
| 319857 | beta-BHC | ~~2.100000~~ 0.400000 | UN | u | |
| 58899 | gamma-BHC (Lindane) | ~~5.900000~~ 0.410000 | UN | u | |
| 319868 | delta-BHC | ~~0.550000~~ 0.320000 | UN | UJ | , C |
| 76448 | Heptachlor | ~~0.420000~~ 0.260000 | UN | u | |
| 30[illegible]2 | Aldrin | 1.400000 | U | u | |
| 5[illegible]2 | gamma-Chlordane | ~~1.700000~~ 1.400000 | UN | | + |
| 5[illegible]9 | alpha-Chlordane | ~~1.700000~~ 0.800000 | UN | | + |
| 39765805 | trans-Nonachlor | ~~0.670000~~ 0.750000 | UNJ | | + |
| 1024573 | Heptachlor epoxide | 0.490000 | U | u | |
| 60571 | Dieldrin | 0.520000 | U | u | |
| 72559 | 4,4'-DDE | 3.400000 | U | u | |
| 53190 | 2,4'-DDD | ~~4.300000~~ 0.880000 | UN | u | + |
| 72208 | Endrin | 0.290000 | U | u | |
| 72548 | 4,4'-DDD | ~~8.000000~~ 2.200000 | UN | u | + |
| 789026 | 2,4'-DDT | 0.500000 | U | u | |
| 33216659 | Endosulfan II | 1.000000 | U | u | |
| 1031078 | Endosulfan sulfate | 1.000000 | U | u | |
| 50293 | 4,4'-DDT | ~~3.600000~~ 0.780000 | UN | u | + |
| 7421934 | Endrin aldehyde | 1.900000 | | | |
| 53494705 | Endrin ketone | 0.710000 | U | u | |
| 72435 | Methoxychlor | ~~0.450000~~ 0.620000 | UNJ | u | + |
| 2385855 | Mirex | 3.300000 | | | |

1-3-97

OGDEN VALIDATED

LEVEL D

*Analysis Not Validated

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA730

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT04

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3022

Sample wt/vol: 0.0041 Kg Lab File ID: 3,1122963,23,1

% Moisture: 74.30 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/30/96

Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 11/24/96

Injection Volume: 2 (µL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/Kg

| Cas No: | Compound | | Q | REV Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1122963,23,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.200 | U | u | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1122962,23,1 | | | |
| 37680652 | PCB-18 (2,2',5) | ~~0.940~~ 0.260 | ~~UJ~~ | u | + |
| 7012375 | PCB-28 (2,4,4') | 0.250 | U | u | |
| 35693993 | PCB-52 (2,2',5,5') | ~~40.000~~ 0.460 | ~~UJ~~ | uJ | +, C |
| 41464395 | PCB-44 (2,2',3,5') | 0.210 | U | u | |
| 32598100 | PCB-66 (2,3',4,4') | 0.350 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 1.100 | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.470 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 1.300 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 2.000 | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.260 | U | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | ~~0.410~~ 2.500 | ~~JUJ~~ | u | * B |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.380 | U | u | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.890 | U | u | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.620 | U | u | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | ~~0.190~~ 0.490 | ~~UJ~~ | u | + |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.420 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | ~~0.032~~ 0.430 | ~~UJ~~ | u | + |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.130 | J | J | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.200 | U | u | |

OGDEN VALIDATED

LEVEL D

1-3-97

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA730

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT04

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3022

Sample wt/vol: 0.0041 Kg Lab File ID: 3,1122963,23,1

% Moisture: 74.30 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/30/96

Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 11/24/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Compound from Column: DB-17 Lab File ID: 3,1122963,23,1

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| 319846 | ~~alpha-BHC~~ | 1.200000 | | | |
| 3424826 | 2,4'-DDE | ~~0.092000~~ 0.450000 | UJ | U | + |
| 959988 | Endosulfan I | 0.550000 | J | J | |

Compound from Column: RTX-5 Lab File ID: 2,1122962,23,1

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| 118741 | Hexachlorobenzene | 0.190000 | U | U | |
| 319857 | beta-BHC | ~~0.072000~~ 0.220000 | UNJ | U | + |
| 58899 | gamma-BHC (Lindane) | ~~1.800000~~ 0.230000 | UNJ | U | + |
| 319868 | delta-BHC | 0.110000 | J | J | C |
| 76448 | Heptachlor | 0.150000 | U | U | |
| 309002 | Aldrin | 0.820000 | U | | |
| 5103742 | gamma-Chlordane | 0.800000 | U | | |
| 51 | alpha-Chlordane | 0.450000 | U | | |
| 51 | cis-Nonachlor | 0.420000 | U | * | |
| 39765805 | trans-Nonachlor | 0.420000 | U | U | |
| 1024573 | Heptachlor epoxide | 0.840000 | | | |
| 60571 | Dieldrin | 0.300000 | U | U | |
| 72559 | 4,4'-DDE | 2.000000 | U | U | |
| 53190 | 2,4'-DDD | ~~12.000000~~ 0.230000 | UNJ | U | + |
| 72208 | Endrin | 0.210000 | | | |
| 72548 | 4,4'-DDD | 1.200000 | U | U | |
| 789026 | 2,4'-DDT | 0.290000 | U | | |
| 33216659 | Endosulfan II | 0.600000 | U | | |
| 1031078 | Endosulfan sulfate | 0.600000 | U | | |
| 50293 | 4,4'-DDT | 0.440000 | U | | |
| 7421934 | Endrin aldehyde | 0.410000 | U | | |
| 53494705 | Endrin ketone | 0.410000 | U | | |
| 72435 | Methoxychlor | ~~0.120000~~ 0.350000 | UNJ | U | + |
| 2385855 | Mirex | 2.200000 | | | |

OGDEN VALIDATED

LEVEL D

1-3-97

*Analysis Not Validated

Revision 1-9-97

2/10/96

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC233

Lab Name: Arthur D. Little, Inc.
Contract: N62742-90-D-0019
Lab Code: ADLMA
Case No.: CTO136
ADL Project No.: 69084
SDG No.: OMIFT04
Matrix: (soil/water/tissue) TISSUE
Lab Sample ID: 96B3045
Sample wt/vol: 0.0069 Kg
Lab File ID: 3,1122963,24,1
% Moisture: 73.40 decanted: (Y/N)
Date Received: 09/30/96
Extraction: (SepF/Cont/Sonc)
Date Extracted: 10/30/96
Concentrated Extract Volume: 0.5000(mL)
Date Analyzed: 11/24/96
Injection Volume: 2 (uL)
Dilution Factor: 1.0000
GPC Cleanup: (Y/N) Y pH:
Split Factor: 2.0000
Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/Kg

| Cas No: | Compound | | Q | REV QUAL | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1122963,24,1 | | | |
| 34883437 | PCB-8 (2,4') | 1.100 | | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1122962,24,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 5.000 | | | |
| 7012375 | PCB-28 (2,4,4') | 4.100 | | J | C |
| 35693993 | PCB-52 (2,2',5,5') | 8.400 | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.120 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 4.800 | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 27.000 | E | R | D |
| 32598133 | PCB-77 (3,3',4,4') | 0.280 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 8.400 | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 120.000 | E | R | D |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.150 | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 78.000 | E | R | D |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.230 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 88.000 | E | R | D |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 5.600 | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 83.000 | E | R | D |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 72.000 | E | R | D |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 16.000 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 10.000 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.530 | | | |

**OGDEN VALIDATED**

**LEVEL D**

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC233

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT04

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3045

Sample wt/vol: 0.0069 Kg Lab File ID: 3,1122963,24,1

% Moisture: 73.40 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/30/96

Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 11/24/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/Kg

| Cas No: | Compound | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1122963,24,1 | | | |
| 319846 | alpha-BHC | 0.780000 | | | |
| 3424826 | 2,4'-DDE | ~~2.900000~~ 0.270000 | UN | U | + |
| 959988 | Endosulfan I | 0.350000 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1122962,24,1 | | | |
| 118741 | Hexachlorobenzene | ~~0.230000~~ 0.110000 | UN | U | + |
| 319857 | beta-BHC | 0.500000 | | | |
| 58899 | gamma-BHC (Lindane) | 1.300000 | | | |
| 319868 | delta-BHC | 0.460000 | | J | C |
| 76448 | Heptachlor | 0.090000 | U | U | |
| 309002 | Aldrin | 0.480000 | U | U | |
| 5103742 | gamma-Chlordane | 3.000000 | | | |
| 5[illegible] | alpha-Chlordane | 3.300000 | | | |
| 5[illegible] | cis-Nonachlor | 0.250000 | U | * | |
| 39765805 | trans-Nonachlor | ~~2.600000~~ 0.250000 | UN | U | + |
| 1024573 | Heptachlor epoxide | ~~0.130000~~ 0.170000 | UNJ | U | + |
| 60571 | Dieldrin | 38.000000 | E | R | D |
| 72559 | 4,4'-DDE | 71.000000 | E | ↓ | ↓ |
| 53190 | 2,4'-DDD | 35.000000 | E | | |
| 72208 | Endrin | 3.000000 | | | |
| 72548 | 4,4'-DDD | 75.000000 | E | R | D |
| 789026 | 2,4'-DDT | 12.000000 | | | |
| 33216659 | Endosulfan II | 0.350000 | U | U | |
| 1031078 | Endosulfan sulfate | 0.350000 | U | U | |
| 50293 | 4,4'-DDT | 53.000000 | E | R | D |
| 7421934 | Endrin aldehyde | 0.240000 | U | U | |
| 53494705 | Endrin ketone | 0.240000 | U | U | |
| 72435 | Methoxychlor | 0.130000 | J | J | |
| 2385855 | Mirex | 0.840000 | | | |

1-7-97

*Analysis Not Validated

OGDEN VALIDATED

LEVEL D

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC233DL

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT04

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3045DL

Sample wt/vol: 0.0069 Kg Lab File ID: 3,1126963,17,1

% Moisture: 73.40 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/30/96

Concentrated Extract Volume: 5.0000(mL) Date Analyzed: 11/26/96

Injection Volume: 2 (uL) Dilution Factor: 10.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,17,1 | | | |
| 34883437 | PCB-8 (2,4') | 3.300 | R | R | D |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,17,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 6.300 | R | R | D |
| 7012375 | PCB-28 (2,4,4') | 6.000 | R | ↓ | ↓ |
| 35693993 | PCB-52 (2,2',5,5') | 15.000 | R | | |
| 41464395 | PCB-44 (2,2',3,5') | 8.800 | R | | |
| 32598100 | PCB-66 (2,3',4,4') | 2.100 | UR | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 46.000 | D | | |
| 32598133 | PCB-77 (3,3',4,4') | 54.000 | R | R | D |
| 31508006 | PCB-118 (2,3',4,4',5) | 15.000 | R | R | D |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 210.000 | D | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 5.500 | R | R | D |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 120.000 | D | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 2.300 | UR | R | D |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 130.000 | D | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 7.400 | R | R | D |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 160.000 | D | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 89.000 | D | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 20.000 | R | R | D |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 13.000 | R | ↓ | ↓ |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.370 | JR | | |

**OGDEN VALIDATED**

**LEVEL D**

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC233DL

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIFT04

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3045DL

Sample wt/vol: 0.0069 Kg Lab File ID: 3,1126963,17,1

% Moisture: 73.40 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/30/96

Concentrated Extract Volume: 5.0000(mL) Date Analyzed: 11/26/96

Injection Volume: 2 (uL) Dilution Factor: 10.0000

GPC Cleanup: (Y/N) pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/Kg

| Cas No: | Compound | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,17,1 | | | |
| 319846 | alpha-BHC | 1.300000 | JR | R | D |
| 3424826 | 2,4'-DDE | 4.000000 | R | ↓ | ↓ |
| 959988 | Endosulfan I | 3.500000 | UR | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,17,1 | | | |
| 118741 | Hexachlorobenzene | 1.100000 | UR | R | D |
| 319857 | beta-BHC | 1.300000 | UR | | |
| 58899 | gamma-BHC (Lindane) | 1.200000 | JR | | |
| 319868 | delta-BHC | 1.100000 | UR | | |
| 76448 | Heptachlor | 0.900000 | UR | | |
| 309002 | Aldrin | 4.800000 | UR | | |
| 5109742 | gamma-Chlordane | 3.800000 | JR | | |
| 51[illegible] | alpha-Chlordane | 4.900000 | R | ↓ | ↓ |
| 51[illegible] | cis-Nonachlor | 2.500000 | UR | * | |
| 39765805 | trans-Nonachlor | 3.300000 | R | R | D |
| 1024573 | Heptachlor epoxide | 1.600000 | UR | R | D |
| 60571 | Dieldrin | 28.000000 | D | | |
| 72559 | 4,4'-DDE | 60.000000 | D | | |
| 53190 | 2,4'-DDD | 40.000000 | D | | |
| 72208 | Endrin | 3.200000 | R | R | D |
| 72548 | 4,4'-DDD | 66.000000 | D | | |
| 789026 | 2,4'-DDT | 1.700000 | UR | R | D |
| 33216659 | Endosulfan II | 3.500000 | UR | ↓ | ↓ |
| 1031078 | Endosulfan sulfate | 3.500000 | UR | | |
| 50293 | 4,4'-DDT | 37.000000 | D | | |
| 7421934 | Endrin aldehyde | 2.400000 | UR | R | D |
| 53494705 | Endrin ketone | 2.400000 | UR | | |
| 72435 | Methoxychlor | 0.300000 | JR | | |
| 2385855 | Mirex | 1.700000 | UR | ↓ | ↓ |

OGDEN VALIDATED

*Analysis Not Validated

LEVEL D

OGDEN

# DATA VALIDATION REPORT

CLEAN CONTRACT TASK ORDER #136
NAF Midway Site Investigations

ANALYSIS: PESTICIDES/PCB CONGENERS
SAMPLE DELIVERY GROUP: OMIIT05

Prepared by

Ogden—Denver Operations
550 South Wadsworth Boulevard, Suite 500
Lakewood, Colorado 80226

# CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

Ogden Environmental and Energy Services Co., Inc.
550 South Wadsworth Boulevard
Suite 500
Lakewood, CO 80226

Package ID: C136PP65
Task Order: CTO 136
SDG No.: OMIIT05
No. of Analyses: 18

Laboratory: A.D. Little
Reviewer: K. McNeill
Analysis/Method: Pesticides/PCB Congeners

Date: Jan 28, 1997
Reviewer's Signature: Kane McNeill

| ACTION ITEMS[a] | |
|---|---|
| 1. Case Narrative Deficiencies | |
| 2. Out of Scope Analyses | |
| 3. Analyses Not Conducted | |
| 4. Missing Hardcopy Deliverables | |
| 5. Incorrect Hardcopy Deliverables | |
| 6. Deviations from Analysis Protocol, e.g., | Initial Calibration Qualifications |
| | False + Qualifications (for "J" values + Single Column PD) |
| Holding Times | |
| GC/MS Tune/Inst. Perform | Field QC Qualifications |
| Calibrations | |
| Blanks | |
| Surrogates | |
| Matrix Spike/Dup LCS | |
| Field QC | |
| Internal Standard Performance | |
| Compound Identification and Quantitation | |
| System Performance | |

| COMMENTS[b] |
|---|
| |

[a] Subcontracted analytical laboratory is not meeting contract and/or method requirements.
[b] Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.

# 1. INTRODUCTION

| | |
|---|---|
| Task Order Title: | NAF Midway Site Investigations |
| CLEAN Contract Task Order #: | 0136 |
| SDG#: | OMIIT05 |
| CTO Manager: | J. Cotter |
| Project Contact: | M. Medeiros |
| Matrix: | Tissue |
| Analysis: | Pesticides/PCB Congeners |
| NEESA QC Level: | D |
| No. of Samples: | 18 |
| No. of Reanalyses/Dilutions: | 2 |
| Reviewer: | K. McNeill |
| Date of Review: | January 8, 1997 |

The samples listed in Table 1 were validated based on the NOAA National Status and Trends Analytical Protocols, data validation procedure for Levels C and D pesticides/PCBs (DVP-4, Rev. 2) and the *National Functional Guidelines For Organic Data Review* (2/94). These protocols vary from the CLP Protocols upon which the Navy CLEAN data validation procedures were based. Instances where quality control parameters vary from the CLP Data Validation procedures are documented in the text of this report and should be noted with respect to the overall data quality objectives of this project. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in estimated value were not denoted by a qualification code since the data had already been rejected.

## Table 1. Sample identification

| Client ID | EPA ID | Laboratory ID | Matrix | COC Method |
|---|---|---|---|---|
| M00MT01S01 | MA707 | 96B3011 | tissue | STIV141C/E |
| M00MT01D01 | MA708 | 96B3012 | tissue | STIV141C/E |
| M00MT04S01 | MA716 | 96B3013 | tissue | STIV141C/E |
| M00MT02S01 | MA724 | 96B3017 | tissue | STIV141C/E |
| M00MT03S01 | MA727 | 96B3019 | tissue | STIV141C/E |
| M01MT05S01 | MC188 | 96B3023 | tissue | STIV141C/E |
| M01MT05D01 | MC189 | 96B3024 | tissue | STIV141C/E |
| M01MT06S01 | MC195 | 96B3025 | tissue | STIV141C/E |
| M01MT09S01 | MC196 | 96B3026 | tissue | STIV141C/E |
| M01MT04S01 | MC201 | 96B3052 | tissue | STIV141C/E |
| M01MT03S01 | MC208 | 96B3053 | tissue | STIV141C/E |
| M01MT07S01 | MC212 | 96B3054 | tissue | STIV141C/E |
| M01MT11S01 | MC218 | 96B3055 | tissue | STIV141C/E |
| M01MT12S01 | MC222 | 96B3056 | tissue | STIV141C/E |
| M01MT02S01 | MC223 | 96B3057 | tissue | STIV141C/E |
| M01MT02S01 | MC223DL | 96B3057DL | tissue | STIV141C/E |
| M01MT08S01 | MC226 | 96B3058 | tissue | STIV141C/E |
| M01MT01S01 | MC230 | 96B3059 | tissue | STIV141C/E |
| M01MT01S01 | MC230DL | 96B3059DL | tissue | STIV141C/E |
| M01MT10S01 | MC235 | 96B3060 | tissue | STIV141C/E |

# 2. DATA VALIDATION FINDINGS

## 2.1 SAMPLE MANAGEMENT

The following are findings associated with sample management:

### 2.1.1 Sample Preservation, Handling, and Transport

No preservations were required for pesticide/PCB analysis. Samples in this SDG were received by the laboratory below temperature limits established in NEESA 20.2-047B; however, Status and Trends protocols require tissue samples to be frozen and therefore, no qualifications were assigned. No sample containers were noted to be broken upon arrival at the laboratory. No qualifications were required.

### 2.1.2 Chain of Custody

All COCs were legible and complete. All COCs were signed by laboratory and field personnel. Other questions regarding sample conditions were answered on the COCs. No qualifications were required based on sample receipt information.

### 2.1.3 Holding Times

All samples in this SDG were extracted and analyzed within the prescribed six month holding time for tissues; therefore, no qualifications were required.

## 2.2 PESTICIDES INSTRUMENT PERFORMANCE

No percent resolution or endrin/4,4'-DDT degradation analyses were performed by the laboratory, as required by the CLP SOW (3/90). These analyses have not been established in the Status and Trends protocols; therefore, no evaluation was given to the data based on percent resolution or breakdown degradation. PCBs 103 and 198 were used as the surrogates for this SDG, while tetrachloro-m-xylene served as the internal standard. All target analytes were quantified versus the internal standard recovery. No surrogate or internal standard retention time window was specified in the Status and Trends protocols. The laboratory established a window of $\pm$0.075 or 0.15 minutes. Based on professional judgement, the reviewer considered this an acceptable range. The surrogate and internal standard compounds were within the absolute retention time windows established with initial calibration standards. The retention time for all target compounds was established by the laboratory at $\pm$0.075 minutes, although some windows were reduced or expanded for proper peak identification. In these instances, the reviewer deemed the retention time windows to be acceptable. All continuing calibration standards had retention times within the retention time windows established with the initial calibration standards. No qualifications of the data were required.

## 2.3 CALIBRATION

### 2.3.1 Analytical Sequence

The laboratory modified the analytical sequence from the Status and Trends protocols. The laboratory analyzed an initial five-point calibration with subsequent mid-level calibration standards analyzed for every ten field samples, and at the end of each sequence. Status and Trends protocols suggested a four-point calibration be interspersed with samples and no more than six samples be analyzed in between calibration standards. The laboratory modifications were considered acceptable by the reviewer; therefore, no qualifications were required.

### 2.3.2 Initial Calibration

The NOAA Status and Trends used a correlation coefficient (r) to determine the linearity of initial calibrations. The laboratory deviated from the protocols by measuring the %RSDs from relative response factors for each initial calibration. The laboratory established the %RSD must be less than or equal to 25% for 90% of all compounds and less than or equal to 35% for all compounds. The reviewer used a QC criterion of ≤5% for all compounds for the %RSDs.

Delta-BHC and alpha-BHC exceeded the QC limits on the DB-17 column for the initial calibration performed on 11/25/96. In addition, delta-BHC exceeded the QC limits on the RTX-5 column. Delta-BHC and methoxychlor exceeded the QC limits for the RTX-5 on 12/04/96. Alpha-BHC, gamma-BHC, and PCB-126 exceeded the QC limits on column DB-17. Samples associated with the initial calibration from 11/25/96 had the detects for delta-BHC and alpha-BHC qualified "J" and nondetects "UJ." The initial calibration dated 12/04/96 had no qualifications required because the associated compounds were rejected. No other qualifications were required.

### 2.3.3 Continuing Calibration

No QC limits have been established for continuing calibration standards by the Status and Trends protocols. The laboratory established a %D less than or equal to 25% for 90% of the target compounds and less than or equal to 35% for all compounds. For validation purposes, the reviewer used a QC criterion of 25% for the %Ds. All continuing calibration standard %Ds reported from the RTX-5 column and DB-17 column were within the QC limits.

## 2.4 BLANKS

### 2.4.1 Instrument Blanks

No instrument blanks were analyzed for this SDG. NOAA Status and Trends protocols do not suggest the analysis of instrument blanks; therefore, no evaluation of the data was given based on instrument blanks.

### 2.4.2 Method Blanks

NOAA Status and Trends protocols suggested method blanks were acceptable if no target compound detects were found 3X above the MDLs. The laboratory further qualified the QC limits for blanks, stating that no more than 2 target analytes could exceed 3X the MDLs. Because the reporting limits and the MDLs were the same for this SDG (see Section 2.11), the reviewer chose a more conservative QC criteria. The CLP SOW (3/90) criteria for method blanks was used to evaluate the data. Validation procedures were based on the Ogden DVP-4, Revision 2, which states no target compounds above the reporting limits. No qualifications were required.

## 2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

The laboratory analyzed one SRM in lieu of a blank spike/blank spike duplicate. The QC criteria established to evaluate the matrix spike/ matrix spike duplicate was used by the laboratory for the LCS. Because the Status and Trends protocols did not address LCSs and the established limits were stricter than those in the CLP SOW (3/90), the reviewer deemed the limits acceptable. All target analytes met the QC criteria; therefore, no qualifications were required.

## 2.6 SURROGATE RECOVERY

The laboratory established surrogate recovery QC limits that were stricter than those applied in the Status and Trends protocols. Surrogate recoveries were calculated and reported for the RTX-5 column only; therefore, surrogate recovery evaluation was limited to the data from the RTX-5 column. In addition to surrogates PCB-103 and PCB-198, the laboratory identified an additional surrogate, 4,4'-dibromo-octafluoro-biphenyl (DBOFB). Percent recoveries for DBOFB were reported in the raw data, but not on the summary forms. No historical data or QC limits were provided for DBOFB; therefore, recoveries for DBOFB were not evaluated by the reviewer. The QC limits for tissues were changed from 50 to 125 percent to 45 to 125 percent for the second round of sampling. Surrogate recoveries were within QC limits for all samples; therefore, no qualifications were assigned.

## 2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

The MS/MSD analyses were performed on sample MA707. Matrix spike recoveries were recalculated from the raw data. No transcription or calculation errors were noted. All target compounds were within established QC limits of 50 to 125 percent; therefore, no qualifications were required. The reviewer noted that the QC limits for MS/MSD results were stricter than those in the Status and Trends protocols.

## 2.8 SAMPLE CLEANUP PERFORMANCE

GPC cleanup was performed for all samples in this SDG. No QC criteria has been established for cleanup procedures by NOAA Status and Trends. Samples were evaluated based on surrogate recoveries, matrix spike recoveries, and SRM recoveries. The GPC cleanups were deemed acceptable and no qualifications were required.

## 2.9 FIELD QC SAMPLES

Field QC samples are evaluated, and if necessary, qualified based only on method blanks. Any remaining detects are used to evaluate the associated samples. The following are findings associated with field QC samples:

### 2.9.1 Field Blanks and Equipment Rinsates

The CTO 136 Analytical Summary Table identify samples MV011, MV012, and MV013 (from SDG OMISW01) as the equipment rinsates and sample MV010 (from SDG OMISW01) as the field blank. Sample MV010 had detects for PCB-8, PCB-18, hexachlorobenzene, and gamma-BHC. PCB-8 was detected and qualified "J" in the following samples: MC189, and MC223. PCB-18 was detected and qualified "J" in the following samples: MA707, MA708, MA724, MC189, MC201, MC218, MC222, and MC235. Hexachlorobenzene was detected and qualified "J" in the following sample: MC188. Gamma-BHC was detected and qualified "J" in the following samples: MA727, MC189, MC196, MC201, MC208, MC222, and MC223. Samples MV011, MV012, and MV013 had detects that were not found in the associated samples or had already been qualified for field blank contamination. No other qualifications were required.

### 2.9.2 Field Duplicates

Samples MA707/MA708 and MC188/MC189 were the field duplicate samples associated with this SDG. Several of the detected target compounds, for both duplicate pairs, were in both samples; however, none of the RPDs exceeded 100% for either duplicate pair. No qualifications are assigned to the data based on field duplicate results.

## 2.10 COMPOUND IDENTIFICATION

Compound identification was performed by the reviewer. Possible false negative detects were eliminated upon examination of the chromatograms and quantitation sheets by the reviewer. All detected analytes were confirmed by second column confirmation. Some samples exhibited elevated baselines occurring after 65 minutes into the run. Based on the surrogate recovery for PCB 198 and a comparison of raw data to chromatograms from low level standards, the reviewer determined that target analyte peaks, if present, could be identified.

The laboratory quantitated several compounds without second column confirmation. These compounds were qualified by the laboratory as "NJ" or "N." In addition, several compounds were reported below the reporting limit and at levels less than ½ the MDL. These compounds were qualified by the laboratory as "J." Using ½ the MDL as a basis for professional judgement, the reviewer identified all compounds quantified from a single column and several "J" compounds reported by the laboratory as false positives. The reporting concentrations were changed to the reporting limits and the qualifiers changed to nondetects, "U."

Cis-nonachlor was reported on the Form Is for all samples; however, cis-nonachlor was not identified as a target compound. As a result, the cis-nonachlor was not validated. No qualifications were required.

## 2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantification was verified in the samples in this SDG. No %Ds between the two columns were calculated or reported for target analyte detects. The RTX-5 column served as the primary column for all target compounds, with the exception of PCB 8, alpha-BHC, endosulfan I, 2,4'-DDE and in some cases, PCB-138 and PCB-52, which were quantified from the DB-17 column. The confirmation column was used for confirmation of analytes and no quantification occurred from the column. Review of the raw data confirmed that target analytes were present on both columns and quantification was performed on the correct primary column; therefore no evaluation was given to the inter-column %D information. Several compound were detected but at a level less than the reporting limits and above the MDL. Raw data was reviewed to eliminate the potential for false positives. These compounds were qualified as estimated "J."

Due to high concentrations of target analytes, MC223 and MC230 were reanalyzed at dilutions. All target compounds exceeding the linear range in the samples were rejected, "R" in the initial analysis and were reported from the dilution results. Target compounds reported from the initial analysis were rejected, "R," in the dilution.

Because no CRQL limits have been established for these methods, CRQLs were determined by an MDL study performed by the laboratory. Copies of the MDL study were included with the raw data. Verification of the raw data confirmed the correct CRQLs were applied. No qualifications were required.

# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MA707

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3011

**Sample wt/vol:** 0.0148 Kg **Lab File ID:** 3,1126963,11,1

**% Moisture:** 40.30 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/26/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,11,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.110 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,11,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.350 | | ~~NJ~~ | F |
| 7012375 | PCB-28 (2,4,4') | 0.140 | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | ~~0.170~~ 0.253 | ~~NJ~~ U | U | + |
| 41464395 | PCB-44 (2,2',3,5') | 0.120 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | ~~0.640~~ 0.195 | ~~N~~ U | U | + |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.600 | U | U | |
| 32598133 | PCB-77 (3,3',4,4') | 0.260 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.690 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 1.100 | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.140 | U | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 1.400 | U | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.210 | U | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.490 | U | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.340 | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.270 | U | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.170 | U | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.240 | U | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.200 | U | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.110 | U | U | |

KM
1/7/97

OGDEN VALIDATED

LEVEL D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MA707

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3011

**Sample wt/vol:** 0.0148 Kg **Lab File ID:** 3,1126963,11,1

**% Moisture:** 40.30 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/26/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,11,1 | | | |
| 319846 | alpha-BHC | ~~0.094000~~ 0.154 | ~~NJ~~ U | UJ | +, C |
| 3424826 | 2,4'-DDE | 0.250000 | U | U | |
| 959988 | Endosulfan I | 0.330000 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,11,1 | | | |
| 118741 | Hexachlorobenzene | ~~0.021000~~ 0.103 | ~~NJ~~ U | U | + |
| 319857 | beta-BHC | ~~0.600000~~ 0.123 | ~~N~~ U | U | + |
| 58899 | gamma-BHC (Lindane) | 0.920000 | | | |
| 319868 | delta-BHC | ~~0.062000~~ 0.099 | ~~NJ~~ U | UJ | +, C |
| 76448 | Heptachlor | 0.084000 | U | U | |
| 309002 | Aldrin | 0.450000 | U | U | |
| 5103742 | gamma-Chlordane | 0.440000 | U | U | |
| 5103719 | alpha-Chlordane | 0.250000 | U | U | |
| 5103731 | cis-Nonachlor | 0.230000 | U | * | |
| 39765805 | trans-Nonachlor | 0.230000 | U | U | |
| 1024573 | Heptachlor epoxide | 0.150000 | U | U | |
| 60571 | Dieldrin | 0.160000 | U | U | |
| 72559 | 4,4'-DDE | 1.100000 | U | U | |
| 53190 | 2,4'-DDD | 0.270000 | U | U | |
| 72208 | Endrin | 0.091000 | U | U | |
| 72548 | 4,4'-DDD | 0.670000 | U | U | |
| 789026 | 2,4'-DDT | 0.160000 | U | U | |
| 33216659 | Endosulfan II | 0.330000 | U | U | |
| 1031078 | Endosulfan sulfate | 0.330000 | U | U | |
| 50293 | 4,4'-DDT | 0.240000 | U | U | |
| 7421934 | Endrin aldehyde | 0.230000 | U | U | |
| 53494705 | Endrin ketone | 0.230000 | U | U | |
| 72435 | Methoxychlor | 0.190000 | U | U | |
| 2385855 | Mirex | 0.150000 | U | U | |

KM 1/7/97

*Analysis Not Validated

OGDEN VALIDATED

LEVEL D

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA708

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3012

**Sample wt/vol:** 0.0151 Kg **Lab File ID:** 3,1126963,14,1

**% Moisture:** 42.40 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/26/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1126963,14,1 | | | | | |
| 34883437 | PCB-8 (2,4') | 0.110 | | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,1126962,14,1 | | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.290 | | | ~~NJ~~ | F |
| 7012375 | PCB-28 (2,4,4') | 0.140 | | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | ~~0.170~~ | 0.250 | ~~NJ~~ U | U | + |
| 41464395 | PCB-44 (2,2',3,5') | 0.110 | | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | ~~1.400~~ | 0.191 | ~~N~~ U | U | + |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.590 | | U | U | |
| 32598133 | PCB-77 (3,3',4,4') | 0.250 | | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.680 | | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 1.100 | | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.140 | | U | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 1.300 | | U | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.210 | | U | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.480 | | U | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.330 | | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.260 | | U | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.160 | | U | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.230 | | U | U | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | ~~0.091~~ | 0.195 | ~~NJ~~ U | U | + |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.110 | | U | U | |

KM 1/7/97

OGDEN VALIDATED

LEVEL D

000016

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MA708

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3012

**Sample wt/vol:** 0.0151 Kg **Lab File ID:** 3,1126963,14,1

**% Moisture:** 42.40 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/26/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1126963,14,1 | | | | |
| 19846 | alpha-BHC | 0.120000 | J | J | C |
| 424826 | 2,4'-DDE | 0.240000 | U | U | |
| 59988 | Endosulfan I | ~~1.500000~~ 0.322 | ~~U~~ U | U | + |
| Compound from Column: | RTX-5 Lab File ID: 2,1126962,14,1 | | | | |
| 18741 | Hexachlorobenzene | 0.100000 | U | U | C |
| 19857 | beta-BHC | 0.120000 | U | U | C |
| 8899 | gamma-BHC (Lindane) | 0.120000 | U | U | C |
| 19868 | delta-BHC | 0.099000 | U | U | C |
| 6448 | Heptachlor | 0.082000 | U | U | C |
| 09002 | Aldrin | 0.440000 | U | U | C |
| 103742 | gamma-Chlordane | 0.430000 | U | U | C |
| 103719 | alpha-Chlordane | 0.240000 | U | U | C |
| 103731 | cis-Nonachlor | 0.230000 | U | * | |
| 9765805 | trans-Nonachlor | 0.230000 | U | U | C |
| 024573 | Heptachlor epoxide | 0.150000 | U | U | C |
| 0571 | Dieldrin | 0.160000 | U | U | C |
| 2559 | 4,4'-DDE | 1.100000 | U | U | C |
| 3190 | 2,4'-DDD | 0.130000 | J | U | C |
| 2208 | Endrin | 0.089000 | U | U | C |
| 2548 | 4,4'-DDD | 0.660000 | U | U | C |
| 89026 | 2,4'-DDT | 0.160000 | U | U | C |
| 3216659 | Endosulfan II | 0.320000 | U | U | C |
| 031078 | Endosulfan sulfate | 0.320000 | U | U | C |
| 0293 | 4,4'-DDT | 0.240000 | U | U | C |
| 421934 | Endrin aldehyde | 0.220000 | U | U | C |
| 3494705 | Endrin ketone | 0.220000 | U | U | C |
| 2435 | Methoxychlor | 0.190000 | U | U | C |
| 385855 | Mirex | 0.150000 | U | U | C |

KM
1/6/97

*Analysis Not Validated

QGDEN VALIDATED
LEVEL D

1D

# PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.

MA716

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3013

**Sample wt/vol:** 0.0147 Kg **Lab File ID:** 3,1126963,15,1

**% Moisture:** 43.30 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/26/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,15,1 | | | |
| 34883437 | PCB-8 (2,4') | ~~0.130~~ 0.110 | ~~U~~ U | U | + |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,15,1 | | | |
| 37680652 | PCB-18 (2,2',5) | ~~0.570~~ 0.144 | ~~U~~ U | U | + |
| 7012375 | PCB-28 (2,4,4') | 0.140 | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | 0.250 | U | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.120 | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.200 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.600 | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.260 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.700 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 1.100 | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.140 | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.065 | J | U | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.210 | U | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.490 | U | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.340 | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | ~~0.085~~ 0.272 | ~~U~~ U | U ~~U~~ | + |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.170 | U | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.240 | U | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.200 | U | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.110 | U | | |

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LEVEL D

KM
1/6/97

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MA716

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3013

**Sample wt/vol:** 0.0147 Kg **Lab File ID:** 3,1126963,15,1

**% Moisture:** 43.30 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/26/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,15,1 | | | |
| 319846 | alpha-BHC | ~~0.067000~~ 0.110 | ~~NJ~~ U | UJ | +,C |
| 3424826 | 2,4'-DDE | 0.250000 | U | U | |
| 959988 | Endosulfan I | 0.330000 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,15,1 | | | |
| 118741 | Hexachlorobenzene | ~~0.013000~~ 0.103 | ~~NJ~~ U | U | + |
| 319857 | beta-BHC | 0.120000 | U | U | |
| 58899 | gamma-BHC (Lindane) | ~~0.140000~~ 0.1274 | ~~N~~ U | U | + |
| 319868 | delta-BHC | 0.100000 | U | UJ | C |
| 76448 | Heptachlor | 0.084000 | U | U | |
| 309002 | Aldrin | 0.450000 | U | U | |
| 5103742 | gamma-Chlordane | 0.440000 | U | U | |
| 5103719 | alpha-Chlordane | 0.250000 | U | U | |
| 5103731 | cis-Nonachlor | 0.230000 | U | * | |
| 39765805 | trans-Nonachlor | 0.230000 | U | U | |
| 1024573 | Heptachlor epoxide | 0.150000 | U | | |
| 60571 | Dieldrin | 0.160000 | U | | |
| 72559 | 4,4'-DDE | 1.100000 | U | | |
| 53190 | 2,4'-DDD | 0.280000 | U | | |
| 72208 | Endrin | 0.092000 | U | | |
| 72548 | 4,4'-DDD | 0.670000 | U | | |
| 789026 | 2,4'-DDT | 0.160000 | U | | |
| 33216659 | Endosulfan II | 0.330000 | U | | |
| 1031078 | Endosulfan sulfate | 0.330000 | U | | |
| 50293 | 4,4'-DDT | 0.240000 | U | | |
| 7421934 | Endrin aldehyde | 0.230000 | U | | |
| 53494705 | Endrin ketone | 0.230000 | U | | |
| 72435 | Methoxychlor | 0.190000 | U | | |
| 2385855 | Mirex | 0.160000 | U | U | |

KM 1/6/97

*Analysis Not Validated

OGDEN VALIDATED

000019

LEVEL D

1D
PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MA724

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3017

**Sample wt/vol:** 0.0175 Kg **Lab File ID:** 3,1126963,16,1

**% Moisture:** 38.30 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/26/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,16,1 | | | |
| 34883437 | PCB-8 (2,4') | ~~0.048~~ 0.0925 | ~~NJ~~ U | U | + |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,16,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.730 | | ~~NJ~~ | F |
| 7012375 | PCB-28 (2,4,4') | 0.120 | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | ~~0.390~~ 0.214 | ~~NU~~ | U | + |
| 41464395 | PCB-44 (2,2',3,5') | 0.098 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.160 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.510 | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.220 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.580 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.920 | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.120 | U | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 1.200 | U | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.180 | U | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.410 | U | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.290 | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.230 | U | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.140 | U | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.200 | U | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.170 | U | U | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.094 | U | | |

KM
1/6/97

OGDEN VALIDATED

000020

LEVEL D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MA724

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3017

**Sample wt/vol:** 0.0175 Kg **Lab File ID:** 3,1126963,16,1

**% Moisture:** 38.30 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/26/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,16,1 | | | |
| 319846 | alpha-BHC | 0.130000 | U | UJ | C |
| 3424826 | 2,4'-DDE | 0.210000 | U | U | |
| 959988 | Endosulfan I | 0.280000 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,16,1 | | | |
| 118741 | Hexachlorobenzene | 0.086000 | U | U | |
| 319857 | beta-BHC | 0.100000 | U | U | |
| 58899 | gamma-BHC (Lindane) | 0.110000 | U | U | |
| 319868 | delta-BHC | 0.085000 | U | UJ | C |
| 76448 | Heptachlor | 0.071000 | U | U | |
| 309002 | Aldrin | 0.380000 | U | U | |
| 5103742 | gamma-Chlordane | 0.370000 | U | U | |
| 5103719 | alpha-Chlordane | 0.210000 | U | U | |
| 5103731 | cis-Nonachlor | 0.200000 | U | * | |
| 39765805 | trans-Nonachlor | 0.200000 | U | U | |
| 1024573 | Heptachlor epoxide | 0.130000 | U | | |
| 60571 | Dieldrin | 0.140000 | U | | |
| 72559 | 4,4'-DDE | 0.910000 | U | | |
| 53190 | 2,4'-DDD | 0.230000 | U | | |
| 72208 | Endrin | 0.077000 | U | | |
| 72548 | 4,4'-DDD | 0.570000 | U | | |
| 789026 | 2,4'-DDT | 0.130000 | U | | |
| 33216659 | Endosulfan II | 0.280000 | U | | |
| 1031078 | Endosulfan sulfate | 0.280000 | U | | |
| 50293 | 4,4'-DDT | 0.210000 | U | | |
| 7421934 | Endrin aldehyde | 0.190000 | U | | |
| 53494705 | Endrin ketone | 0.190000 | U | | |
| 72435 | Methoxychlor | 0.160000 | U | U | |
| 2385855 | Mirex | 0.560000 | | | |

*Analysis Not Validated

OGDEN VALIDATED



LEVEL D

# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MA727

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3019

**Sample wt/vol:** 0.0136 Kg **Lab File ID:** 3,1126963,19,1

**% Moisture:** 48.70 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/27/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,19,1 | | | |
| 34883437 | PCB-8 (2,4') | ~~0.170~~ 0.119 | ~~N~~ U | U | + |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,19,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.160 | U | U | |
| 7012375 | PCB-28 (2,4,4') | 0.150 | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | ~~0.330~~ 0.275 | ~~N~~ U | U | + |
| 41464395 | PCB-44 (2,2',3,5') | 0.130 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.210 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.650 | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.280 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.750 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 1.200 | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.160 | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | ~~0.440~~ 1.490 | ~~N~~ U | U ~~N~~ | + |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.230 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.530 | U | U | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.370 | U | U | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | ~~0.110~~ 0.294 | ~~N~~ U | U ~~N~~ | + |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.180 | U | U | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.260 | U | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.220 | U | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.120 | U | | |

KM 1/6/97

OGDEN VALIDATED



LEVEL D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MA727

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3019

**Sample wt/vol:** 0.0136 Kg **Lab File ID:** 3,1126963,19,1

**% Moisture:** 48.70 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/27/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup:** (Y/N) **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,19,1 | | | |
| 19846 | alpha-BHC | ~~0.050000~~ 0.167 | ~~NJ~~ U | UJ | +,C |
| 424826 | 2,4'-DDE | 0.270000 | U | U | |
| 59988 | Endosulfan I | 0.360000 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,19,1 | | | |
| 18741 | Hexachlorobenzene | 0.110000 | U | UJ | |
| 19857 | beta-BHC | 0.060000 | J | ~~UJ~~ | F |
| 8899 | gamma-BHC (Lindane) | 0.100000 | J | | |
| 19868 | delta-BHC | 0.110000 | U | UJ | C |
| 6448 | Heptachlor | 0.091000 | U | U | |
| 09002 | Aldrin | 0.490000 | U | U | |
| 103742 | gamma-Chlordane | 0.480000 | U | U | |
| 103719 | alpha-Chlordane | 0.270000 | U | U | |
| 103731 | cis-Nonachlor | 0.250000 | U | * | |
| 9765805 | trans-Nonachlor | 0.250000 | U | U | |
| 024573 | Heptachlor epoxide | 0.170000 | U | | |
| 0571 | Dieldrin | 0.180000 | U | | |
| 2559 | 4,4'-DDE | 1.200000 | U | | |
| 3190 | 2,4'-DDD | 0.300000 | U | | |
| 2208 | Endrin | 0.099000 | U | | |
| 2548 | 4,4'-DDD | 0.730000 | U | | |
| 89026 | 2,4'-DDT | 0.170000 | U | | |
| 3216659 | Endosulfan II | 0.360000 | U | | |
| 031078 | Endosulfan sulfate | 0.360000 | U | | |
| 0293 | 4,4'-DDT | 0.260000 | U | | |
| 421934 | Endrin aldehyde | 0.250000 | U | | |
| 3494705 | Endrin ketone | 0.250000 | U | | |
| 2435 | Methoxychlor | 0.210000 | U | | |
| 385855 | Mirex | 0.140000 | J | UJ | |

Km 1/6/97

*Analysis Not Validated

OGDEN VALIDATED

000023

LEVEL D

PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC188

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3023

**Sample wt/vol:** 0.0152 Kg **Lab File ID:** 3,1126963,20,1

**% Moisture:** 43.10 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/27/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1126963,20,1 | | | | |
| 4883437 | PCB-8 (2,4') | ~~0.08T~~ ~~0.139~~ 0.106 | ~~NJ~~ U | U | + |
| Compound from Column: | RTX-5 Lab File ID: 2,1126962,20,1 | | | | |
| 7680652 | PCB-18 (2,2',5) | ~~0.320~~ 0.139 | ~~N~~ U | U | + |
| 012375 | PCB-28 (2,4,4') | ~~0.063~~ 0.133 | ~~NJ~~ U | U | + |
| 5693993 | PCB-52 (2,2',5,5') | 0.290 | | | |
| 1464395 | PCB-44 (2,2',3,5') | 0.110 | U | U | |
| 2598100 | PCB-66 (2,3',4,4') | 0.420 | | | |
| 7680732 | PCB-101 (2,2',3,5,5') | 1.100 | | | |
| 2598133 | PCB-77 (3,3',4,4') | 0.250 | U | U | |
| 1508006 | PCB-118 (2,3',4,4',5) | 0.860 | | | |
| 5065271 | PCB-153 (2,2',4,4',5,5') | 4.300 | | | |
| 2598144 | PCB-105 (2,3,3',4,4') | 0.250 | | | |
| 5065282 | PCB-138 (2,2',3,4,4',5') | 3.500 | | | |
| 7465288 | PCB-126 (3,3',4,4',5) | ~~0.920~~ .206 | ~~N~~ U | U | + |
| 2663680 | PCB-187 (2,2',3,4',5,5',6) | 3.500 | | | |
| 8380073 | PCB-128 (2,2',3,3',4,4') | 0.280 | J | J | |
| 6065293 | PCB-180 (2,2',3,4,4',5,5') | 1.300 | | | |
| 5065306 | PCB-170 (2,2',3,3',4,4',5) | 0.500 | | | |
| 2663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.160 | J | J | |
| 0186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.190 | U | U | |
| C51243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.110 | U | U | |

KM 1/6/97

OGDEN VALIDATED

000024

LEVEL D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC188

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3023

**Sample wt/vol:** 0.0152 Kg **Lab File ID:** 3,1126963,20,1

**% Moisture:** 43.10 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/27/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) | ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| ompound from Column: | DB-17 | Lab File ID: 3,1126963;20,1 | | | | |
| 19846 | alpha-BHC | ~~0.055000~~ | 0.149~~8~~ | ~~NJ~~ U | UJ | +,c |
| 424826 | 2,4'-DDE | 0.240000 | | U | U | |
| 59988 | Endosulfan I | 0.320000 | | U | U | |
| ompound from Column: | RTX-5 | Lab File ID: 2,1126962,20,1 | | | | |
| 18741 | Hexachlorobenzene | 0.014000 | | J | J | F |
| 19857 | beta-BHC | 0.120000 | | U | U | |
| 3899 | gamma-BHC (Lindane) | ~~0.031000~~ | 0.123~~1~~ | ~~NJ~~ U | U | + |
| 19868 | delta-BHC | ~~0.032000~~ | 0.096~~3~~ | ~~NJ~~ U | UJ | +,c |
| 5448 | Heptachlor | 0.082000 | | U | U | |
| 09002 | Aldrin | 0.440000 | | U | U | |
| 103742 | gamma-Chlordane | 0.430000 | | U | U | |
| 103719 | alpha-Chlordane | 0.240000 | | U | U | |
| 103731 | cis-Nonachlor | 0.230000 | | U | U | |
| 9765805 | trans-Nonachlor | 0.230000 | | U | U | |
| 024573 | Heptachlor epoxide | 0.150000 | | U | U | |
| 0571 | Dieldrin | 0.160000 | | U | U | |
| 2559 | 4,4'-DDE | 0.550000 | | J | J | |
| 3190 | 2,4'-DDD | 0.270000 | | U | U | |
| 2208 | Endrin | 0.089000 | | U | U | |
| 2548 | 4,4'-DDD | 0.650000 | | U | U | |
| 89026 | 2,4'-DDT | 0.150000 | | U | U | |
| 3216659 | Endosulfan II | 0.320000 | | U | U | |
| 031078 | Endosulfan sulfate | 0.320000 | | U | U | |
| 0293 | 4,4'-DDT | 0.240000 | | U | U | |
| 421934 | Endrin aldehyde | 0.220000 | | U | U | |
| 3494705 | Endrin ketone | 0.220000 | | U | U | |
| 2435 | Methoxychlor | 0.190000 | | U | U | |
| 385855 | Mirex | ~~0.038000~~ | 0.149 | ~~J~~ U | UJ | + |

*Analysis Not Validated

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OGDEN VALIDATED

LEVEL D

1D

# PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.

MC189

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3024

**Sample wt/vol:** 0.0141 Kg **Lab File ID:** 3,1126963,21,1

**% Moisture:** 43.00 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/27/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,21,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.160 | | | J | F |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,21,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.300 | | | J | F |
| 7012375 | PCB-28 (2,4,4') | ~~0.077~~ | 0.144 | ~~NJ~~ U | U | + |
| 35693993 | PCB-52 (2,2',5,5') | 0.350 | | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.120 | | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.570 | | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 1.500 | | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.270 | | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 1.000 | | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 5.300 | | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.290 | | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 4.100 | | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | ~~1.200~~ | 0.222 | ~~N~~ U | U | + |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 4.200 | | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.290 | | J | J | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 1.600 | | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.500 | | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.170 | | J | J | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | ~~0.097~~ | 0.104 | ~~J~~ U | U | + |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | ~~0.066~~ | 0.115 | ~~NJ~~ U | U | + |

KM 1/6/97

QGDEN VALIDATED

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LEVEL D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC189

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3024

**Sample wt/vol:** 0.0141 Kg **Lab File ID:** 3,1126963,21,1

**% Moisture:** 43.00 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/27/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,21,1 | | | |
| 319846 | alpha-BHC | 0.041000 | J | J | c |
| 3424826 | 2,4'-DDE | 0.260000 | U | U | |
| 959988 | Endosulfan I | 0.350000 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,21,1 | | | |
| 118741 | Hexachlorobenzene | ~~0.006500~~ 0.108 | ~~NJ~~ U | U | + |
| 319857 | beta-BHC | 0.130000 | U | U | |
| 58899 | gamma-BHC (Lindane) | 0.110000 | J | ~~J~~ J | F |
| 319868 | delta-BHC | ~~0.040000~~ 0.104 | ~~NJ~~ U | U J | +,c |
| 76448 | Heptachlor | 0.088000 | U | U | |
| 309002 | Aldrin | 0.470000 | U | U | |
| 5103742 | gamma-Chlordane | 0.460000 | U | U | |
| 5103719 | alpha-Chlordane | 0.260000 | U | U | |
| 5103731 | cis-Nonachlor | 0.240000 | U | U * | |
| 39765805 | trans-Nonachlor | 0.240000 | U | U | |
| 1024573 | Heptachlor epoxide | 0.160000 | U | U | |
| 60571 | Dieldrin | 0.170000 | U | U | |
| 72559 | 4,4'-DDE | 0.660000 | J | J | |
| 53190 | 2,4'-DDD | 0.290000 | U | U | |
| 72208 | Endrin | 0.096000 | U | U | |
| 72548 | 4,4'-DDD | 0.700000 | U | U | |
| 789026 | 2,4'-DDT | ~~0.100000~~ 0.165 | ~~NJ~~ U | U | + |
| 33216659 | Endosulfan II | 0.350000 | U | U | |
| 1031078 | Endosulfan sulfate | 0.350000 | U | U | |
| 50293 | 4,4'-DDT | 0.250000 | U | U | |
| 7421934 | Endrin aldehyde | 0.240000 | U | U | |
| 53494705 | Endrin ketone | 0.240000 | U | U | |
| 72435 | Methoxychlor | 0.200000 | U | U | |
| 2385855 | Mirex | ~~0.047000~~ 0.161 | ~~J~~ U | U ~~J~~ | + |

KM 1/6/97

*Analysis Not Validated

OGDEN VALIDATED

000027

LEVEL D

# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC195

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3025

**Sample wt/vol:** 0.0161 Kg **Lab File ID:** 3,1126963,22,1

**% Moisture:** 41.30 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/27/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,22,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.100 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,22,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.530 | 0.133 | ~~N~~ U | U | + |
| 7012375 | PCB-28 (2,4,4') | 0.130 | | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | 0.300 | 0.234 | ~~N~~ U | U | + |
| 41464395 | PCB-44 (2,2',3,5') | 0.110 | | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.180 | | U | U | |
| 37680732 | PCB-101 (2,2',3,5,5') | ~~0.100~~ | 0.566 | ~~N~~ | U ~~N~~ | + |
| 32598133 | PCB-77 (3,3',4,4') | 0.240 | | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.630 | | U | U | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | ~~0.430~~ | 1.000 | ~~N~~ U | U ~~N~~ | + |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.130 | | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | ~~0.380~~ | 1.257 | ~~N~~ U | U ~~N~~ | + |
| 57465288 | PCB-126 (3,3',4,4',5) | ~~0.091~~ | 0.196 | ~~NJ~~ U | U | + |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.400 | | J | J | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.310 | | U | U | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 2.200 | | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | ~~0.022~~ | 0.154 | ~~N~~ U | U ~~N~~ | + |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.220 | | U | U | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.180 | | U | U | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.100 | | U | U | |

KM 1/6/97

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LEVEL D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC195

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3025

**Sample wt/vol:** 0.0161 Kg **Lab File ID:** 3,1126963,22,1

**% Moisture:** 41.30 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/27/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) | ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,22,1 | | | | |
| 319846 | alpha-BHC | ~~0.066000~~ | 0.1423 | ~~NJ~~ U | UJ | +,c |
| 3424826 | 2,4'-DDE | 0.230000 | | U | U | |
| 959988 | Endosulfan I | 0.300000 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,22,1 | | | | |
| 118741 | Hexachlorobenzene | 0.094000 | | U | U | |
| 319857 | beta-BHC | 0.110000 | | U | U | |
| 58899 | gamma-BHC (Lindane) | ~~0.170000~~ | 0.1170 | ~~NJ~~ U | U | + |
| 319868 | delta-BHC | 0.092000 | | U | UJ | c |
| 76448 | Heptachlor | 0.077000 | | U | U | |
| 309002 | Aldrin | 0.410000 | | U | U | |
| 5103742 | gamma-Chlordane | 0.410000 | | U | U | |
| 5103719 | alpha-Chlordane | ~~0.170000~~ | 0.2308 | ~~NJ~~ U | U | + |
| 5103731 | cis-Nonachlor | 0.210000 | | U | * | |
| 39765805 | trans-Nonachlor | ~~0.140000~~ | 0.215 | ~~NJ~~ U | U | + |
| 1024573 | Heptachlor epoxide | 0.140000 | | U | U | |
| 60571 | Dieldrin | 0.150000 | | U | U | |
| 72559 | 4,4'-DDE | ~~0.100000~~ | 0.980 | ~~J~~ U | U | + |
| 53190 | 2,4'-DDD | 0.250000 | | U | U | |
| 72208 | Endrin | ~~0.240000~~ | 0.0853 | ~~NJ~~ U | U | + |
| 72548 | 4,4'-DDD | 0.620000 | | U | U | |
| 789026 | 2,4'-DDT | 0.150000 | | U | | |
| 33216659 | Endosulfan II | 0.300000 | | U | | |
| 1031078 | Endosulfan sulfate | 0.300000 | | U | | |
| 50293 | 4,4'-DDT | 0.220000 | | U | | |
| 7421934 | Endrin aldehyde | 0.210000 | | U | | |
| 53494705 | Endrin ketone | 0.210000 | | U | | |
| 72435 | Methoxychlor | 0.180000 | | U | U | |
| 2385855 | Mirex | 0.210000 | | | | |

KM 1/6/97

*Analysis Not Validated

LEVEL D

OGDEN VALIDATION

PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC196

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIIT05

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B3026

Sample wt/vol: 0.0164 Kg Lab File ID: 3,1126963,23,1

% Moisture: 43.50 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/31/96

Concentrated Extract Volume: 1.0000(mL) Date Analyzed: 11/27/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1126963,23,1 | | | | |
| 1883437 | PCB-8 (2,4') | ~~0.069~~ 0.098 | ~~NJ~~ U | U | + |
| Compound from Column: | RTX-5 Lab File ID: 2,1126962,23,1 | | | | |
| 7680652 | PCB-18 (2,2',5) | 1.400 | | | |
| 012375 | PCB-28 (2,4,4') | 0.130 | U | U | |
| 5693993 | PCB-52 (2,2',5,5') | 0.310 | | | |
| 464395 | PCB-44 (2,2',3,5') | 0.100 | U | U | |
| 2598100 | PCB-66 (2,3',4,4') | ~~0.088~~ 0.176 | ~~NJ~~ U | U | + |
| 7680732 | PCB-101 (2,2',3,5,5') | 0.270 | J | UCH | |
| 2598133 | PCB-77 (3,3',4,4') | 0.230 | U | | |
| 1508006 | PCB-118 (2,3',4,4',5) | 0.520 | J | | |
| 5065271 | PCB-153 (2,2',4,4',5,5') | 1.000 | | | |
| 2598144 | PCB-105 (2,3,3',4,4') | 0.130 | J | UCH | |
| 5065282 | PCB-138 (2,2',3,4,4',5') | 1.000 | J | | |
| 7465288 | PCB-126 (3,3',4,4',5) | ~~0.250~~ 0.191 | ~~NJ~~ U | U | + |
| 2663680 | PCB-187 (2,2',3,4',5,5',6) | 1.000 | | | |
| 3380073 | PCB-128 (2,2',3,3',4,4') | ~~0.091~~ 0.305 | ~~J~~ U | U ~~J~~ | + |
| 5065293 | PCB-180 (2,2',3,4,4',5,5') | 1.200 | | | |
| 5065306 | PCB-170 (2,2',3,3',4,4',5) | ~~0.031~~ 0.151 | ~~J~~ U | U ~~J~~ | + |
| 2663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.220 | U | U | |
| 0186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.180 | U | U | |
| 051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.100 | U | U | |

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LEVEL D

OGDEN VALIDATED

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC196

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3026

**Sample wt/vol:** 0.0164 Kg **Lab File ID:** 3,1126963,23,1

**% Moisture:** 43.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/27/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: DB-17 Lab File ID: 3,1126963,23,1 | | | | | |
| 319846 | alpha-BHC | ~~0.090000~~ 0.139 | ~~NJ~~ U | U J | +,C |
| 3424826 | 2,4'-DDE | 0.220000 | U | C | |
| 959988 | Endosulfan I | 0.300000 | U | C | |
| Compound from Column: RTX-5 Lab File ID: 2,1126962,23,1 | | | | | |
| 118741 | Hexachlorobenzene | 0.092000 | U | C | |
| 319857 | beta-BHC | 0.110000 | U | C | |
| 58899 | gamma-BHC (Lindane) | 0.099000 | J | U | T |
| 319868 | delta-BHC | 0.091000 | U | C | |
| 76448 | Heptachlor | 0.076000 | U | C | |
| 309002 | Aldrin | 0.400000 | U | C | |
| 5103742 | gamma-Chlordane | 0.400000 | U | C | |
| 5103719 | alpha-Chlordane | 0.220000 | U | C | |
| 5103731 | cis-Nonachlor | 0.210000 | U | * | |
| 39765805 | trans-Nonachlor | 0.210000 | U | C | |
| 1024573 | Heptachlor epoxide | 0.140000 | U | C | |
| 60571 | Dieldrin | 0.150000 | U | C | |
| 72559 | 4,4'-DDE | 1.100000 | | C | |
| 53190 | 2,4'-DDD | 0.250000 | U | C | |
| 72208 | Endrin | 0.210000 | | C | |
| 72548 | 4,4'-DDD | 0.600000 | U | C | |
| 789026 | 2,4'-DDT | 0.140000 | U | C | |
| 33216659 | Endosulfan II | 0.300000 | U | C | |
| 1031078 | Endosulfan sulfate | 0.300000 | U | C | |
| 50293 | 4,4'-DDT | 0.220000 | U | C | |
| 7421934 | Endrin aldehyde | 0.200000 | U | C | |
| 53494705 | Endrin ketone | 0.200000 | U | C | |
| 72435 | Methoxychlor | 0.170000 | U | C | |
| 2385855 | Mirex | 0.140000 | U | C | |

KM
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**LEVEL D**

**OGDEN VALIDATED**

*Analysis Not Validated

PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC201

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3052

**Sample wt/vol:** 0.0122 Kg **Lab File ID:** 3,1126963,24,1

**% Moisture:** 48.90 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/27/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,24,1 | | | | |
| 34883437 | PCB-8 (2,4') | ~~0.610~~ | ~~0.257~~ 0.137 | ~~N~~ U | U | + |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,24,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.500 | | | J | F |
| 7012375 | PCB-28 (2,4,4') | 0.430 | | | | |
| 35693993 | PCB-52 (2,2',5,5') | 1.000 | | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.014 | | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 2.300 | | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 3.700 | | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.031 | | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 2.700 | | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 12.000 | | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.780 | | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 10.000 | | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | ~~2.500~~ | 0.257 | ~~N~~ U | U | + |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 9.800 | | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.810 | | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 3.600 | | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 1.300 | | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.029 | | U | U | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.024 | | U | U | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.013 | | U | U | |

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**LEVEL D**

**OGDEN VALIDATED**

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC201

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3052

**Sample wt/vol:** 0.0122 Kg **Lab File ID:** 3,1126963,24,1

**% Moisture:** 48.90 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/27/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) | ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,24,1 | | | | |
| 319846 | alpha-BHC | ~~0.130000~~ | 0.187 | ~~N~~ U | U | J +,C |
| 3424826 | 2,4'-DDE | ~~0.230000~~ | 0.303 | ~~N~~ U | U | J + |
| 959988 | Endosulfan I | 0.040000 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,24,1 | | | | |
| 118741 | Hexachlorobenzene | 0.012000 | | U | U | |
| 319857 | beta-BHC | 0.015000 | | U | U | |
| 58899 | gamma-BHC (Lindane) | 0.300000 | | | J | F |
| 319868 | delta-BHC | ~~0.058000~~ | 0.120 | ~~N~~ U | U | J +,C |
| 76448 | Heptachlor | 0.010000 | | U | U | |
| 309002 | Aldrin | 0.054000 | | U | U | |
| 5103742 | gamma-Chlordane | 0.054000 | | U | U | |
| 5103719 | alpha-Chlordane | 0.030000 | | U | U | |
| 5103731 | cis-Nonachlor | 0.230000 | | | * | |
| 39765805 | trans-Nonachlor | 0.028000 | | U | U | |
| 1024573 | Heptachlor epoxide | 0.019000 | | U | U | |
| 60571 | Dieldrin | 0.020000 | | U | U | |
| 72559 | 4,4'-DDE | 5.700000 | | | | |
| 53190 | 2,4'-DDD | 0.033000 | | U | U | |
| 72208 | Endrin | ~~0.190000~~ | 0.112 | ~~N~~ U | U | + |
| 72548 | 4,4'-DDD | 0.270000 | | | | |
| 789026 | 2,4'-DDT | 0.600000 | | | | |
| 33216659 | Endosulfan II | 0.040000 | | U | U | |
| 1031078 | Endosulfan sulfate | 0.040000 | | U | U | |
| 50293 | 4,4'-DDT | 0.720000 | | | | |
| 7421934 | Endrin aldehyde | 0.027000 | | U | U | |
| 53494705 | Endrin ketone | 0.027000 | | U | U | |
| 72435 | Methoxychlor | 0.023000 | | U | U | |
| 2385855 | Mirex | 0.120000 | | | | |

KM
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*Analysis Not Validated

**LEVEL D**

**OGDEN VALIDATED**

1D
# PCB ORGANICS ANALYSIS DATA SHEET



**EPA SAMPLE NO.**

MC208

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3053

**Sample wt/vol:** 0.0153 Kg **Lab File ID:** 3,1126963,25,1

**% Moisture:** 41.60 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/27/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,25,1 | | | | |
| 34883437 | PCB-8 (2,4') | ~~0.120~~ | 0.106 | ~~N~~ U | U | + |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,25,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.140 | | U | U | |
| 7012375 | PCB-28 (2,4,4') | 0.620 | | | | |
| 35693993 | PCB-52 (2,2',5,5') | 2.000 | | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.110 | | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 1.100 | | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 5.800 | | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.250 | | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 4.300 | | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 18.000 | | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 1.300 | | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 15.000 | | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | ~~3.800~~ | 0.205 | ~~N~~ U | U | + |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 13.000 | | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 1.300 | | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 5.100 | | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 1.900 | | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.620 | | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.240 | | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.110 | | U | U | |

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**LEVEL D**

**OGDEN VALIDATED**

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC208

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3053

**Sample wt/vol:** 0.0153 Kg **Lab File ID:** 3,1126963,25,1

**% Moisture:** 41.60 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/27/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1126963,25,1 | | | | |
| 319846 | alpha-BHC | ~~0.350000~~ 0.149 | ~~N~~ U | UJ | +,C |
| 3424826 | 2,4'-DDE | ~~0.260000~~ 0.241 | ~~N~~ U | U | + |
| 959988 | Endosulfan I | 0.320000 | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,1126962,25,1 | | | | |
| 118741 | Hexachlorobenzene | ~~0.120000~~ .0992 | ~~N~~ U | U | + |
| 319857 | beta-BHC | 0.120000 | U | U | |
| 58899 | gamma-BHC (Lindane) | 0.025000 | J | UJ | F |
| 319868 | delta-BHC | ~~0.052000~~ .0959 | ~~N~~ U | UJ | +,C |
| 76448 | Heptachlor | 0.081000 | U | U | |
| 309002 | Aldrin | 0.430000 | U | U | |
| 5103742 | gamma-Chlordane | 0.430000 | U | U | |
| 5103719 | alpha-Chlordane | 0.240000 | U | U | |
| 5103731 | cis-Nonachlor | 0.220000 | U | * | |
| 39765805 | trans-Nonachlor | 0.220000 | U | U | |
| 1024573 | Heptachlor epoxide | 0.150000 | U | U | |
| 60571 | Dieldrin | 0.160000 | U | U | |
| 72559 | 4,4'-DDE | 2.000000 | | | |
| 53190 | 2,4'-DDD | 0.260000 | U | U | |
| 72208 | Endrin | ~~0.380000~~ .0892 | ~~N~~ U | U | + |
| 72548 | 4,4'-DDD | ~~0.260000~~ 0.660 | ~~Y~~ U | U | + |
| 789026 | 2,4'-DDT | ~~0.580000~~ .1521 | ~~N~~ U | U | + |
| 33216659 | Endosulfan II | 0.320000 | U | U | |
| 1031078 | Endosulfan sulfate | 0.320000 | U | U | |
| 50293 | 4,4'-DDT | ~~0.240000~~ .235 | ~~N~~ U | U | + |
| 7421934 | Endrin aldehyde | 0.220000 | U | U | |
| 53494705 | Endrin ketone | 0.220000 | U | U | |
| 72435 | Methoxychlor | 0.180000 | U | U | |
| 2385855 | Mirex | 0.150000 | U | U | |

KM
01/06/97

*Analysis Not Validated

LEVEL D

OGDEN VALIDATED

# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC212

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3054

**Sample wt/vol:** 0.0134 Kg **Lab File ID:** 3,1126963,26,1

**% Moisture:** 46.00 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/27/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1126963,26,1 | | | | |
| 34883437 | PCB-8 (2,4') | ~~0.054~~ 0.121 | ~~NJ~~ U | U | + |
| Compound from Column: | RTX-5 Lab File ID: 2,1126962,26,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | ~~0.660~~ 0.159 | ~~N~~ U | U | + |
| 7012375 | PCB-28 (2,4,4') | 0.150 | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | 2.900 | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.130 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.210 | U | U | |
| 37680732 | PCB-101 (2,2',3,5,5') | ~~0.059~~ 0.680 | ~~NJ~~ U | U | + |
| 32598133 | PCB-77 (3,3',4,4') | 0.280 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.760 | U | U | |
| 35065271- | PCB-153 (2,2',4,4',5,5') | ~~0.310~~ 1.208 | ~~N~~ U | U | + |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.160 | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | ~~0.390~~ 1.51 | ~~N~~ U | U | + |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.230 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.440 | J | U | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.380 | U | U | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 3.200 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.180 | U | U | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.260 | U | U | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.220 | U | U | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.120 | U | U | |

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LEVEL D

OGDEN VALIDATED

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC212

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3054

**Sample wt/vol:** 0.0134 Kg **Lab File ID:** 3,1126963,26,1

**% Moisture:** 46.00 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/27/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) | ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,26,1 | | | | |
| 319846 | alpha-BHC | ~~0.042000~~ | 0.170 | ~~NJ~~ U | UJ | +,c |
| 3424826 | 2,4'-DDE | 1.200000 | | | | |
| 959988 | Endosulfan I | 0.360000 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,26,1 | | | | |
| 118741 | Hexachlorobenzene | 0.110000 | | U | U | |
| 319857 | beta-BHC | 0.140000 | | U | U | |
| 58899 | gamma-BHC (Lindane) | ~~0.300000~~ | 0.140 | ~~N~~ U | U | + |
| 319868 | delta-BHC | 0.110000 | | U | UJ | c |
| 76448 | Heptachlor | 0.093000 | | U | U | |
| 309002 | Aldrin | 0.490000 | | U | | |
| 5103742 | gamma-Chlordane | 0.490000 | | U | | |
| 5103719 | alpha-Chlordane | 0.280000 | | U | U | |
| 5103731 | cis-Nonachlor | 0.260000 | | U | * | |
| 39765805 | trans-Nonachlor | 0.260000 | | U | U | |
| 1024573 | Heptachlor epoxide | 0.170000 | | U | | |
| 60571 | Dieldrin | 0.180000 | | U | | |
| 72559 | 4,4'-DDE | 1.200000 | | U | U | |
| 53190 | 2,4'-DDD | ~~0.370000~~ | .302 | ~~N~~ U | U | + |
| 72208 | Endrin | 0.370000 | | | | |
| 72548 | 4,4'-DDD | 0.740000 | | U | U | |
| 789026 | 2,4'-DDT | 0.180000 | | U | | |
| 33216659 | Endosulfan II | 0.360000 | | U | | |
| 1031078 | Endosulfan sulfate | 0.360000 | | U | | |
| 50293 | 4,4'-DDT | 0.270000 | | U | | |
| 7421934 | Endrin aldehyde | 0.250000 | | U | | |
| 53494705 | Endrin ketone | 0.250000 | | U | | |
| 72435 | Methoxychlor | 0.210000 | | U | | |
| 2385855 | Mirex | 0.170000 | | U | U | |

KM
1/6/97

*Analysis Not Validated

**LEVEL D**

OGDEN VALIDATED

# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC218

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIIT05

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 9683055

Sample wt/vol: 0.0158 Kg Lab File ID: 3,1126963,27,1

% Moisture: 36.70 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 10/31/96

Concentrated Extract Volume: 1.0000(mL) Date Analyzed: 11/27/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 2.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/Kg

| Cas No: | Compound | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,27,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.100 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,27,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.300 | | J | F |
| 7012375 | PCB-28 (2,4,4') | 0.130 | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | ~~0.130~~ 0.237 | ~~NJ~~ U | U | + |
| 41464395 | PCB-44 (2,2',3,5') | 0.110 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.180 | U | U | |
| 37680732 | PCB-101 (2,2',3,5,5') | ~~0.041~~ 0.576 | ~~NJ~~ U | U | + |
| 32598133 | PCB-77 (3,3',4,4') | 0.240 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.650 | U | U | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 0.088 | J | J | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.130 | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | ~~0.120~~ 0.640 | ~~J~~ U | U | + |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.200 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.460 | U | U | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.320 | U | U | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.600 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.160 | U | U | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.220 | U | U | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.190 | U | U | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.100 | U | U | |

KM
01/06/97

LEVEL D

OGDEN VALIDATED

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC218

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3055

**Sample wt/vol:** 0.0158 Kg **Lab File ID:** 3,1126963,27,1

**% Moisture:** 36.70 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/27/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,27,1 | | | |
| 319846 | alpha-BHC | 0.140000 | U | UJ | C |
| 3424826 | 2,4'-DDE | 0.230000 | U | U | |
| 959988 | Endosulfan I | 0.310000 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,27,1 | | | |
| 118741 | Hexachlorobenzene | ~~0.007500~~ 0.096 | ~~U~~ U | U ~~U~~ | ~~F~~ + |
| 319857 | beta-BHC | 0.120000 | U | U | |
| 58899 | gamma-BHC (Lindane) | ~~0.015000~~ 0.118 | ~~U~~ U | U ~~U~~ | + |
| 319868 | delta-BHC | 0.094000 | U | UJ | C |
| 76448 | Heptachlor | 0.079000 | U | U | |
| 309002 | Aldrin | 0.420000 | U | U | |
| 5103742 | gamma-Chlordane | 0.410000 | U | U | |
| 5103719 | alpha-Chlordane | 0.230000 | U | U | |
| 5103731 | cis-Nonachlor | 0.220000 | U | U | |
| 39765805 | trans-Nonachlor | 0.220000 | U | U | |
| 1024573 | Heptachlor epoxide | 0.140000 | U | U | |
| 60571 | Dieldrin | 0.150000 | U | U | |
| 72559 | 4,4'-DDE | ~~0.210000~~ 0.993 | ~~U~~ U | U ~~U~~ | + |
| 53190 | 2,4'-DDD | 0.260000 | U | U | |
| 72208 | Endrin | 0.085000 | U | | |
| 72548 | 4,4'-DDD | 0.630000 | U | | |
| 789026 | 2,4'-DDT | 0.150000 | U | | |
| 33216659 | Endosulfan II | 0.310000 | U | | |
| 1031078 | Endosulfan sulfate | 0.310000 | U | | |
| 50293 | 4,4'-DDT | 0.230000 | U | | |
| 7421934 | Endrin aldehyde | 0.210000 | U | | |
| 53494705 | Endrin ketone | 0.210000 | U | | |
| 72435 | Methoxychlor | 0.180000 | U | U | |
| 2385855 | Mirex | 0.200000 | | | |

KM 1/7/97

*Analysis Not Validated

OGDEN VALIDATED

LEVEL D

# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC222

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3056

**Sample wt/vol:** 0.0145 Kg **Lab File ID:** 3,1126963,28,1

**% Moisture:** 45.30 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/27/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,28,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.110 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,28,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.320 | | | U | F |
| 7012375 | PCB-28 (2,4,4') | 0.140 | | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | 0.260 | | U | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.120 | | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.200 | | U | U | |
| 37680732 | PCB-101 (2,2',3,5,5') | ~~0.040~~ | 0.628 | ~~NJ~~ U | U | + |
| 32598133 | PCB-77 (3,3',4,4') | 0.260 | | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.700 | | U | U | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | ~~0.200~~ | 1.12 | ✓ U | U | + |
| 32598144 | PCB-105 (2,3,3',4,4') | ~~0.062~~ | 0.147 | ~~NJ~~ U | U | + |
| 35065282 | PCB-138 (2,2',3,4,4',5') | ~~0.330~~ | 1.40 | ✓ U | U | + |
| 57465288 | PCB-126 (3,3',4,4',5) | ~~0.054~~ | 0.216 | ~~NJ~~ U | U | + |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.470 | | J | U | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.350 | | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 3.300 | | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.170 | | U | U | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.240 | | U | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.200 | | U | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.110 | | U | U | |

KM
1/6/97

**LEVEL D**

OGDEN VALIDATED

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC222

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3056

**Sample wt/vol:** 0.0145 Kg **Lab File ID:** 3,1126963,28,1

**% Moisture:** 45.30 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/27/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) | ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,28,1 | | | | |
| 319846 | alpha-BHC | ~~0.088000~~ | 0.157 | ~~NJ~~ U | UJ | +,c |
| 3424826 | 2,4'-DDE | 0.250000 | | U | U | |
| 72208 | Endrin | 0.880000 | | | | |
| 959988 | Endosulfan I | ~~0.043000~~ | 0.335 | ~~NJ~~ U | U | + |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,28,1 | | | | |
| 118741 | Hexachlorobenzene | 0.100000 | | U | UJ | |
| 319857 | beta-BHC | 0.130000 | | U | UJ | |
| 58899 | gamma-BHC (Lindane) | 0.081000 | | J | J | F |
| 319868 | delta-BHC | ~~0.000000~~ | 0.102 | ~~NJ~~ U | UJ | +,c |
| 76448 | Heptachlor | 0.086000 | | U | U | |
| 309002 | Aldrin | 0.460000 | | U | U | |
| 5103742 | gamma-Chlordane | 0.450000 | | U | U | |
| 5103719 | alpha-Chlordane | ~~1.700000~~ | 0.255 | ~~N~~ U | U | + |
| 5103731 | cis-Nonachlor | 0.240000 | | U | U* | |
| 39765805 | trans-Nonachlor | 0.240000 | | U | U | |
| 1024573 | Heptachlor epoxide | 0.160000 | | U | U | |
| 60571 | Dieldrin | 0.170000 | | U | U | |
| 72559 | 4,4'-DDE | ~~0.150000~~ | 1.080 | ~~J~~ | U | + |
| 53190 | 2,4'-DDD | 0.200000 | | J | UJ | |
| 72548 | 4,4'-DDD | 0.680000 | | U | U | |
| 789026 | 2,4'-DDT | 0.160000 | | U | U | |
| 33216659 | Endosulfan II | 0.340000 | | U | U | |
| 1031078 | Endosulfan sulfate | 0.340000 | | U | U | |
| 50293 | 4,4'-DDT | 0.250000 | | U | U | |
| 7421934 | Endrin aldehyde | 0.230000 | | U | U | |
| 53494705 | Endrin ketone | 0.230000 | | U | U | |
| 72435 | Methoxychlor | 0.200000 | | U | U | |
| 2385855 | Mirex | 0.160000 | | U | U | |

KM 1/6/97

*Analysis Not Validated

**LEVEL D**

OGDEN VALIDATED

# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC223

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3057

**Sample wt/vol:** 0.0154 Kg **Lab File ID:** 3,1126963,31,1

**% Moisture:** 43.40 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/27/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,31,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.170 | | | J | F |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,31,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.670 | | | | |
| 7012375 | PCB-28 (2,4,4') | 1.100 | | | | |
| 35693993 | PCB-52 (2,2',5,5') | 2.800 | | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.110 | | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 6.800 | | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 12.000 | | | | |
| 32598133 | PCB-77 (3,3',4,4') | ~~15.000~~ | 0.246 | ~~N~~U | U | + |
| 31508006 | PCB-118 (2,3',4,4',5) | 8.700 | | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 43.000 | | E | R | D |
| 32598144 | PCB-105 (2,3,3',4,4') | 2.400 | | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 39.000 | | E | R | D |
| 57465288 | PCB-126 (3,3',4,4',5) | ~~10.000~~ | 0.204 | ~~N~~U | U | + |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 35.000 | | E | R | D |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 3.200 | | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 14.000 | | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 7.000 | | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 1.900 | | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.650 | | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | ~~0.038~~ | 0.105 | ~~N~~U | U ~~J~~ | + |

KM 1/6/97

**LEVEL D**

**OGDEN VALIDATED**

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC223

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3057

**Sample wt/vol:** 0.0154 Kg **Lab File ID:** 3,1126963,31,1

**% Moisture:** 43.40 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/27/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1126963,31,1 | | | | |
| 319846 | alpha-BHC | 0.370000 | | H | C |
| 3424826 | 2,4'-DDE | 0.240000 | U | U | |
| 959988 | Endosulfan I | 0.320000 | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,1126962,31,1 | | | | |
| 118741 | Hexachlorobenzene | 0.098000 | U | U | |
| 319857 | beta-BHC | 0.120000 | U | U | |
| 58899 | gamma-BHC (Lindane) | 0.055000 | J | H | F |
| 319868 | delta-BHC | 0.097000 | U | U | C |
| 76448 | Heptachlor | ~~0.290000~~ .078 | ~~K~~ U | U | + |
| 309002 | Aldrin | 0.430000 | U | U | |
| 5103742 | gamma-Chlordane | 0.420000 | U | U | |
| 5103719 | alpha-Chlordane | 0.240000 | U | U | |
| 5103731 | cis-Nonachlor | 0.220000 | U | * | |
| 39765805 | trans-Nonachlor | ~~0.130000~~ 0.223 | ~~NJ~~ U | U | + |
| 1024573 | Heptachlor epoxide | 0.150000 | U | U | |
| 60571 | Dieldrin | 0.160000 | U | U | |
| 72559 | 4,4'-DDE | 5.000000 | | | |
| 53190 | 2,4'-DDD | 2.400000 | | | |
| 72208 | Endrin | 0.087000 | U | U | |
| 72548 | 4,4'-DDD | 0.640000 | U | | |
| 789026 | 2,4'-DDT | 1.500000 | | | |
| 33216659 | Endosulfan II | 0.320000 | U | U | |
| 1031078 | Endosulfan sulfate | 0.320000 | U | U | |
| 50293 | 4,4'-DDT | 0.970000 | | | |
| 7421934 | Endrin aldehyde | 0.220000 | U | U | |
| 53494705 | Endrin ketone | 0.220000 | U | U | |
| 72435 | Methoxychlor | 0.180000 | U | U | |
| 2385855 | Mirex | 0.250000 | | | |

KM 1/6/97

*Analysis Not Validated

**LEVEL D**

OGDEN VALIDATED

1D
# PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC223DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3057DL

**Sample wt/vol:** 0.0154 Kg **Lab File ID:** 3,1204963,9,1

**% Moisture:** 43.40 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 5.0000(mL) **Date Analyzed:** 12/04/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 5.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1204963,9,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.530 | UR | R | D |
| Compound from Column: | RTX-5 Lab File ID: 2,1204962,9,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.690 | UR | R | D |
| 7012375 | PCB-28 (2,4,4') | 0.310 | JR | | |
| 35693993 | PCB-52 (2,2',5,5') | 2.700 | R | | |
| 41464395 | PCB-44 (2,2',3,5') | 1.400 | R | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.930 | UR | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 14.000 | R | | |
| 32598133 | PCB-77 (3,3',4,4') | 1.200 | UR | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 9.300 | R | R | D |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 54.000 | D | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.690 | UR | R | D |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 41.000 | D | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 1.000 | UR | R | D |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 40.000 | D | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 2.900 | R | R | D |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 13.000 | R | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 6.800 | R | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 1.700 | R | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.740 | JR | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.034 | JR | R | D |

OGDEN VALIDATED
LEVEL D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC223DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3057DL

**Sample wt/vol:** 0.0154 Kg **Lab File ID:** 3,1204963,9,1

**% Moisture:** 43.40 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 5.0000(mL) **Date Analyzed:** 12/04/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 5.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1204963,9,1 | | | |
| 319846 | alpha-BHC | 0.160000 | JR | R | D |
| 3424826 | 2,4'-DDE | 0.560000 | JR | | |
| 959988 | Endosulfan I | 1.600000 | UR | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1204962,9,1 | | | |
| 118741 | Hexachlorobenzene | 0.490000 | UR | R | D |
| 319857 | beta-BHC | 0.590000 | UR | | |
| 58899 | gamma-BHC (Lindane) | 0.610000 | UR | | |
| 319868 | delta-BHC | 0.480000 | UR | | |
| 76448 | Heptachlor | 0.400000 | UR | | |
| 309002 | Aldrin | 2.200000 | UR | | |
| 5103742 | gamma-Chlordane | 2.100000 | UR | | |
| 5103719 | alpha-Chlordane | 1.200000 | UR | | |
| 5103731 | cis-Nonachlor | 0.750000 | NJR | * | |
| 39765805 | trans-Nonachlor | 1.100000 | UR | R | D |
| 1024573 | Heptachlor epoxide | 0.740000 | UR | | |
| 60571 | Dieldrin | 0.790000 | UR | | |
| 72559 | 4,4'-DDE | 4.100000 | JR | | |
| 53190 | 2,4'-DDD | 1.300000 | UR | | |
| 72208 | Endrin | 0.440000 | UR | | |
| 72548 | 4,4'-DDD | 0.830000 | JR | | |
| 789026 | 2,4'-DDT | 1.600000 | NR | | |
| 33216659 | Endosulfan II | 1.600000 | UR | | |
| 1031078 | Endosulfan sulfate | 1.600000 | UR | | |
| 50293 | 4,4'-DDT | 0.770000 | JR | | |
| 7421934 | Endrin aldehyde | 1.100000 | UR | | |
| 53494705 | Endrin ketone | 1.100000 | UR | | |
| 72435 | Methoxychlor | 0.920000 | UR | | |
| 2385855 | Mirex | 0.200000 | JR | | |

QGDEN VALIDATED

LEVEL D

*Analysis Not Validated

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC226

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3058

**Sample wt/vol:** 0.0163 Kg **Lab File ID:** 3,1126963,32,1

**% Moisture:** 43.40 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/27/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,32,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.100 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,32,1 | | | |
| 37680652 | PCB-18 (2,2',5) | ~~0.440~~ 0.130 | ~~N~~ U | U | + |
| 7012375 | PCB-28 (2,4,4') | 0.130 | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | ~~0.990~~ 0.230 | ~~N~~ U | U | + |
| 41464395 | PCB-44 (2,2',3,5') | 0.110 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.180 | U | U | |
| 37680732 | PCB-101 (2,2',3,5,5') | ~~0.084~~ 0.559 | ~~N~~ U | U | + |
| 32598133 | PCB-77 (3,3',4,4') | 0.300 | | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.630 | U | U | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | ~~0.430~~ 0.993 | ~~N~~ U | U | + |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.130 | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | ~~0.380~~ 1.240 | ~~N~~ U | U | + |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.190 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.570 | | U | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.310 | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 2.500 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.150 | U | U | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.220 | U | U | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.180 | U | U | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.100 | U | U | |

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**LEVEL D**

**OGDEN VALIDATED**

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC226

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3058

**Sample wt/vol:** 0.0163 Kg **Lab File ID:** 3,1126963,32,1

**% Moisture:** 43.40 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/27/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1126963,32,1 | | | | |
| 19846 | alpha-BHC | ~~0.064000~~ 0.140 | ~~NJ~~ U | UJ | +,C |
| 424826 | 2,4'-DDE | ~~0.340000~~ 0.226 | ~~N~~ U | U | + |
| 59988 | Endosulfan I | 0.300000 | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,1126962,32,1 | | | | |
| 18741 | Hexachlorobenzene | ~~0.016000~~ 0.093 | ~~NJ~~ U | U | + |
| 19857 | beta-BHC | ~~0.041000~~ 0.111 | ~~NJ~~ U | U | + |
| 8899 | gamma-BHC (Lindane) | ~~0.220000~~ 0.115 | ~~N~~ U | U | + |
| 19868 | delta-BHC | ~~0.046000~~ 0.090 | ~~NJ~~ U | UJ | +,C |
| 6448 | Heptachlor | 0.076000 | U | U | |
| 09002 | Aldrin | 0.410000 | U | U | |
| 103742 | gamma-Chlordane | 0.400000 | U | U | |
| 103719 | alpha-Chlordane | ~~0.250000~~ 0.226 | ~~N~~ U | U | + |
| 103731 | cis-Nonachlor | 0.210000 | U | U* | |
| 9765805 | trans-Nonachlor | 0.210000 | U | U | |
| 024573 | Heptachlor epoxide | 0.140000 | U | U | |
| 0571 | Dieldrin | 0.150000 | U | U | |
| 2559 | 4,4'-DDE | ~~0.170000~~ 0.962 | ~~N~~ U | U | + |
| 3190 | 2,4'-DDD | 0.220000 | J | UJ | |
| 2208 | Endrin | ~~0.510000~~ 0.083 | ~~N~~ U | U | + |
| 2548 | 4,4'-DDD | ~~0.070000~~ 0.621 | ~~NJ~~ U | U | + |
| 89026 | 2,4'-DDT | 0.140000 | U | U | |
| 3216659 | Endosulfan II | 0.300000 | U | | |
| 031078 | Endosulfan sulfate | 0.300000 | U | | |
| 0293 | 4,4'-DDT | 0.220000 | U | | |
| 421934 | Endrin aldehyde | 0.200000 | U | | |
| 3494705 | Endrin ketone | 0.200000 | U | | |
| 2435 | Methoxychlor | 0.170000 | U | U | |
| 385855 | Mirex | 0.760000 | | | |

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**LEVEL D**
*Analysis Not Validated
**OGDEN VALIDATED**

Revision I 1-9-97

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC226

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3058

**Sample wt/vol:** 0.0163 Kg **Lab File ID:** 3,1126963,32,1

**% Moisture:** 43.40 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/27/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) | ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,32,1 | | | | |
| 319846 | alpha-BHC | ~~0.064000~~ | 0.140 | ~~N~~J U | UJ | +,C |
| 3424826 | 2,4'-DDE | ~~0.340000~~ | 0.226 | ~~N~~ U | U | + |
| 959988 | Endosulfan I | 0.300000 | | U | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,32,1 | | | | |
| 118741 | Hexachlorobenzene | ~~0.016000~~ | 0.093 | ~~NJ~~ U | U | + |
| 319857 | beta-BHC | ~~0.041000~~ | 0.111 | ~~NJ~~ U | U | + |
| 58899 | gamma-BHC (Lindane) | ~~0.220000~~ | 0.115 | ~~N~~ U | U | + |
| 319868 | delta-BHC | ~~0.046000~~ | 0.090 | ~~NJ~~ U | UJ | +,C |
| 76448 | Heptachlor | 0.076000 | | U | U | |
| 309002 | Aldrin | 0.410000 | | U | U | |
| 5103742 | gamma-Chlordane | 0.400000 | | U | U | |
| 5103719 | alpha-Chlordane | ~~0.250000~~ | 0.226 | ~~N~~ U | U | + |
| 5103731 | cis-Nonachlor | 0.210000 | | U | U* | |
| 39765805 | trans-Nonachlor | 0.210000 | | U | U | |
| 1024573 | Heptachlor epoxide | 0.140000 | | U | U | |
| 60571 | Dieldrin | 0.150000 | | U | U | |
| 72559 | 4,4'-DDE | ~~0.170000~~ | 0.962 | ~~N~~ J U | UJ | + |
| 53190 | 2,4'-DDD | 0.220000 | | U | U | |
| 72208 | Endrin | ~~0.510000~~ | 0.083 | ~~N~~ U | U | + |
| 72548 | 4,4'-DDD | ~~0.070000~~ | 0.621 | ~~NJ~~ U | U | + |
| 789026 | 2,4'-DDT | 0.140000 | | U | U | |
| 33216659 | Endosulfan II | 0.300000 | | U | | |
| 1031078 | Endosulfan sulfate | 0.300000 | | U | | |
| 50293 | 4,4'-DDT | 0.220000 | | U | | |
| 7421934 | Endrin aldehyde | 0.200000 | | U | | |
| 53494705 | Endrin ketone | 0.200000 | | U | | |
| 72435 | Methoxychlor | 0.170000 | | U | | |
| 2385855 | Mirex | 0.760000 | | | | |

Superseded by Rev 1

KM 1/7/97

**LEVEL D**

*Analysis Not Validated

**OGDEN VALIDATED**

# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC230

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3059

**Sample wt/vol:** 0.0167 Kg **Lab File ID:** 3,1126963,33,1

**% Moisture:** 38.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/28/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,33,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.088 | | J | J | F |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,33,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | ~~0.710~~ | 0.127 | ~~N~~U | U | + |
| 7012375 | PCB-28 (2,4,4') | 1.000 | | | | |
| 35693993 | PCB-52 (2,2',5,5') | 2.100 | | | | |
| 4146[illegible]395 | PCB-44 (2,2',3,5') | 0.390 | | | | |
| 32598100 | PCB-66 (2,3',4,4') | 7.300 | | | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 15.000 | | | | |
| 32598133 | PCB-77 (3,3',4,4') | ~~13.000~~ | 0.230 | ~~N~~U | U | + |
| 31508006 | PCB-118 (2,3',4,4',5) | 6.600 | | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 56.000 | | E | R | D |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.130 | | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 47.000 | | E | R | D |
| 57465288 | PCB-126 (3,3',4,4',5) | ~~17.000~~ | 0.188 | ~~N~~U | U | + |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 55.000 | | E | R | D |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 2.800 | | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 13.000 | | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 7.000 | | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 1.800 | | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.820 | | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.050 | | J | J | |

KM
1/7/97

**LEVEL D**

OGDEN VALIDATED

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC230

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3059

**Sample wt/vol:** 0.0167 Kg **Lab File ID:** 3,1126963,33,1

**% Moisture:** 38.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/28/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) | ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,33,1 | | | | |
| 319846 | alpha-BHC | 0.120000 | | J | J | C |
| 3424826 | 2,4'-DDE | ~~1.800000~~ | 0.221 | ~~N~~ U | U | + |
| 959988 | Endosulfan I | 0.290000 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,33,1 | | | | |
| 118741 | Hexachlorobenzene | ~~0.017000~~ | .0908 | ~~J~~ U | U ~~J~~ | ~~F~~ + |
| 319857 | beta-BHC | 0.110000 | | U | U | |
| 58899 | gamma-BHC (Lindane) | ~~0.130000~~ | 0.112 | ~~N~~ U | U | + |
| 319868 | delta-BHC | 0.089000 | | U | U J | C |
| 76448 | Heptachlor | 0.270000 | | | | |
| 309002 | Aldrin | 0.400000 | | U | U | |
| 5103742 | gamma-Chlordane | 0.390000 | | U | U | |
| 5103719 | alpha-Chlordane | 0.220000 | | U | U | |
| 5103731 | cis-Nonachlor | 0.210000 | | U | * | |
| 39765805 | trans-Nonachlor | ~~0.210000~~ | 0.206 | ~~N~~ U | U | + |
| 1024573 | Heptachlor epoxide | 0.140000 | | U | U | |
| 60571 | Dieldrin | 0.140000 | | U | U | |
| 72559 | 4,4'-DDE | 11.000000 | | | | |
| 53190 | 2,4'-DDD | 6.700000 | | | | |
| 72208 | Endrin | ~~0.094000~~ | 0.081 | ~~N~~ U | U | + |
| 72548 | 4,4'-DDD | 2.100000 | | | | |
| 789026 | 2,4'-DDT | 1.900000 | | | | |
| 33216659 | Endosulfan II | 0.290000 | | U | U | |
| 1031078 | Endosulfan sulfate | 0.290000 | | U | U | |
| 50293 | 4,4'-DDT | 1.200000 | | | | |
| 7421934 | Endrin aldehyde | 0.200000 | | U | U | |
| 53494705 | Endrin ketone | 0.200000 | | U | U | |
| 72435 | Methoxychlor | 0.170000 | | U | U | |
| 2385855 | Mirex | 0.110000 | | J | U | |

KM 1/7/97

*Analysis Not Validated

OGDEN VALIDATED

LEVEL D

# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC230DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3059DL

**Sample wt/vol:** 0.0167 Kg **Lab File ID:** 3,1204963,10,1

**% Moisture:** 38.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 5.0000(mL) **Date Analyzed:** 12/04/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 5.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1204963,10,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.490 | UR | R | D |
| Compound from Column: | RTX-5 Lab File ID: 2,1204962,10,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.640 | UR | R | D |
| 7012375 | PCB-28 (2,4,4') | 0.350 | JR | | |
| 35693993 | PCB-52 (2,2',5,5') | 2.100 | R | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.260 | JR | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.860 | UR | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 18.000 | R | | |
| 32598133 | PCB-77 (3,3',4,4') | 1.100 | UR | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 7.500 | R | R | D |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 67.000 | D | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.630 | UR | R | D |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 51.000 | D | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.930 | UR | R | D |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 64.000 | D | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 2.600 | R | R | D |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 12.000 | R | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 6.200 | R | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 1.600 | R | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.810 | JR | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.042 | JR | R | D |

**LEVEL D**

OGDEN VALIDATED

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC230DL

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3059DL

**Sample wt/vol:** 0.0167 Kg **Lab File ID:** 3,1204963,10,1

**% Moisture:** 38.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 5.0000(mL) **Date Analyzed:** 12/04/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 5.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: DB-17 | Lab File ID: 3,1204963,10,1 | | | | |
| 319846 | alpha-BHC | 0.680000 | UR | R | D |
| 3424826 | 2,4'-DDE | 1.800000 | R | ↓ | ↓ |
| 959988 | Endosulfan I | 1.500000 | UR | | |
| Compound from Column: RTX-5 | Lab File ID: 2,1204962,10,1 | | | | |
| 118741 | Hexachlorobenzene | 0.450000 | UR | R | D |
| 319857 | beta-BHC | 0.550000 | UR | | |
| 58899 | gamma-BHC (Lindane) | 0.560000 | UR | | |
| 319868 | delta-BHC | 0.450000 | UR | | |
| 76448 | Heptachlor | 0.370000 | UR | | |
| 309002 | Aldrin | 2.000000 | UR | | |
| 5103742 | gamma-Chlordane | 2.000000 | UR | | |
| 5103719 | alpha-Chlordane | 1.100000 | UR | | |
| 5103731 | cis-Nonachlor | 1.200000 | R | * | |
| 39765805 | trans-Nonachlor | 1.000000 | UR | R | D |
| 1024573 | Heptachlor epoxide | 0.680000 | UR | | |
| 60571 | Dieldrin | 0.720000 | UR | | |
| 72559 | 4,4'-DDE | 7.900000 | R | | |
| 53190 | 2,4'-DDD | 7.400000 | R | | |
| 72208 | Endrin | 0.400000 | UR | | |
| 72548 | 4,4'-DDD | 2.100000 | JR | | |
| 789026 | 2,4'-DDT | 2.200000 | R | | |
| 33216659 | Endosulfan II | 1.500000 | UR | | |
| 1031078 | Endosulfan sulfate | 1.500000 | UR | | |
| 50293 | 4,4'-DDT | 0.960000 | JR | | |
| 7421934 | Endrin aldehyde | 1.000000 | UR | | |
| 53494705 | Endrin ketone | 1.000000 | UR | | |
| 72435 | Methoxychlor | 0.850000 | UR | | |
| 2385855 | Mirex | 0.180000 | JR | | |

*Analysis Not Validated

**LEVEL D**

OGDEN VALIDATED

# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC235

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3060

**Sample wt/vol:** 0.0144 Kg **Lab File ID:** 3,1126963,34,1

**% Moisture:** 45.60 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/28/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,34,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.110 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,34,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.980 | | | J | F |
| 7012375 | PCB-28 (2,4,4') | 0.140 | | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | 0.260 | | U | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.120 | | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.200 | | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.610 | | U | | |
| 32598133 | PCB-77 (3,3',4,4') | ~~0.170~~ | 0.264 | ~~NJ~~ U | U | + |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.710 | | U | U | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | ~~0.480~~ | 1.125 | ~~J~~ U | U ~~J~~ | + |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.150 | | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | ~~0.340~~ | 1.400 | ~~J~~ U | U ~~J~~ | + |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.220 | | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.460 | | J | J | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.350 | | U | U | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 2.500 | | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | ~~0.008~~ | 0.172 | ~~J~~ U | U ~~J~~ | + |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.250 | | U | U | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.200 | | U | U | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.110 | | U | U | |

KW 1/7/97

**LEVEL D**

OGDEN VALIDATED

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC235

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT05

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3060

**Sample wt/vol:** 0.0144 Kg **Lab File ID:** 3,1126963,34,1

**% Moisture:** 45.60 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 10/31/96

**Concentrated Extract Volume:** 1.0000(mL) **Date Analyzed:** 11/28/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) | ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1126963,34,1 | | | | |
| 319846 | alpha-BHC | ~~0.110000~~ | 0.158 | ~~N~~JU | UJ | +,C |
| 3424826 | 2,4'-DDE | 0.260000 | | U | U | |
| 959988 | Endosulfan I | 0.340000 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1126962,34,1 | | | | |
| 118741 | Hexachlorobenzene | 0.100000 | | U | U | |
| 319857 | beta-BHC | 0.130000 | | U | U | |
| 58899 | gamma-BHC (Lindane) | 0.130000 | | U | U | |
| 319868 | delta-BHC | 0.100000 | | U | UJ | C |
| 76448 | Heptachlor | 0.086000 | | U | U | |
| 309002 | Aldrin | 0.460000 | | U | U | |
| 5103742 | gamma-Chlordane | 0.450000 | | U | U | |
| 5103719 | alpha-Chlordane | 0.260000 | | U | U | |
| 5103731 | cis-Nonachlor | 0.240000 | | U | * | |
| 39765805 | trans-Nonachlor | 0.240000 | | U | U | |
| 1024573 | Heptachlor epoxide | 0.160000 | | U | U | |
| 60571 | Dieldrin | 0.170000 | | U | U | |
| 72559 | 4,4'-DDE | ~~0.190000~~ | 1.089 | ~~J~~U | U~~J~~ | + |
| 53190 | 2,4'-DDD | 0.330000 | | | | |
| 72208 | Endrin | 0.660000 | | | | |
| 72548 | 4,4'-DDD | 0.690000 | | U | U | |
| 789026 | 2,4'-DDT | 0.160000 | | U | U | |
| 33216659 | Endosulfan II | ~~0.370000~~ | 0.337 | ~~N~~U | U | + |
| 1031078 | Endosulfan sulfate | 0.340000 | | U | U | |
| 50293 | 4,4'-DDT | 0.250000 | | U | | |
| 7421934 | Endrin aldehyde | 0.230000 | | U | | |
| 53494705 | Endrin ketone | 0.230000 | | U | | |
| 72435 | Methoxychlor | 0.200000 | | U | U | |
| 2385855 | Mirex | 0.540000 | | | | |

KM
1/7/97

*Analysis Not Validated

**LEVEL D**

OGDEN VALIDATED

OGDEN

# DATA VALIDATION REPORT

CLEAN CONTRACT TASK ORDER #136
NAF Midway Site Investigations

ANALYSIS: PESTICIDES/PCB CONGENERS
SAMPLE DELIVERY GROUP: OMIIT06

Prepared by

Ogden—Denver Operations
550 South Wadsworth Boulevard, Suite 500
Lakewood, Colorado 80226

# CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

Ogden Environmental and Energy Services Co., Inc.
550 South Wadsworth Boulevard
Suite 500
Lakewood, CO 80226

Package ID: C136PP66
Task Order: 11019013 6
SDG No.: OMIIT06
No. of Analyses: 16

Laboratory: A.D. LITTLE
Reviewer: M. Pokorny
Analysis/Method: Pesticides/PCB Congeners

Date: 1.16.97
Reviewer's Signature: [signature]

| ACTION ITEMS[a] | |
|---|---|
| 1. **Case Narrative Deficiencies** | |
| 2. **Out of Scope Analyses** | |
| 3. **Analyses Not Conducted** | |
| 4. **Missing Hardcopy Deliverables** | |
| 5. **Incorrect Hardcopy Deliverables** | MV031 DETECTS NOT CALCULATED CORRECTLY. |
| 6. **Deviations from Analysis Protocol, e.g.,** | QUALIFICATIONS GIVEN FOR CALIBRATION DEFICIENCIES, BLANK CONTAMINATION, SURROGATES, MS/MSD DEFICIENCIES, AND UNCONFIRMED DETECTS. |
| Holding Times | |
| GC/MS Tune/Inst. Perform | |
| Calibrations | |
| Blanks | |
| Surrogates | |
| Matrix Spike/Dup LCS | |
| Field QC | |
| Internal Standard Performance | |
| Compound Identification and Quantitation | |
| System Performance | |

| COMMENTS[b] | |
|---|---|
| | |

[a] Subcontracted analytical laboratory is not meeting contract and/or method requirements.
[b] Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.

# 1. INTRODUCTION

| | |
|---|---|
| Task Order Title: | NAF Midway Site Investigations |
| CLEAN Contract Task Order #: | 0136 |
| SDG#: | OMIIT06 |
| CTO Manager: | J. Cotter |
| Project Contact: | M. Medeiros |
| Matrix: | Tissue |
| Analysis: | Pesticides/PCB Congeners |
| NEESA QC Level: | D |
| No. of Samples: | 16 |
| No. of Reanalyses/Dilutions: | 5 |
| Reviewer: | M. Pokorny |
| Date of Review: | January 15, 1997 |

The samples listed in Table 1 were validated based on the NOAA National Status and Trends Analytical Protocols, data validation procedure for Levels C and D pesticides/PCBs (DVP-4, Rev. 2) and the *National Functional Guidelines For Organic Data Review* (2/94). These protocols vary from the CLP Protocols upon which the Navy CLEAN data validation procedures were based. Instances where quality control parameters vary from the CLP Data Validation procedures are documented in the text of this report and should be noted with respect to the overall data quality objectives of this project. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in estimated value were not denoted by a qualification code since the data had already been rejected.

## Table 1. Sample identification

| Client ID | EPA ID | Laboratory ID | Matrix | COC Method |
|---|---|---|---|---|
| M00MT04S07 | MA721 | 96B3050 | tissue | STIV141C/E |
| M00MT04D07 | MA722 | 96B3051 | tissue | STIV141C/E |
| M00MT01S08 | MA723 | 96B3016 | tissue | STIV141C/E |
| M00MT01S08 | MA723RE | 96B3016RE | tissue | STIV141C/E |
| M01MT09S07 | MC198 | 96B2966 | tissue | STIV141C/E |
| M01MT09S07 | MC198RE | 96B2966REF | tissue | STIV141C/E |
| M01MT05S08 | MC209 | 96B3036 | tissue | STIV141C/E |
| M01MT05S08 | MC209RE | 96B3036REF | tissue | STIV141C/E |
| M01MT08S07 | MC229 | 96B2977 | tissue | STIV141C/E |
| M01MT10S07 | MC237 | 96B2980 | tissue | STIV141C/E |
| M01MT10S07 | MC237RE | 96B2980REF | tissue | STIV141C/E |
| M99MT03S01 | MV016 | 96B2997 | tissue | STIV141C/E |
| M99MT03D01 | MV017 | 96B2998 | tissue | STIV141C/E |
| M99MT04S01 | MV021 | 96B3001 | tissue | STIV141C/E |
| M99MT08S01 | MV026 | 96B3003 | tissue | STIV141C/E |
| M99MT01S01 | MV030 | 96B3005 | tissue | STIV141C/E |
| M99MT06S01 | MV031 | 96B3006 | tissue | STIV141C/E |
| M99MT07S01 | MV034 | 96B3007 | tissue | STIV141C/E |
| M99MT05S01 | MV037 | 96B3008 | tissue | STIV141C/E |
| M999T02S01 | MV040 | 96B3009 | tissue | STIV141C/E |
| M999T02S01 | MV040RE | 96B3009REF | tissue | STIV141C/E |

# 2. DATA VALIDATION FINDINGS

## 2.1 SAMPLE MANAGEMENT

The following are findings associated with sample management:

### 2.1.1 Sample Preservation, Handling, and Transport

No preservations were required for pesticide/PCB analysis. Samples in this SDG were received by the laboratory below temperature limits established in NEESA 20.2-047B; however, Status and Trends protocols require tissue samples to be frozen and therefore, no qualifications were assigned. No sample containers were noted to be broken upon arrival at the laboratory. No qualifications were required.

### 2.1.2 Chain of Custody

All COCs were legible and complete. All COCs were signed by laboratory and field personnel. Other questions regarding sample conditions were answered on the COCs. No qualifications were required based on sample receipt information.

### 2.1.3 Holding Times

All samples in this SDG were extracted and analyzed within the prescribed six month holding time for tissues; therefore, no qualifications were required.

## 2.2 PESTICIDES INSTRUMENT PERFORMANCE

No percent resolution or endrin/4,4'-DDT degradation analyses were performed by the laboratory, as required by the CLP SOW (3/90). These analyses have not been established in the Status and Trends protocols; therefore, no evaluation was given to the data based on percent resolution or breakdown degradation. PCBs 103 and 198 were used as the surrogates for this SDG, while tetrachloro-m-xylene served as the internal standard. All target analytes were quantified versus the internal standard recovery. No surrogate or internal standard retention time window was specified in the Status and Trends protocols. The laboratory established a window of $\pm$0.075 or 0.15 minutes. Based on professional judgement, the reviewer considered this an acceptable range. The surrogate and internal standard compounds were within the absolute retention time windows established with initial calibration standards. The retention time for all target compounds was established by the laboratory at $\pm$0.075 minutes, although some windows were reduced or expanded for proper peak identification. In these instances, the reviewer deemed the retention time windows to be acceptable. All continuing calibration standards had retention times within the retention time windows established with the initial calibration standards. No qualifications of the data were required.

## 2.3 CALIBRATION

### 2.3.1 Analytical Sequence

The laboratory modified the analytical sequence from the Status and Trends protocols. The laboratory analyzed an initial five-point calibration with subsequent mid-level calibration standards analyzed for every ten field samples, and at the end of each sequence. Status and Trends protocols suggested a four-point calibration be interspersed with samples and no more than six samples be analyzed in between calibration standards. The laboratory modifications were considered acceptable by the reviewer; therefore, no qualifications were required.

### 2.3.2 Initial Calibration

The NOAA Status and Trends used a correlation coefficient (r) to determine the linearity of initial calibrations. The laboratory deviated from the protocols by measuring the %RSDs from relative response factors for each initial calibration. The laboratory established the %RSD must be less than or equal to 25% for 90% of all compounds and less than or equal to 35% for all compounds. The reviewer used a QC criterion of 25% for all compounds for the %RSDs.

Delta-BHC, PCB-126, methoxychlor, and alpha-BHC exceeded the QC limits on one or both columns for the initial calibration performed on 12/04/96. Samples MA721, MA722, MC229, MV016, MV017, MV021, MV026, MV030, MV031, MV034, and MV037 had detects for delta-BHC, PCB-126, methoxychlor, and alpha-BHC qualified "J" and nondetects "UJ." Delta-BHC, PCB-101, 4,4´-DDT, and alpha-BHC exceeded the QC limits on one or both columns for the initial calibration performed on 12/20/96. Samples MC198RE, MC209RE, MC237RE, and MV040RE had the detects for delta-BHC, PCB-101, 4,4´-DDT, and alpha-BHC qualified "J" and nondetects "UJ." No other qualifications were required.

### 2.3.3 Continuing Calibration

No QC limits have been established for continuing calibration standards by the Status and Trends protocols. The laboratory established a %D less than or equal to 25% for 90% of the target compounds and less than or equal to 35% for all compounds. For validation purposes, the reviewer used a QC criterion of 25% for the %Ds. The continuing calibration dated 12/20/96 1835 had a %D for 4,4´-DDT out of control limits; samples MC198RE, MC209RE, MC237RE, and MV040RE had 4,4´-DDT detects qualified "J" and nondetects "UJ." All other continuing calibration standard %Ds reported from the RTX-5 column and DB-17 column were within the QC limits. No other qualifications were required.

## 2.4 BLANKS

### 2.4.1 Instrument Blanks

No instrument blanks were analyzed for this SDG. NOAA Status and Trends protocols do not suggest the analysis of instrument blanks; therefore, no evaluation of the data was given based on instrument blanks.

### 2.4.2 Method Blanks

NOAA Status and Trends protocols suggested method blanks were acceptable if no target compound detects were found 3X above the MDLs. The laboratory further qualified the QC limits for blanks, stating that no more than 2 target analytes could exceed 3X the MDLs. Because the reporting limits and the MDLs were the same for this SDG (see Section 2.11), the reviewer chose a more conservative QC criteria. The CLP SOW (3/90) criteria for method blanks was used to evaluate the data. Validation procedures were based on the Ogden DVP-4, Revision 2, which states no target compounds above the reporting limits. No detects were reported in the method blanks. No qualifications were required.

## 2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

The laboratory analyzed two SRMs in lieu of blank spike/blank spike duplicates. The QC criteria established to evaluate the matrix spike/ matrix spike duplicate was used by the laboratory for the LCS. Because the Status and Trends protocols did not address LCSs and the established limits were stricter than those in the CLP SOW (3/90), the reviewer deemed the limits acceptable. All target analytes met the QC criteria; therefore, no qualifications were required.

## 2.6 SURROGATE RECOVERY

The laboratory established surrogate recovery QC limits that were stricter than those applied in the Status and Trends protocols. Surrogate recoveries were calculated and reported for the RTX-5 column only; therefore, surrogate recovery evaluation was limited to the data from the RTX-5 column. In addition to surrogates PCB-103 and PCB-198, the laboratory identified an additional surrogate, 4,4'-dibromo-octafluoro-biphenyl (DBOFB). Percent recoveries for DBOFB were reported in the raw data, but not on the summary forms. No historical data or QC limits were provided for DBOFB; therefore, recoveries for DBOFB were not evaluated by the reviewer. The QC limits for tissues were changed from 50 to 125 percent to 45 to 125 percent for the second round of sampling. Surrogate recoveries were below control limits, but above 10%, for at least one surrogate for samples MA723, MC209, MC237, and MV040. Samples MC209, MC237, and MV040 were refractionated and reanalyzed as MC209RE, MC237RE, and MV040RE and MA723 was reextracted and reanalyzed as MA723RE. All surrogate results were acceptable in the reanalyses; therefore, the initial analyses were rejected, "R", in favor of the reanalyses. No other qualifications were required for surrogate recoveries.

## 2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

The MS/MSD analyses were performed twice on sample MC198. Matrix spike recoveries were recalculated from the raw data. No transcription or calculation errors were noted. All pesticide compounds were within established QC limits of 50 to 125 percent for the first analyses of MC198 MS/MSD; however, five PCB compounds were recovered below QC limits. Samples MC198, MC198MS, and MC198MSD were refractionated and reanalyzed with acceptable results. The original analysis of MC198 was rejected, "R", and the reanalysis, MC198RE, was retained. The reviewer noted that the QC limits for MS/MSD results were stricter than those in the Status and Trends protocols. No other qualifications were required.

## 2.8 SAMPLE CLEANUP PERFORMANCE

GPC cleanup was performed for all samples in this SDG. No QC criteria has been established for cleanup procedures by NOAA Status and Trends. Samples were evaluated based on surrogate recoveries, matrix spike recoveries, and SRM recoveries. The GPC cleanups were deemed acceptable and no qualifications were required.

## 2.9 FIELD QC SAMPLES

Field QC samples are evaluated, and if necessary, qualified based only on method blanks. Any remaining detects are used to evaluate the associated samples. The following are findings associated with field QC samples:

### 2.9.1 Field Blanks and Equipment Rinsates

The CTO 136 Analytical Summary Table identify samples MV011, MV012, and MV013 (from SDG OMISW01) as the equipment rinsates and sample MV010 (from SDG OMISW01) as the field blank. Sample MV010 had detects for PCB-8, PCB-18, hexachlorobenzene, and gamma-BHC. PCB-8 was detected and qualified "J" in the following samples: MV016, MV017, and MV031. PCB-18 was detected and qualified "J" in the following samples: MA723RE, MV017, MV021, MV031, MV034, and MV037. Hexachlorobenzene was detected and qualified "J" in the following sample: MV034. Gamma-BHC was detected and qualified "J" in the following samples: MV016, MV017, MV021, MV031, and MV037. Samples MV011, MV012, and MV013 had detects that were not found in the associated samples or had already been qualified for field blank contamination. No other qualifications were required.

### 2.9.2 Field Duplicates

Samples MA721/MA722 and MV016/MV017 were the field duplicate pairs associated with this SDG. Samples MA721/MA722 had common detects for mirex, PCB-138, and PCB-180 with RPDs greater than 100%; PCB-18 was detected in both samples and had an RPD of 80%. Hexachlorobenzene, beta-BHC, gamma-BHC, PCB-153, PCB-105, and PCB-170 were detected in sample MA722 but not in sample MA721. Samples MV016/MV017 had numerous common target compound detects all with RPDs of less than 100%, with the exception of mirex, which had an RPD of 102%. Sample MV017 had detects for PCB-18, PCB-28 and alpha-BHC which were not detected in sample MV016. Sample MV016 had a detect for 4,4´-DDD, sample MV017 had a nondetect for 4,4´-DDD. No qualifications are assigned to the data based on field duplicate results.

## 2.10 COMPOUND IDENTIFICATION

Compound identification was performed by the reviewer. Possible false negative detects were eliminated upon examination of the chromatograms and quantitation sheets by the reviewer. All detected analytes were confirmed by second column confirmation. Some samples exhibited elevated baselines occurring after 65 minutes into the run. Based on the surrogate recovery for PCB 198 and a comparison of raw data to chromatograms from low level standards, the reviewer determined that target analyte peaks, if present, could be identified.

The laboratory quantitated several compounds without second column confirmation. These compounds were qualified by the laboratory as "NJ" or "N." In addition, several compounds were reported below the reporting limit and at levels less than ½ the MDL. These compounds were qualified by the laboratory as "J." Using ½ the MDL as a basis for professional judgement, the reviewer identified all compounds quantified from a single column and several "J" compounds reported by the laboratory as false positives. The reporting concentrations were changed to the reporting limits and the qualifiers changed to nondetects, "U."

Cis-nonachlor was reported on the Form Is for all samples; however, cis-nonachlor was not identified as a target compound. As a result, the cis-nonachlor was not validated. No qualifications were required.

## 2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantification was verified in the samples in this SDG. No %Ds between the two columns were calculated or reported for target analyte detects. The RTX-5 column served as the primary column for all target compounds, with the exception of PCB 8, alpha-BHC, endosulfan I, 2,4'-DDE and in some cases, PCB-138 and PCB-52, which were quantified from the DB-17 column. The confirmation column was used for confirmation of analytes and no quantification occurred from the column. Review of the raw data confirmed that target analytes were present on both columns and quantification was performed on the correct primary column; therefore no evaluation was given to the inter-column %D information. Several compound were detected but at a level less than the reporting limits and above the MDL. Raw data was reviewed to eliminate the potential for false positives. These compounds were qualified as estimated "J."

Sample MV031 was found to have all detects incorrectly calculated by the laboratory; all results were recalculated and corrected on the sample MV031 Form I.

Because no CRQL limits have been established for these methods, CRQLs were determined by an MDL study performed by the laboratory. Copies of the MDL study were included with the raw data. Verification of the raw data confirmed the correct CRQLs were applied. No qualifications were required.

# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MA721

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3050

**Sample wt/vol:** 0.0018 Kg **Lab File ID:** 3,1204963,33,1

**% Moisture:** 92.43 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/06/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Raw Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1204963,33,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.450 | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | ~~0.890~~ 5.55 | J | U J | + |
| Compound from Column: | RTX-5 Lab File ID: 2,1204962,33,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.860 | U | U | |
| 7012375 | PCB-28 (2,4,4') | 0.560 | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | ~~1.600~~ 1.06 | ~~N~~ U | U | + |
| 41464395 | PCB-44 (2,2',3,5') | 0.470 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.790 | U | ↓ | |
| 37680732 | PCB-101 (2,2',3,5,5') | 2.400 | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 1.000 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 2.800 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | ~~0.150~~ 4.44 | ~~NJ~~ | U | + |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.580 | U | U | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.850 | U | U J | C |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 2.000 | U | U | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 1.400 | U | U | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | ~~0.210~~ 1.11 | J | U J | + |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.670 | U | U | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.970 | U | ↓ | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.800 | U | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.450 | U | | |

nwp
1-14-97

~~*Analysis Not Validated~~

**OGDEN VALIDATED**

**LEVEL D**

# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MA722

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3051

**Sample wt/vol:** 0.0021 Kg **Lab File ID:** 3,1204963,34,1

**% Moisture:** 91.29 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/06/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | Rev Qual | Qual code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1204963,34,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.390 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1204962,34,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 2.000 | | U | U | |
| 7012375 | PCB-28 (2,4,4') | 0.490 | | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | ~~0.660~~ | 0.90 | ~~NJ~~ | U | + |
| 41464395 | PCB-44 (2,2',3,5') | 0.410 | | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.690 | | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 2.100 | | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.910 | | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 2.400 | | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | ~~0.890~~ | 3.81 | J | U | + |
| 32598144 | PCB-105 (2,3,3',4,4') | 1.300 | | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 3.300 | | J | J | + |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.740 | | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 1.700 | | U | U | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 1.200 | | U | U | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.910 | | J | J | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | ~~0.028~~ | 0.57 | J | U | + |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | ~~0.200~~ | 0.86 | ~~NJ~~ | U | + |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | ~~0.380~~ | 0.71 | ~~NJ~~ | U | + |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | ~~0.120~~ | 0.39 | ~~NJ~~ | U | + |

MP 1.14.97

~~*Analysis Not Validated~~

OGDEN VALIDATED

LEVEL D

1D
# PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MA723

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3016

**Sample wt/vol:** 0.0034 Kg **Lab File ID:** 3,1204963,29,1

**% Moisture:** 80.80 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1204963,29,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.240 | U | R | S D |
| Compound from Column: | RTX-5 Lab File ID: 2,1204962,29,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.310 | U | R | S D |
| 7012375 | PCB-28 (2,4,4') | 0.300 | U | | |
| 35693993 | PCB-52 (2,2',5,5') | 0.540 | U | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.250 | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.420 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 1.300 | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.560 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 1.500 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 2.300 | U | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.160 | NJ | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 0.370 | J | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.460 | U | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 1.100 | U | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.730 | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.120 | J | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.360 | U | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.120 | NJ | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.046 | NJ | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.240 | U | | |

MP 1·17·97

**OGDEN VALIDATED**

**LEVEL D**

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA723RE

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019
**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06
**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3016RE
**Sample wt/vol:** 0.0049 Kg **Lab File ID:** 3,0107973,9,1
**% Moisture:** 80.80 **decanted: (Y/N)** **Date Received:** 09/30/96
**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 01/02/97
**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 01/05/97
**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000
**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000
**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0107973,9,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.170 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,0107972,9,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.150 | J | J | F |
| 7012375 | PCB-28 (2,4,4') | 0.210 | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | 0.380 | U | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.180 | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.290 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.900 | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.390 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 1.000 | U | U | + |
| 35065271 | PCB-153 (2,2',4,4',5,5') | ~~0.290~~ 1.63 | J | | |
| 3144 | PCB-105 (2,3,3',4,4') | 0.220 | U | U | |
| 5282 | PCB-138 (2,2',3,4,4',5') | ~~0.410~~ 2.04 | J | U | + |
| 5,+65288 | PCB-126 (3,3',4,4',5) | 0.320 | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 0.740 | U | U | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.510 | U | U | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.240 | J | J | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.250 | U | U | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.360 | U | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.300 | U | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.170 | U | | |

mp 1.17.97

**OGDEN VALIDATED**

**LEVEL D**

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC198

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2966

**Sample wt/vol:** 0.0027 Kg **Lab File ID:** 3,1204963,13,1

**% Moisture:** 89.00 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/04/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1204963,13,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.310 | U | R | ~~Q~~ D |
| Compound from Column: | RTX-5 Lab File ID: 2,1204962,13,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.480 | | R | ~~Q~~ D |
| 7012375 | PCB-28 (2,4,4') | 0.390 | | | |
| 35693993 | PCB-52 (2,2',5,5') | 0.680 | J | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.220 | NJ | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.290 | J | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 2.400 | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.720 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 2.500 | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 14.000 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 1.300 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 10.000 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.590 | U | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 11.000 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.930 | J | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 9.800 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 2.100 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 2.000 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.690 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.230 | NJ | | |

MP 1·17·97

**OGDEN VALIDATED**

**LEVEL D**

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC198RE

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT0~~X~~ 6

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2966REF

**Sample wt/vol:** 0.0027 Kg **Lab File ID:** 3,1219963,9,1

**% Moisture:** 89.00 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/20/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 4.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1219963,9,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.620 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1219962,9,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.800 | | U | U | |
| 7012375 | PCB-28 (2,4,4') | 0.770 | | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | ~~0.480~~ | 1.41 | ~~NJ~~ | U | + |
| 41464395 | PCB-44 (2,2',3,5') | 0.650 | | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 1.100 | | U | U | |
| 37680732 | PCB-101 (2,2',3,5,5') | 2.600 | | J | J | C |
| 32598133 | PCB-77 (3,3',4,4') | 1.400 | | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 2.500 | | J | J | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 17.000 | | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 1.200 | | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 16.000 | | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 1.200 | | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 13.000 | | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 1.100 | | J | J | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 9.500 | | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 2.300 | | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 1.900 | | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.750 | | J | J | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | ~~0.260~~ | 0.61 | ~~NJ~~ | U | + |

MP 1.15.97

OGDEN VALIDATED

LEVEL D

1D
PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC209

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3036

**Sample wt/vol:** 0.0030 Kg **Lab File ID:** 3,1204963,30,1

**% Moisture:** 80.80 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1204963,30,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.270 | U | R | ~~X~~ D |
| Compound from Column: | RTX-5 | Lab File ID: 2,1204962,30,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.220 | J | R | ~~X~~ D |
| 7012375 | PCB-28 (2,4,4') | 0.340 | U | | |
| 35693993 | PCB-52 (2,2',5,5') | 0.100 | NJ | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.280 | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.480 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 1.300 | J | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.630 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 2.500 | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 25.000 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 1.600 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 13.000 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.520 | U | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 17.000 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.760 | J | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 31.000 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 12.000 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 3.400 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 1.500 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.085 | J | | |

MP 1.17.97

**OGDEN VALIDATED**

**LEVEL D**

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC209RE

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019
**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT0~~X~~ 6
**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3036REF
**Sample wt/vol:** 0.0030 Kg **Lab File ID:** 3,1219963,15,1
**% Moisture:** 80.80 **decanted: (Y/N)** **Date Received:** 09/30/96
**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96
**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/20/96
**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000
**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 4.0000
**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1219963,15,1 | | | | |
| 319846 | alpha-BHC | 0.750000 | U | U | |
| 3424826 | 2,4'-DDE | 1.200000 | U | U J | C |
| 959988 | Endosulfan I | 1.600000 | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,1219962,15,1 | | | | |
| 118741 | Hexachlorobenzene | ~~0.130000~~ 0.50 | J | U ~~J~~ | ~~F~~ + |
| 319857 | beta-BHC | 0.610000 | U | U | |
| 58899 | gamma-BHC (Lindane) | 0.620000 | U | U | |
| 319868 | delta-BHC | 0.490000 | U | U J | C |
| 76448 | Heptachlor | 0.410000 | U | U | |
| 309002 | Aldrin | 2.200000 | U | | |
| 5103742 | gamma-Chlordane | 2.200000 | U | | |
| 5103719 | alpha-Chlordane | 1.200000 | U | | |
| 5103731 | cis-Nonachlor | 1.100000 | U | * | |
| 39765805 | trans-Nonachlor | 1.100000 | U | U | |
| 1024573 | Heptachlor epoxide | 0.750000 | U | | |
| 60571 | Dieldrin | 0.800000 | U | | |
| 72559 | 4,4'-DDE | 5.300000 | U | | |
| 53190 | 2,4'-DDD | 1.300000 | U | | |
| 72208 | Endrin | 0.450000 | U | | |
| 72548 | 4,4'-DDD | 3.300000 | U | | |
| 789026 | 2,4'-DDT | 0.780000 | U | UJ | C |
| 33216659 | Endosulfan II | 1.600000 | U | U | |
| 1031078 | Endosulfan sulfate | 1.600000 | U | | |
| 50293 | 4,4'-DDT | 1.200000 | U | J | C |
| 7421934 | Endrin aldehyde | 1.100000 | U | | |
| 53494705 | Endrin ketone | 1.100000 | U | | |
| 72435 | Methoxychlor | 0.940000 | U | | |
| 2385855 | Mirex | 0.760000 | U | | |

MP 1.17.97

*Analysis Not Validated

OGDEN VALIDATED

LEVEL D

# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC229

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2977

**Sample wt/vol:** 0.0023 Kg **Lab File ID:** 3,1204963,16,1

**% Moisture:** 90.74 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1204963,16,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.360 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1204962,16,1 | | | |
| 37680652 | PCB-18 (2,2',5) | ~~1.100~~ 0.48 | ~~N~~ | U | + |
| 7012375 | PCB-28 (2,4,4') | 0.450 | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | ~~0.890~~ 0.83 | ~~N~~ | U | + |
| 41464395 | PCB-44 (2,2',3,5') | 0.380 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.640 | U | U | |
| 37680732 | PCB-101 (2,2',3,5,5') | 1.700 | J | J | |
| 32598133 | PCB-77 (3,3',4,4') | 0.840 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 2.300 | U | U | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 16.000 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 1.600 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 11.000 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.690 | U | UJ | C |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 22.000 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.880 | J | J | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 46.000 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.830 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 2.100 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.770 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | ~~0.520~~ 0.36 | ~~N~~ | U | + |

mp 1.14.97

~~*Analysis Not Validated~~

OGDEN VALIDATED

LEVEL D

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC237

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019
**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06
**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2980
**Sample wt/vol:** 0.0030 Kg **Lab File ID:** 3,1204963,17,1
**% Moisture:** 88.10 **decanted: (Y/N)** **Date Received:** 09/30/96
**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96
**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/05/96
**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000
**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000
**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1204963,17,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.140 | J | R | S D |
| Compound from Column: | RTX-5 | Lab File ID: 2,1204962,17,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.360 | U | R | S D |
| 7012375 | PCB-28 (2,4,4') | 0.350 | U | | |
| 35693993 | PCB-52 (2,2',5,5') | 0.350 | NJ | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.290 | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.490 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.220 | NJ | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.650 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 1.700 | U | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 1.600 | J | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.690 | N | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 1.200 | J | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.530 | U | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 2.000 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.850 | U | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 6.200 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.057 | J | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 1.200 | N | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.310 | NJ | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.280 | U | | |

MP 1.17.97

**OGDEN VALIDATED**

**LEVEL D**

1D
PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC237RE

Lab Name: Arthur D. Little, Inc. Contract: N62742-90-D-0019

Lab Code: ADLMA Case No.: CTO136 ADL Project No.: 69084 SDG No.: OMIIT0~~X~~ 6

Matrix: (soil/water/tissue) TISSUE Lab Sample ID: 96B2980REF

Sample wt/vol: 0.0030 Kg Lab File ID: 3,1219963,12,1

% Moisture: 88.10 decanted: (Y/N) Date Received: 09/30/96

Extraction: (SepF/Cont/Sonc) Date Extracted: 11/01/96

Concentrated Extract Volume: 0.5000(mL) Date Analyzed: 12/20/96

Injection Volume: 2 (uL) Dilution Factor: 1.0000

GPC Cleanup: (Y/N) Y pH: Split Factor: 4.0000

Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/Kg

| Cas No: | Compound | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1219963,12,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.560 | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | ~~1.590~~ 1.67 3.33 | J | UJ | + |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.740 | J | J | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1219962,12,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.720 | U | U | |
| 7012375 | PCB-28 (2,4,4') | 0.690 | U | | |
| 35693993 | PCB-52 (2,2',5,5') | 1.300 | U | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.580 | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.980 | U | UJ | C |
| 37680732 | PCB-101 (2,2',3,5,5') | 3.000 | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 1.300 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 3.500 | U | U | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | ~~1.900~~ 2.67 | J | UJ | + |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.720 | U | U | |
| 57465288 | PCB-126 (3,3',4,4',5) | 1.100 | U | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 2.400 | J | UJ | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 1.700 | U | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.840 | U | U | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | ~~1.300~~ 1.20 | J | U | + |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.590 | J | UJ | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.550 | U | U | |

mP 1.15.97

OGDEN VALIDATED

LEVEL D

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV016

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019
**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06
**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2997
**Sample wt/vol:** 0.0131 Kg **Lab File ID:** 3,1204963,18,1
**% Moisture:** 47.10 **decanted: (Y/N)** **Date Received:** 09/30/96
**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96
**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/05/96
**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000
**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000
**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Ther Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1204963,18,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.260 | | J | F |
| Compound from Column: | RTX-5 | Lab File ID: 2,1204962,18,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.082 | U | U | |
| 7012375 | PCB-28 (2,4,4') | 0.079 | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | 0.330 | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.066 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.110 | U | U | |
| 37680732 | PCB-101 (2,2',3,5,5') | 1.200 | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.150 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 1.100 | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 6.000 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.600 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 4.700 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.120 | U | UJ | C |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 4.200 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.420 | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.930 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.210 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.096 | J | J | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.059 | J | J | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.380 | | | |

~~*Analysis Not Validated~~

**OGDEN VALIDATED**

**LEVEL D**

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV017

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2998

**Sample wt/vol:** 0.0113 Kg **Lab File ID:** 3,1204963,21,1

**% Moisture:** 54.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1204963,21,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.150 | | J | F |
| Compound from Column: | RTX-5 Lab File ID: 2,1204962,21,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.260 | | J | F |
| 7012375 | PCB-28 (2,4,4') | 0.140 | | | |
| 35693993 | PCB-52 (2,2',5,5') | 0.180 | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.076 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.130 | U | U | |
| 37680732 | PCB-101 (2,2',3,5,5') | 1.100 | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.170 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 1.100 | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 5.900 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.520 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 4.400 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.140 | U | UJ | C |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 3.900 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.360 | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 2.600 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.280 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.150 | J | J | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.120 | J | J | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.590 | | | |

~~*Analysis Not Validated~~

**OGDEN VALIDATED**

**LEVEL D**

1D
PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MV021

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3001

**Sample wt/vol:** 0.0121 Kg **Lab File ID:** 3,1204963,22,1

**% Moisture:** 50.70 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1204963,22,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.068 ~~0.150~~ 0.082 | ~~N~~ | U | + |
| Compound from Column: | RTX-5 | Lab File ID: 2,1204962,22,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.260 | | | F |
| 7012375 | PCB-28 (2,4,4') | 0.083 ~~0.240~~ ~~0.160~~ | ~~N~~ | U | + |
| 35693993 | PCB-52 (2,2',5,5') | 0.270 | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.071 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.120 | U | U | |
| 37680732 | PCB-101 (2,2',3,5,5') | 1.200 | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.160 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 1.100 | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 5.200 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.087 | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 4.100 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.130 | U | UJ | C |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 3.000 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.380 | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.930 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.280 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.078 | J | J | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.066 | J | J | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.290 | | | |

MVP 1.14.97

~~*Analysis Not Validated~~

OGDEN VALIDATED

LEVEL D

# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MV026

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3003

**Sample wt/vol:** 0.0130 Kg **Lab File ID:** 3,1204963,23,1

**% Moisture:** 46.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1204963,23,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.063 | ~~0.120~~ ~~0.027~~ | ~~U~~ | U | + |
| Compound from Column: | RTX-5 | Lab File ID: 2,1204962,23,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.084 | ~~0.270~~ ~~0.110~~ | ~~U~~ | U | + |
| 7012375 | PCB-28 (2,4,4') | | 0.065 | J | J | |
| 35693993 | PCB-52 (2,2',5,5') | | 0.170 | | | |
| 41464395 | PCB-44 (2,2',3,5') | | 0.066 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | | 0.110 | U | U | |
| 37680732 | PCB-101 (2,2',3,5,5') | | 0.960 | | | |
| 32598133 | PCB-77 (3,3',4,4') | | 0.150 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | | 0.840 | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | | 4.500 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | | 0.380 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | | 3.600 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | | 0.120 | U | UJ | C |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | | 3.000 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | | 0.360 | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | | 1.000 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | | 0.390 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | | 0.094 | J | J | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.12 | ~~0.040~~ ~~.038~~ | J | U ~~J~~ | + |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | | 0.220 | | | |

MP 1.14.97

~~*Analysis Not Validated~~

**OGDEN VALIDATED**

**LEVEL D**

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV030

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3005

**Sample wt/vol:** 0.0133 Kg **Lab File ID:** 3,1204963,24,1

**% Moisture:** 46.40 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1204963,24,1 | | | | |
| 34883437 | PCB-8 (2,4') | ~~0.027~~ .062 | J | U ~~J~~ | ~~R~~ + |
| Compound from Column: | RTX-5 Lab File ID: 2,1204962,24,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | ~~0.024~~ 0.083 | J | U ~~J~~ | ~~R~~ + |
| 7012375 | PCB-28 (2,4,4') | 0.077 | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | 3.100 | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.065 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.110 | U | ↓ | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.330 | U | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.140 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.380 | U | U | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 7.300 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.420 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 5.200 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.120 | U | UJ | C |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) 0.27 | ~~4.400~~ 0.36 | ~~N~~ | U | + |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.290 | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 1.200 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.560 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.820 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 1.200 | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 8.600 | | | |

MP 1.14.97

~~*Analysis Not Validated~~

OGDEN VALIDATED

LEVEL D

1D
# PCB ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MV040RE

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT0~~7~~ 6

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3009REF

**Sample wt/vol:** 0.0127 Kg **Lab File ID:** 3,1219963,13,1

**% Moisture:** 47.70 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/20/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 4.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1219963,13,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.130 | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,1219962,13,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | ~~0.360~~ 0.170 | ~~N~~ | U | + |
| 7012375 | PCB-28 (2,4,4') | 0.160 | U | U | |
| 35693993 | PCB-52 (2,2',5,5') | 0.260 | J | J | |
| 41464395 | PCB-44 (2,2',3,5') | 0.140 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.230 | U | U | |
| 37680732 | PCB-101 (2,2',3,5,5') | 1.000 | | J | C |
| 32598133 | PCB-77 (3,3',4,4') | 0.300 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.670 | J | J | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 4.900 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.170 | U | U | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 4.900 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 1.000 0.250 | ~~N~~ | U | + |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 2.600 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.220 | J | J | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.720 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.320 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.058 | J | J | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.120 | J | J | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.370 | | | |

mp 1·15·97

**OGDEN VALIDATED**

**LEVEL D**

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC209RE

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT0~~X~~ 6

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3036REF

**Sample wt/vol:** 0.0030 Kg **Lab File ID:** 3,1219963,15,1

**% Moisture:** 80.80 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/20/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 4.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1219963,15,1 | | | | |
| 34883437 | PCB-8 (2,4') | 0.540 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1219962,15,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | 0.710 | | U | U | |
| 7012375 | PCB-28 (2,4,4') | 0.680 | | U | | |
| 35693993 | PCB-52 (2,2',5,5') | 1.200 | | U | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.570 | | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.960 | | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 1.600 | | J | J | C |
| 32598133 | PCB-77 (3,3',4,4') | 1.300 | | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 3.100 | | J | J | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 33.000 | | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 1.700 | | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 18.000 | | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 1.000 | | U | U | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 21.000 | | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.870 | | J | J | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 35.000 | | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 13.000 | | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 4.000 | | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 1.600 | | | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.110 | 0.55 | ~~NJ~~ | U | + |

mp 1.15.97

**OGDEN VALIDATED**

**LEVEL D**

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV031

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3006

**Sample wt/vol:** 0.0131 Kg **Lab File ID:** 3,1204963,25,1

**% Moisture:** 46.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1204963,25,1 | | | | |
| 34883437 | PCB-8 (2,4') | | ~~0.074~~ 0.0690 | | J | F, *$ |
| Compound from Column: | RTX-5 | Lab File ID: 2,1204962,25,1 | | | | |
| 37680652 | PCB-18 (2,2',5) | | 0.30 ~~0.320~~ ~~0.290~~ | | J | F, *$ |
| 7012375 | PCB-28 (2,4,4') | | 0.076 ~~0.027~~ ~~0.025~~ | J | U * | + |
| 35693993 | PCB-52 (2,2',5,5') | | ~~0.390~~ 0.28 | | | *$ |
| 41464395 | PCB-44 (2,2',3,5') | | 0.066 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | | 0.110 | U | U | |
| 37680732 | PCB-101 (2,2',3,5,5') | | ~~1.300~~ 1.18 | | | *$ |
| 32598133 | PCB-77 (3,3',4,4') | | 0.150 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | | ~~1.100~~ 1.02 | | | *$ |
| 35065271 | PCB-153 (2,2',4,4',5,5') | | ~~5.700~~ 5.30 | | | * |
| 32598144 | PCB-105 (2,3,3',4,4') | | ~~0.360~~ 0.33 | | | * |
| 35065282 | PCB-138 (2,2',3,4,4',5') | | ~~4.200~~ 3.90 | | | * |
| 57465288 | PCB-126 (3,3',4,4',5) | | ~~0.120~~ 0.120 | U | UJ | C |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | | ~~3.400~~ 3.10 | | | *$ |
| 38380073 | PCB-128 (2,2',3,3',4,4') | | ~~0.320~~ 0.290 | | | * |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | | ~~0.720~~ 0.660 | | | * |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | | ~~0.240~~ 0.220 | | | * |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | | ~~0.098~~ 0.091 | J | J | * |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | | ~~0.099~~ 0.091 | J | J | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | | ~~0.440~~ 0.400 | | | *$ |

WWP 1.14.97

~~*Analysis Not Validated~~

**OGDEN VALIDATED**

corrections
1-17-97

**LEVEL D**

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV034

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3007

**Sample wt/vol:** 0.0139 Kg **Lab File ID:** 3,1204963,26,1

**% Moisture:** 42.30 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1204963,26,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.059 ~~0.120~~ ~~0.087~~ | ~~N~~ | U | + |
| Compound from Column: | RTX-5 | Lab File ID: 2,1204962,26,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.340 | | | |
| 7012375 | PCB-28 (2,4,4') | 0.072 ~~0.095~~ ~~0.100~~ | ~~NJ~~ | UJ | + |
| 35693993 | PCB-52 (2,2',5,5') | 0.130 | J | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.062 | U | UJ | |
| 32598100 | PCB-66 (2,3',4,4') | 0.100 | U | UJ | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.730 | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.140 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.680 | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 4.500 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.250 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 3.500 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.110 | U | UJ | C |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 2.600 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.470 | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.680 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.220 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.110 | J | UJ | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.080 | J | UJ | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.390 | | | |

MP 1.14.97

~~*Analysis Not Validated~~

**OGDEN VALIDATED**

**LEVEL D**

1D
# PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV037

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3008

**Sample wt/vol:** 0.0132 Kg **Lab File ID:** 3,1204963,27,1

**% Moisture:** 45.80 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1204963,27,1 | | | |
| 34883437 | PCB-8 (2,4') | ~~0.150~~ 0.062 ~~0.082~~ | ~~N~~ | U | + |
| Compound from Column: | RTX-5 | Lab File ID: 2,1204962,27,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.180 | | | |
| 7012375 | PCB-28 (2,4,4') | ~~0.022~~ 0.076 | J | U ~~J~~ | F + |
| 35693993 | PCB-52 (2,2',5,5') | 0.240 | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.065 | U | U | |
| 32598100 | PCB-66 (2,3',4,4') | 0.110 | U | U | |
| 37680732 | PCB-101 (2,2',3,5,5') | 1.200 | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.140 | U | U | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.940 | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 6.300 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.650 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 5.300 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.120 | U | UJ | C |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 3.500 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.390 | | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.620 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.310 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.150 | | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.060 | J | J | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.270 | | | |

MP 1.14.97

~~*Analysis Not Validated~~

OGDEN VALIDATED

LEVEL D

1D
PCB ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MV040

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3009

**Sample wt/vol:** 0.0127 Kg **Lab File ID:** 3,1204963,28,1

**% Moisture:** 47.70 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** Y **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1204963,28,1 | | | |
| 34883437 | PCB-8 (2,4') | 0.130 | | R | SD |
| Compound from Column: | RTX-5 | Lab File ID: 2,1204962,28,1 | | | |
| 37680652 | PCB-18 (2,2',5) | 0.320 | | R | SD |
| 7012375 | PCB-28 (2,4,4') | 0.072 | NJ | | |
| 35693993 | PCB-52 (2,2',5,5') | 0.230 | | | |
| 41464395 | PCB-44 (2,2',3,5') | 0.068 | U | | |
| 32598100 | PCB-66 (2,3',4,4') | 0.110 | U | | |
| 37680732 | PCB-101 (2,2',3,5,5') | 0.810 | | | |
| 32598133 | PCB-77 (3,3',4,4') | 0.150 | U | | |
| 31508006 | PCB-118 (2,3',4,4',5) | 0.610 | | | |
| 35065271 | PCB-153 (2,2',4,4',5,5') | 4.000 | | | |
| 32598144 | PCB-105 (2,3,3',4,4') | 0.350 | | | |
| 35065282 | PCB-138 (2,2',3,4,4',5') | 3.000 | | | |
| 57465288 | PCB-126 (3,3',4,4',5) | 0.120 | U | | |
| 52663680 | PCB-187 (2,2',3,4',5,5',6) | 2.100 | | | |
| 38380073 | PCB-128 (2,2',3,3',4,4') | 0.190 | J | | |
| 36065293 | PCB-180 (2,2',3,4,4',5,5') | 0.610 | | | |
| 35065306 | PCB-170 (2,2',3,3',4,4',5) | 0.220 | | | |
| 52663782 | PCB-195 (2,2',3,3',4,4',5,6) | 0.078 | J | | |
| 40186729 | PCB-206 (2,2',3,3',4,4',5,5',6) | 0.080 | J | | |
| 2051243 | PCB-209 (2,2',3,3',4,4',5,5',6,6') | 0.310 | | | |

MP 1.17.97

**OGDEN VALIDATED**

**LEVEL D**

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA721

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3050

**Sample wt/vol:** 0.0018 Kg **Lab File ID:** 3,1204963,33,1

**% Moisture:** 92.43 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/06/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1204963,33,1 | | | |
| 319846 | alpha-BHC | 0.620000 | U | UJ | C |
| 3424826 | 2,4'-DDE | 1.000000 | U | U | |
| 959988 | Endosulfan I | 1.300000 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1204962,33,1 | | | |
| 118741 | Hexachlorobenzene | 0.410000 | U | U | |
| 319857 | beta-BHC | 0.500000 | U | ↓ | |
| 58899 | gamma-BHC (Lindane) | 0.510000 | U | | |
| 319868 | delta-BHC | 0.410000 | U | UJ | C |
| 76448 | Heptachlor | 0.340000 | U | U | |
| 309002 | Aldrin | 1.800000 | U | | |
| 5103742 | gamma-Chlordane | 1.800000 | U | ↓ | |
| 5103719 | alpha-Chlordane | 1.000000 | U | * | |
| 5103731 | cis-Nonachlor | 0.940000 | U | | |
| 39765805 | trans-Nonachlor | 0.940000 | U | U | |
| 1024573 | Heptachlor epoxide | 0.620000 | U | | |
| 60571 | Dieldrin | 0.660000 | U | | |
| 72559 | 4,4'-DDE | 4.300000 | U | | |
| 53190 | 2,4'-DDD | 1.100000 | U | | |
| 72208 | Endrin | 0.370000 | U | | |
| 72548 | 4,4'-DDD | 2.700000 | U | | |
| 789026 | 2,4'-DDT | 0.640000 | U | | |
| 33216659 | Endosulfan II | 1.300000 | U | | |
| 1031078 | Endosulfan sulfate | 1.300000 | U | | |
| 50293 | 4,4'-DDT | 0.980000 | U | | |
| 7421934 | Endrin aldehyde | 0.910000 | U | | |
| 53494705 | Endrin ketone | 0.910000 | U | ↓ | |
| 72435 | Methoxychlor | 0.770000 | U | UJ | C |
| 2385855 | Mirex | 0.110000 | J | J | |

*Analysis Not Validated

OGDEN VALIDATED

LEVEL D

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA722

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3051

**Sample wt/vol:** 0.0021 Kg **Lab File ID:** 3,1204963,34,1

**% Moisture:** 91.29 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/06/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Raw Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1204963,34,1 | | | |
| 319846 | alpha-BHC | 0.540000 | U | UJ | C |
| 3424826 | 2,4'-DDE | 0.880000 | U | U | |
| 959988 | Endosulfan I | 1.200000 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1204962,34,1 | | | |
| 118741 | Hexachlorobenzene | ~~0.098000~~ 0.36 | J | UJ | K+ |
| 319857 | beta-BHC | 0.250000 | J | J | |
| 58899 | gamma-BHC (Lindane) | 0.320000 | J | J | |
| 319868 | delta-BHC | 0.350000 | U | UJ | C |
| 76448 | Heptachlor | 0.300000 | U | U | |
| 309002 | Aldrin | 1.600000 | U | | |
| 5103742 | gamma-Chlordane | 1.600000 | U | | |
| 5103719 | alpha-Chlordane | 0.880000 | U | | |
| 5103731 | cis-Nonachlor | ~~0.820000~~ | ~~U~~ | * | |
| 39765805 | trans-Nonachlor | 0.820000 | U | U | |
| 1024573 | Heptachlor epoxide | 0.540000 | U | | |
| 60571 | Dieldrin | 0.580000 | U | | |
| 72559 | 4,4'-DDE | 3.800000 | U | | |
| 53190 | 2,4'-DDD | 0.970000 | U | | |
| 72208 | Endrin | 0.320000 | U | | |
| 72548 | 4,4'-DDD | 2.400000 | U | | |
| 789026 | 2,4'-DDT | 0.560000 | U | | |
| 33216659 | Endosulfan II | 1.200000 | U | | |
| 1031078 | Endosulfan sulfate | 1.200000 | U | | |
| 50293 | 4,4'-DDT | 0.860000 | U | | |
| 7421934 | Endrin aldehyde | 0.800000 | U | | |
| 53494705 | Endrin ketone | 0.800000 | U | | |
| 72435 | Methoxychlor | 0.670000 | U | UJ | C |
| 2385855 | Mirex | 0.540000 | J | J | |

MP 1.14.97

*Analysis Not Validated

OGDEN VALIDATED

LEVEL D

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MA723

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3016

**Sample wt/vol:** 0.0034 Kg **Lab File ID:** 3,1204963,29,1

**% Moisture:** 80.80 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1204963,29,1 | | | | |
| 319846 | alpha-BHC | 0.018000 | NJ | R | D |
| 3424826 | 2,4'-DDE | 0.540000 | U | | |
| 959988 | Endosulfan I | 0.710000 | U | | |
| Compound from Column: | RTX-5 Lab File ID: 2,1204962,29,1 | | | | |
| 118741 | Hexachlorobenzene | 0.025000 | J | R | D |
| 319857 | beta-BHC | 0.270000 | U | | |
| 58899 | gamma-BHC (Lindane) | 0.270000 | U | | |
| 319868 | delta-BHC | 0.220000 | U | | |
| 76448 | Heptachlor | 0.180000 | U | | |
| 309002 | Aldrin | 0.970000 | U | | |
| 5103742 | gamma-Chlordane | 0.950000 | U | | |
| 5103719 | alpha-Chlordane | 0.540000 | U | | |
| 5103731 | cis-Nonachlor | 0.500000 | U | * | |
| 39765805 | trans-Nonachlor | 0.500000 | U | R | D |
| 1024573 | Heptachlor epoxide | 0.330000 | U | | |
| 60571 | Dieldrin | 0.350000 | U | | |
| 72559 | 4,4'-DDE | 2.300000 | U | | |
| 53190 | 2,4'-DDD | 0.590000 | U | | |
| 72208 | Endrin | 0.200000 | U | | |
| 72548 | 4,4'-DDD | 1.400000 | U | | |
| 789026 | 2,4'-DDT | 0.340000 | U | | |
| 33216659 | Endosulfan II | 0.710000 | U | | |
| 1031078 | Endosulfan sulfate | 0.710000 | U | | |
| 50293 | 4,4'-DDT | 0.530000 | U | | |
| 7421934 | Endrin aldehyde | 0.490000 | U | | |
| 53494705 | Endrin ketone | 0.490000 | U | | |
| 72435 | Methoxychlor | 0.410000 | U | | |
| 2385855 | Mirex | 0.170000 | J | | |

*Analysis Not Validated

OGDEN VALIDATED

LEVEL D

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MA723RE

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019
**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06
**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3016RE
**Sample wt/vol:** 0.0049 Kg **Lab File ID:** 3,0107973,9,1
**% Moisture:** 80.80 **decanted: (Y/N)** **Date Received:** 09/30/96
**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 01/02/97
**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 01/05/97
**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000
**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000
**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,0107973,9,1 | | | |
| 319846 | alpha-BHC | ~~0.048000~~ 0.22 | J | U J | + |
| 3424826 | 2,4'-DDE | 0.380000 | U | U | |
| 959988 | Endosulfan I | ~~0.310000~~ 0.50 | ~~NJ~~ | U | + |
| Compound from Column: | RTX-5 | Lab File ID: 2,0107972,9,1 | | | |
| 118741 | Hexachlorobenzene | ~~0.048000~~ 0.15 | J | U J | K + |
| 319857 | beta-BHC | 0.190000 | U | U | |
| 58899 | gamma-BHC (Lindane) | ~~0.073000~~ 0.19 | J | U J | K + |
| 319868 | delta-BHC | ~~0.040000~~ 0.15 | ~~NJ~~ | U | + |
| 76448 | Heptachlor | 0.130000 | U | U | |
| 309002 | Aldrin | 0.680000 | U | | |
| 5103742 | gamma-Chlordane | 0.670000 | U | | |
| 719 | alpha-Chlordane | 0.380000 | U | * | |
| /31 | cis-Nonachlor | 0.350000 | U | | |
| 39765805 | trans-Nonachlor | 0.350000 | U | U | |
| 1024573 | Heptachlor epoxide | 0.230000 | U | | |
| 60571 | Dieldrin | 0.250000 | U | | |
| 72559 | 4,4'-DDE | 1.600000 | U | | |
| 53190 | 2,4'-DDD | 0.410000 | U | | |
| 72208 | Endrin | 0.140000 | U | | |
| 72548 | 4,4'-DDD | 1.000000 | U | | |
| 789026 | 2,4'-DDT | 0.240000 | U | | |
| 33216659 | Endosulfan II | 0.500000 | U | | |
| 1031078 | Endosulfan sulfate | 0.500000 | U | | |
| 50293 | 4,4'-DDT | 0.370000 | U | | |
| 7421934 | Endrin aldehyde | 0.340000 | U | | |
| 53494705 | Endrin ketone | 0.340000 | U | | |
| 72435 | Methoxychlor | 0.290000 | U | | |
| 2385855 | Mirex | 0.230000 | U | | |

MP 1.15.97

*Analysis Not Validated

OGDEN VALIDATED

LEVEL D

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC198

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2966

**Sample wt/vol:** 0.0027 Kg **Lab File ID:** 3,1204963,13,1

**% Moisture:** 89.00 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/04/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1204963,13,1 | | | |
| 319846 | alpha-BHC | 0.430000 | U | R | D |
| 3424826 | 2,4'-DDE | 0.700000 | U | | |
| 959988 | Endosulfan I | 0.920000 | U | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1204962,13,1 | | R | D |
| 118741 | Hexachlorobenzene | 0.034000 | J | | |
| 319857 | beta-BHC | 0.340000 | U | | |
| 58899 | gamma-BHC (Lindane) | 0.350000 | U | | |
| 319868 | delta-BHC | 0.280000 | U | | |
| 76448 | Heptachlor | 0.230000 | U | | |
| 309002 | Aldrin | 1.300000 | U | | |
| 5103742 | gamma-Chlordane | 1.200000 | U | | |
| 5103719 | alpha-Chlordane | 0.210000 | NJ | | |
| 5103731 | cis-Nonachlor | 0.500000 | NJ | * | |
| 39765805 | trans-Nonachlor | 0.280000 | J | R | D |
| 1024573 | Heptachlor epoxide | 0.430000 | U | | |
| 60571 | Dieldrin | 0.460000 | U | | |
| 72559 | 4,4'-DDE | 4.200000 | | | |
| 53190 | 2,4'-DDD | 0.760000 | J | | |
| 72208 | Endrin | 0.250000 | U | | |
| 72548 | 4,4'-DDD | 0.890000 | J | | |
| 789026 | 2,4'-DDT | 0.970000 | | | |
| 33216659 | Endosulfan II | 0.920000 | U | | |
| 1031078 | Endosulfan sulfate | 0.920000 | U | | |
| 50293 | 4,4'-DDT | 1.200000 | | | |
| 7421934 | Endrin aldehyde | 0.630000 | U | | |
| 53494705 | Endrin ketone | 0.630000 | U | | |
| 72435 | Methoxychlor | 0.530000 | U | | |
| 2385855 | Mirex | 0.650000 | | | |

*Analysis Not Validated

OGDEN VALIDATED

LEVEL D

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC198RE

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019
**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT0X 6
**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2966REF
**Sample wt/vol:** 0.0027 Kg **Lab File ID:** 3,1219963,9,1
**% Moisture:** 89.00 **decanted: (Y/N)** **Date Received:** 09/30/96
**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96
**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/20/96
**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000
**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 4.0000
**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1219963,9,1 | | | |
| 319846 | alpha-BHC | 0.860000 | U | U | C |
| 3424826 | 2,4'-DDE | 1.400000 | U | U | |
| 959988 | Endosulfan I | 1.800000 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1219962,9,1 | | | |
| 118741 | Hexachlorobenzene | ~~0.239000~~ 0.55 | J | U J | + |
| 319857 | beta-BHC | 0.690000 | U | U | |
| 58899 | gamma-BHC (Lindane) | 0.710000 | U | U | |
| 319868 | delta-BHC | 0.560000 | U | U J | C |
| 76448 | Heptachlor | 0.470000 | U | U | |
| 309002 | Aldrin | 2.500000 | U | ↓ | |
| 5103742 | gamma-Chlordane | 2.500000 | U | | |
| 5103719 | alpha-Chlordane | 1.400000 | U | | |
| 5103731 | cis-Nonachlor | 0.470000 | NJ | * | |
| 39765805 | trans-Nonachlor | 1.300000 | U | U | |
| 1024573 | Heptachlor epoxide | 0.860000 | U | U | |
| 60571 | Dieldrin | 0.910000 | U | U | |
| 72559 | 4,4'-DDE | 5.000000 | J | J | |
| 53190 | 2,4'-DDD | 0.950000 | J | J | |
| 72208 | Endrin | 0.510000 | U | U | |
| 72548 | 4,4'-DDD | 1.200000 | J | J | |
| 789026 | 2,4'-DDT | ~~1.700000~~ 0.89 | ~~N~~ | U | + |
| 33216659 | Endosulfan II | 1.800000 | U | U | |
| 1031078 | Endosulfan sulfate | 1.800000 | U | U | |
| 50293 | 4,4'-DDT | 1.100000 | J | J | C |
| 7421934 | Endrin aldehyde | 1.300000 | U | U | |
| 53494705 | Endrin ketone | 1.300000 | U | U | |
| 72435 | Methoxychlor | 1.100000 | U | U | |
| 2385855 | Mirex | 0.660000 | J | J | |

mP 1.15.97

*Analysis Not Validated

**OGDEN VALIDATED**

**LEVEL D**

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC209

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3036

**Sample wt/vol:** 0.0030 Kg **Lab File ID:** 3,1204963,30,1

**% Moisture:** 80.80 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1204963,30,1 | | | | |
| 319846 | alpha-BHC | 0.380000 | U | R | D |
| 3424826 | 2,4'-DDE | 0.610000 | U | | |
| 959988 | Endosulfan I | 0.810000 | U | | |
| Compound from Column: | RTX-5 Lab File ID: 2,1204962,30,1 | | | | |
| 118741 | Hexachlorobenzene | 0.043000 | J | R | D |
| 319857 | beta-BHC | 0.300000 | U | | |
| 58899 | gamma-BHC (Lindane) | 0.310000 | U | | |
| 319868 | delta-BHC | 0.250000 | U | | |
| 76448 | Heptachlor | 0.210000 | U | | |
| 309002 | Aldrin | 1.100000 | U | | |
| 5103742 | gamma-Chlordane | 1.100000 | U | | |
| 5103719 | alpha-Chlordane | 0.610000 | U | | |
| 5103731 | cis-Nonachlor | 0.570000 | U | * | |
| 39765805 | trans-Nonachlor | 0.570000 | U | R | D |
| 1024573 | Heptachlor epoxide | 0.380000 | U | | |
| 60571 | Dieldrin | 0.400000 | U | | |
| 72559 | 4,4'-DDE | 2.600000 | U | | |
| 53190 | 2,4'-DDD | 0.430000 | J | | |
| 72208 | Endrin | 0.220000 | U | | |
| 72548 | 4,4'-DDD | 1.600000 | U | | |
| 789026 | 2,4'-DDT | 0.550000 | N | | |
| 33216659 | Endosulfan II | 0.810000 | U | | |
| 1031078 | Endosulfan sulfate | 0.810000 | U | | |
| 50293 | 4,4'-DDT | 0.600000 | U | | |
| 7421934 | Endrin aldehyde | 0.550000 | U | | |
| 53494705 | Endrin ketone | 0.550000 | U | | |
| 72435 | Methoxychlor | 0.470000 | U | | |
| 2385855 | Mirex | 0.380000 | U | | |

*Analysis Not Validated

OGDEN VALIDATED

LEVEL D

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**
MC229

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2977

**Sample wt/vol:** 0.0023 Kg **Lab File ID:** 3,1204963,16,1

**% Moisture:** 90.74 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1204963,16,1 | | | | |
| 319846 | alpha-BHC | 0.500000 | U | UJ | C |
| 3424826 | 2,4'-DDE | 0.820000 | U | U | |
| 959988 | Endosulfan I | 1.100000 | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,1204962,16,1 | | | | |
| 118741 | Hexachlorobenzene | ~~0.148000~~ 0.33 | J | U | + |
| 319857 | beta-BHC | 0.400000 | U | U | |
| 58899 | gamma-BHC (Lindane) | 0.420000 | U | U | |
| 319868 | delta-BHC | 0.330000 | U | UJ | C |
| 76448 | Heptachlor | 0.270000 | U | U | |
| 309002 | Aldrin | 1.500000 | U | U | |
| 5103742 | gamma-Chlordane | 1.400000 | U | U | |
| 5103719 | alpha-Chlordane | 0.820000 | U | U | |
| 5103731 | cis-Nonachlor | 0.480000 | ~~U~~ | U | * |
| 39765805 | trans-Nonachlor | 0.270000 | J | U | |
| 1024573 | Heptachlor epoxide | 0.500000 | U | U | |
| 60571 | Dieldrin | 0.540000 | U | U | |
| 72559 | 4,4'-DDE | 2.000000 | J | U | |
| 53190 | 2,4'-DDD | 0.670000 | J | U | |
| 72208 | Endrin | 0.300000 | U | U | |
| 72548 | 4,4'-DDD | 2.200000 | U | U | |
| 789026 | 2,4'-DDT | 0.520000 | U | U | |
| 33216659 | Endosulfan II | 1.100000 | U | U | |
| 1031078 | Endosulfan sulfate | 1.100000 | U | U | |
| 50293 | 4,4'-DDT | 0.590000 | J | U | |
| 7421934 | Endrin aldehyde | 0.740000 | U | U | |
| 53494705 | Endrin ketone | 0.740000 | U | U | |
| 72435 | Methoxychlor | 0.630000 | U | UJ | C |
| 2385855 | Mirex | 0.880000 | | | |

mP 1·14·97

OGDEN VALIDATED

*Analysis Not Validated

LEVEL D

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MC237

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2980

**Sample wt/vol:** 0.0030 Kg **Lab File ID:** 3,1204963,17,1

**% Moisture:** 88.10 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1204963,17,1 | | | | |
| 319846 | alpha-BHC | 0.390000 | U | R | D |
| 3424826 | 2,4'-DDE | 0.630000 | U | | |
| 959988 | Endosulfan I | 0.830000 | U | | |
| Compound from Column: | RTX-5 Lab File ID: 2,1204962,17,1 | | | R | D |
| 118741 | Hexachlorobenzene | 0.062000 | J | | |
| 319857 | beta-BHC | 0.310000 | U | | |
| 58899 | gamma-BHC (Lindane) | 0.028000 | J | | |
| 319868 | delta-BHC | 0.250000 | U | | |
| 76448 | Heptachlor | 0.210000 | U | | |
| 309002 | Aldrin | 1.100000 | U | | |
| 5103742 | gamma-Chlordane | 1.100000 | U | | |
| 5103719 | alpha-Chlordane | 0.630000 | U | | |
| 5103731 | cis-Nonachlor | 0.580000 | U | * | |
| 39765805 | trans-Nonachlor | 0.580000 | U | R | D |
| 1024573 | Heptachlor epoxide | 0.390000 | U | | |
| 60571 | Dieldrin | 0.410000 | U | | |
| 72559 | 4,4'-DDE | 0.810000 | J | | |
| 53190 | 2,4'-DDD | 0.690000 | U | | |
| 72208 | Endrin | 0.230000 | U | | |
| 72548 | 4,4'-DDD | 1.700000 | U | | |
| 789026 | 2,4'-DDT | 0.400000 | U | | |
| 33216659 | Endosulfan II | 0.830000 | U | | |
| 1031078 | Endosulfan sulfate | 0.830000 | U | | |
| 50293 | 4,4'-DDT | 0.610000 | U | | |
| 7421934 | Endrin aldehyde | 0.570000 | U | | |
| 53494705 | Endrin ketone | 0.570000 | U | | |
| 72435 | Methoxychlor | 0.480000 | U | | |
| 2385855 | Mirex | 0.300000 | J | | |

*Analysis Not Validated

OGDEN VALIDATED

LEVEL D

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.
MC237RE

Lab Name: Arthur D. Little, Inc.
Contract: N62742-90-D-0019
Lab Code: ADLMA
Case No.: CTO136
ADL Project No.: 69084
SDG No.: OMIIT0X 6
Matrix: (soil/water/tissue) TISSUE
Lab Sample ID: 96B2980REF
Sample wt/vol: 0.0030 Kg
Lab File ID: 3,1219963,12,1
% Moisture: 88.10 decanted: (Y/N)
Date Received: 09/30/96
Extraction: (SepF/Cont/Sonc)
Date Extracted: 11/01/96
Concentrated Extract Volume: 0.5000(mL)
Date Analyzed: 12/20/96
Injection Volume: 2 (uL)
Dilution Factor: 1.0000
GPC Cleanup: (Y/N) pH:
Spilt Factor: 4.0000
Sulfur Cleanup: (Y/N) N

Concentration Units: (ug/L or ug/Kg) ug/Kg

| Cas No: | Compound | | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1219963,12,1 | | | |
| 319846 | alpha-BHC | 0.770000 | U | U | J C |
| 3424826 | 2,4'-DDE | 1.300000 | U | U | |
| 959988 | Endosulfan I | 1.700000 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1219962,12,1 | | | |
| 118741 | Hexachlorobenzene | ~~0.130000~~ 0.56 | J | U | J + |
| 319857 | beta-BHC | 0.620000 | U | U | |
| 58899 | gamma-BHC (Lindane) | 0.640000 | U | U | J C |
| 319868 | delta-BHC | 0.500000 | U | U | |
| 76448 | Heptachlor | 0.420000 | U | U | |
| 309002 | Aldrin | 2.200000 | U | U | |
| 5103742 | gamma-Chlordane | 2.200000 | U | U | |
| 5103719 | alpha-Chlordane | 1.300000 | U | U | * |
| 5103731 | cis-Nonachlor | 1.200000 | U | U | |
| 39765805 | trans-Nonachlor | 1.200000 | U | U | |
| 1024573 | Heptachlor epoxide | 0.770000 | U | U | |
| 60571 | Dieldrin | 0.820000 | U | U | |
| 72559 | 4,4'-DDE | ~~0.920000~~ 5.27 | J | U | J + |
| 53190 | 2,4'-DDD | 1.400000 | U | U | |
| 72208 | Endrin | 0.460000 | U | U | |
| 72548 | 4,4'-DDD | 3.400000 | U | U | |
| 789026 | 2,4'-DDT | 0.800000 | U | U | |
| 33216659 | Endosulfan II | 1.700000 | U | U | |
| 1031078 | Endosulfan sulfate | 1.700000 | U | U | |
| 50293 | 4,4'-DDT | 1.200000 | U | U | J C |
| 7421934 | Endrin aldehyde | 1.100000 | U | U | |
| 53494705 | Endrin ketone | 1.100000 | U | U | |
| 72435 | Methoxychlor | 0.960000 | U | U | |
| 2385855 | Mirex | 0.780000 | U | U | |

MP 1.15.97

*Analysis Not Validated

OGDEN VALIDATED

LEVEL D

000015b

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MV016

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2997

**Sample wt/vol:** 0.0131 Kg **Lab File ID:** 3,1204963,18,1

**% Moisture:** 47.10 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | Raw Qual | Qual Code |
|---|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1204963,18,1 | | | | | |
| 319846 | alpha-BHC | | 0.270000 | | | UJ | C |
| 3424826 | 2,4'-DDE | | 0.190000 | 0.18 0.14 | NJ | U | + |
| 959988 | Endosulfan I | | 0.190000 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1204962,18,1 | | | | | |
| 118741 | Hexachlorobenzene | 0.057 | 0.013000 | 0.025 | NJ | U | + |
| 319857 | beta-BHC | 0.069 | 0.069000 | 0.091 | NJ | U | + |
| 58899 | gamma-BHC (Lindane) | | 0.057000 | | J | J | F |
| 319868 | delta-BHC | | 0.057000 | | U | UJ | C |
| 76448 | Heptachlor | 0.047 | 0.140000 | 0.062 | N | U | + |
| 309002 | Aldrin | | 0.250000 | | U | U | |
| 5103742 | gamma-Chlordane | | 0.250000 | | U | | |
| 5103719 | alpha-Chlordane | | 0.140000 | | U | | |
| 5103731 | cis-Nonachlor | | 0.130000 | | U | * | |
| 39765805 | trans-Nonachlor | 0.13 | 0.044000 | 0.17 | NJ | U | + |
| 1024573 | Heptachlor epoxide | | 0.087000 | | U | U | |
| 60571 | Dieldrin | | 0.093000 | | U | U | |
| 72559 | 4,4'-DDE | | 0.890000 | | | | |
| 53190 | 2,4'-DDD | | 0.890000 | | | | |
| 72208 | Endrin | | 0.052000 | | U | U | |
| 72548 | 4,4'-DDD | | 0.084000 | 0.38 | J | UJ | + |
| 789026 | 2,4'-DDT | 0.091 | 0.399000 | 0.42 | N | U | + |
| 33216659 | Endosulfan II | | 0.190000 | | U | U | |
| 1031078 | Endosulfan sulfate | | 0.190000 | | U | | |
| 50293 | 4,4'-DDT | | 0.140000 | | U | | |
| 7421934 | Endrin aldehyde | | 0.130000 | | U | | |
| 53494705 | Endrin ketone | | 0.130000 | | U | | |
| 72435 | Methoxychlor | | 0.110000 | | U | UJ | C |
| 2385855 | Mirex | | 0.250000 | | | | |

MP 1.14.97

*Analysis Not Validated

OGDEN VALIDATED

LEVEL D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV017

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019
**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06
**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B2998
**Sample wt/vol:** 0.0113 Kg **Lab File ID:** 3,1204963,21,1
**% Moisture:** 54.50 **decanted: (Y/N)** **Date Received:** 09/30/96
**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96
**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/05/96
**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000
**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000
**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/Kg

| Cas No: | Compound | | | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1204963,21,1 | | | | |
| 319846 | alpha-BHC | | 0.077000 | J | J | C |
| 3424826 | 2,4'-DDE | 0.16 | 0.130000 0.18 | NJ | U | + |
| 959988 | Endosulfan I | | 0.210000 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1204962,21,1 | | | | |
| 118741 | Hexachlorobenzene | 0.066 | 0.014000 0.025 | NJ | U | + |
| 319857 | beta-BHC | 0.080 | 0.085000 0.091 | N | U | + |
| 58899 | gamma-BHC (Lindane) | | 0.088000 | | J | F |
| 319868 | delta-BHC | 0.065 | 0.085000 0.074 | NJ | U | C, + |
| 76448 | Heptachlor | | 0.055000 | U | U | |
| 309002 | Aldrin | | 0.290000 | U | U | |
| 5103742 | gamma-Chlordane | 0.29 | 0.409000 0.33 | N | U | + |
| 5103719 | alpha-Chlordane | | 0.160000 | U | U | |
| 5103731 | cis-Nonachlor | | 0.150000 | U | * | |
| 39765805 | trans-Nonachlor | | 0.150000 | U | U | |
| 1024573 | Heptachlor epoxide | | 0.100000 | U | U | |
| 60571 | Dieldrin | | 0.110000 | U | U | |
| 72559 | 4,4'-DDE | | 0.700000 | J | J | |
| 53190 | 2,4'-DDD | | 0.740000 | | | |
| 72208 | Endrin | | 0.059000 | U | U | |
| 72548 | 4,4'-DDD | | 0.440000 | U | U | |
| 789026 | 2,4'-DDT | 0.11 | 0.309000 0.12 | N | U | + |
| 33216659 | Endosulfan II | | 0.210000 | U | U | |
| 1031078 | Endosulfan sulfate | | 0.210000 | U | U | |
| 50293 | 4,4'-DDT | | 0.160000 | U | U | |
| 7421934 | Endrin aldehyde | | 0.150000 | U | U | |
| 53494705 | Endrin ketone | | 0.150000 | U | U | |
| 72435 | Methoxychlor | | 0.120000 | U | U | C |
| 2385855 | Mirex | | 0.081000 | J | J | |

mp 1.14.97

*Analysis Not Validated

OGDEN VALIDATED

LEVEL D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MV021

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3001

**Sample wt/vol:** 0.0121 Kg **Lab File ID:** 3,1204963,22,1

**% Moisture:** 50.70 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) | ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1204963,22,1 | | | | | |
| 319846 | alpha-BHC | 0.091 | ~~0.097000~~ 0.11 | ~~N~~ | UJ | C,+ |
| 3424826 | 2,4'-DDE | 0.15 | ~~0.086000~~ 0.18 | ~~NJ~~ | U | + |
| 959988 | Endosulfan I | | 0.200000 | U | U | |
| Compound from Column: | RTX-5 Lab File ID: 2,1204962,22,1 | | | | | |
| 118741 | Hexachlorobenzene | | ~~0.007000~~ .062 | J | U ~~J~~ | F + |
| 319857 | beta-BHC | | 0.076000 | U | U | |
| 58899 | gamma-BHC (Lindane) | | 0.068000 | J | J | F |
| 319868 | delta-BHC | 0.061 | ~~0.065000~~ 0.074 | ~~N~~ | UJ | C,+ |
| 76448 | Heptachlor | 0.051 | 0.052000 ~~0.062~~ | ~~N~~ | U | + |
| 309002 | Aldrin | | 0.270000 | U | U | |
| 5103742 | gamma-Chlordane | | 0.280000 | | | |
| 5103719 | alpha-Chlordane | | 0.150000 | U | U | |
| 5103731 | cis-Nonachlor | | 0.140000 | U | * | |
| 39765805 | trans-Nonachlor | | ~~0.065000~~ 0.14 | J | U ~~J~~ | + |
| 1024573 | Heptachlor epoxide | | 0.094000 | U | U | |
| 60571 | Dieldrin | | 0.100000 | U | U | |
| 72559 | 4,4'-DDE | | 1.800000 | | | |
| 53190 | 2,4'-DDD | | 0.530000 | | | |
| 72208 | Endrin | | 0.056000 | U | U | |
| 72548 | 4,4'-DDD | | 0.410000 | U | U | |
| 789026 | 2,4'-DDT | 0.099 | 0.250000 ~~0.17~~ | ~~N~~ | U | + |
| 33216659 | Endosulfan II | | 0.200000 | U | U | |
| 1031078 | Endosulfan sulfate | | 0.200000 | U | U | |
| 50293 | 4,4'-DDT | | 0.160000 | | | |
| 7421934 | Endrin aldehyde | | 0.140000 | U | U | |
| 53494705 | Endrin ketone | | 0.140000 | U | U | |
| 72435 | Methoxychlor | | 0.120000 | U | UJ | C |
| 2385855 | Mirex | | 0.089000 | J | J | |

mp 1.14.97

*Analysis Not Validated

OGDEN VALIDATED

LEVEL D

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV026

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019
**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06
**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3003
**Sample wt/vol:** 0.0130 Kg **Lab File ID:** 3,1204963,23,1
**% Moisture:** 46.50 **decanted: (Y/N)** **Date Received:** 09/30/96
**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96
**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/05/96
**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000
**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000
**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1204963,23,1 | | | |
| 319846 | alpha-BHC | ~~0.072000~~ 0.11 | ~~NJ~~ | UJ | C,+ |
| 3424826 | 2,4'-DDE | 0.140000 | U | U | |
| 959988 | Endosulfan I | 0.190000 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1204962,23,1 | | | |
| 118741 | Hexachlorobenzene | ~~0.018000~~ 0.075 | ~~NJ~~ | U | + |
| 319857 | beta-BHC | ~~0.095000~~ 0.091 | ~~N~~ | U | + |
| 58899 | gamma-BHC (Lindane) | ~~0.064000~~ 0.094 | ~~NJ~~ | U | + |
| 319868 | delta-BHC | ~~0.086000~~ 0.074 | ~~N~~ | UJ | C + |
| 76448 | Heptachlor | ~~0.045000~~ 0.062 | ~~NJ~~ | U | + |
| 309002 | Aldrin | 0.250000 | U | U | |
| 5103742 | gamma-Chlordane | 0.250000 | U | U | |
| 5103719 | alpha-Chlordane | 0.140000 | U | U | |
| 5103731 | cis-Nonachlor | 0.130000 | U | * | |
| 39765805 | trans-Nonachlor | 0.130000 | U | U | |
| 1024573 | Heptachlor epoxide | 0.087000 | U | U | |
| 60571 | Dieldrin | 0.093000 | U | U | |
| 72559 | 4,4'-DDE | 0.720000 | | | |
| 53190 | 2,4'-DDD | 0.510000 | | | |
| 72208 | Endrin | 0.071000 | | | |
| 72548 | 4,4'-DDD | 0.380000 | U | U | |
| 789026 | 2,4'-DDT | ~~0.210000~~ 0.12 | ~~N~~ | UJ | + |
| 33216659 | Endosulfan II | 0.190000 | U | U | |
| 1031078 | Endosulfan sulfate | 0.190000 | U | | |
| 50293 | 4,4'-DDT | 0.140000 | U | | |
| 7421934 | Endrin aldehyde | 0.130000 | U | | |
| 53494705 | Endrin ketone | 0.130000 | U | | |
| 72435 | Methoxychlor | 0.110000 | U | UJ | C |
| 2385855 | Mirex | ~~0.017000~~ .085 | J | U J | + |

vmp 1.14.97

*Analysis Not Validated

OGDEN VALIDATED

LEVEL D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MV030

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3005

**Sample wt/vol:** 0.0133 Kg **Lab File ID:** 3,1204963,24,1

**% Moisture:** 46.40 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | Rev Qual | Qual Code |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 Lab File ID: 3,1204963,24,1 | | | | |
| 319846 | alpha-BHC | ~~0.014000~~ 0.083 | J | UJ ~~J~~ | ~~a~~ +, c |
| 3424826 | 2,4'-DDE | 0.140000 | U | U | |
| 959988 | Endosulfan I | 1.700000 | | | |
| Compound from Column: | RTX-5 Lab File ID: 2,1204962,24,1 | | | | |
| 118741 | Hexachlorobenzene | ~~0.024000~~ 0.056 | J | U ~~J~~ | ~~F~~ + |
| 319857 | beta-BHC | 0.450000 | | | |
| 58899 | gamma-BHC (Lindane) | 0.550000 | | | |
| 319868 | delta-BHC | 0.390000 | | J | c |
| 76448 | Heptachlor 0.047 | ~~2.100000~~ 0.062 | ~~N~~ | U | + |
| 309002 | Aldrin | 0.250000 | U | U | |
| 5103742 | gamma-Chlordane | 0.250000 | U | U | |
| 5103719 | alpha-Chlordane | 0.140000 | U | U | |
| 5103731 | cis-Nonachlor | 0.130000 | U | * | |
| 39765805 | trans-Nonachlor | 1.600000 | | | |
| 1024573 | Heptachlor epoxide | 0.085000 | U | U | |
| 60571 | Dieldrin | 0.091000 | U | ↓ | |
| 72559 | 4,4'-DDE | 0.600000 | U | | |
| 53190 | 2,4'-DDD | 0.150000 | U | U | |
| 72208 | Endrin | 0.078000 | | | |
| 72548 | 4,4'-DDD | 2.500000 | | | |
| 789026 | 2,4'-DDT | 0.089000 | U | U | |
| 33216659 | Endosulfan II | 0.180000 | U | | |
| 1031078 | Endosulfan sulfate | 0.180000 | U | | |
| 50293 | 4,4'-DDT | 0.140000 | U | ↓ | |
| 7421934 | Endrin aldehyde | 0.130000 | U | | |
| 53494705 | Endrin ketone | 0.130000 | U | U | |
| 72435 | Methoxychlor | 0.110000 | U | UJ | c |
| 2385855 | Mirex | 1.200000 | | | |

MMP 1.14.97

*Analysis Not Validated

OGDEN VALIDATED

LEVEL D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MV031

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3006

**Sample wt/vol:** 0.0131 Kg **Lab File ID:** 3,1204963,25,1

**% Moisture:** 46.50 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | | Q | Rev Qual | Qual code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1204963,25,1 | | | | |
| 319846 | alpha-BHC | 0.073000 | | J | UJ | C |
| 3424826 | 2,4'-DDE | 0.120000 | | J | | |
| 959988 | Endosulfan I | 0.190000 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1204962,25,1 | | | | |
| 118741 | Hexachlorobenzene | 0.058000 | | U | U | |
| 319857 | beta-BHC | 0.069 | ~~0.018000~~ 0.091 | ~~NJ~~ | U | + |
| 58899 | gamma-BHC (Lindane) | 0.062000 | | J | UJ | F |
| 319868 | delta-BHC | 0.057000 | | J | UJ | C |
| 76448 | Heptachlor | 0.047 | ~~0.109000~~ 0.062 | ~~J~~ | U | + |
| 309002 | Aldrin | 0.250000 | | U | U | |
| 5103742 | gamma-Chlordane | 0.250000 | | U | U | |
| 5103719 | alpha-Chlordane | 0.140000 | | U | U | |
| 5103731 | cis-Nonachlor | 0.130000 | | U | U* | |
| 39765805 | trans-Nonachlor | 0.130000 | | U | U | |
| 1024573 | Heptachlor epoxide | 0.087000 | | U | U | |
| 60571 | Dieldrin | 0.092000 | | U | U | |
| 72559 | 4,4'-DDE | 0.840000 | | | | |
| 53190 | 2,4'-DDD | 0.640000 | | | | |
| 72208 | Endrin | 0.140000 | | | | |
| 72548 | 4,4'-DDD | 0.380000 | | U | U | |
| 789026 | 2,4'-DDT | 0.210000 | | | | |
| 33216659 | Endosulfan II | 0.190000 | | U | U | |
| 1031078 | Endosulfan sulfate | 0.190000 | | U | U | |
| 50293 | 4,4'-DDT | 0.140000 | | U | U | |
| 7421934 | Endrin aldehyde | 0.130000 | | U | U | |
| 53494705 | Endrin ketone | 0.130000 | | U | U | |
| 72435 | Methoxychlor | 0.110000 | | U | UJ | C |
| 2385855 | Mirex | ~~0.023000~~ 0.084 | | J | U | + |

mP 1.14.97

*Analysis Not Validated

OGDEN VALIDATED

LEVEL D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

**EPA SAMPLE NO.**

MV034

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3007

**Sample wt/vol:** 0.0139 Kg **Lab File ID:** 3,1204963,26,1

**% Moisture:** 42.30 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/Kg

| Cas No: | Compound | | | Q | Raw Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1204963,26,1 | | | | |
| 319846 | alpha-BHC | 0.079 | ~~0.054000~~ ~~0.11~~ | ~~NJ~~ | UJ | C,+ |
| 3424826 | 2,4'-DDE | 0.13 | ~~0.250000~~ ~~0.18~~ | ~~N~~ | U | + |
| 959988 | Endosulfan I | | 0.180000 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1204962,26,1 | | | | |
| 118741 | Hexachlorobenzene | | 0.052000 | J | U | F |
| 319857 | beta-BHC | 0.065 | ~~0.081000~~ ~~0.091~~ | ~~NJ~~ | U | + |
| 58899 | gamma-BHC (Lindane) | | ~~0.027000~~ 0.068 | J | UJ | F + |
| 319868 | delta-BHC | | 0.037000 | ~~NJ~~ | UJ | C,+ |
| 76448 | Heptachlor | | 0.045000 | U | U | |
| 309002 | Aldrin | | 0.240000 | U | | |
| 5103742 | gamma-Chlordane | | 0.230000 | U | | |
| 5103719 | alpha-Chlordane | | 0.130000 | U | | |
| 5103731 | cis-Nonachlor | | 0.120000 | U | | |
| 39765805 | trans-Nonachlor | | 0.120000 | U | U | |
| 1024573 | Heptachlor epoxide | | 0.082000 | U | U | |
| 60571 | Dieldrin | | 0.087000 | U | U | |
| 72559 | 4,4'-DDE | | 0.510000 | J | J | |
| 53190 | 2,4'-DDD | | 0.390000 | | | |
| 72208 | Endrin | | 0.048000 | U | U | |
| 72548 | 4,4'-DDD | | 0.360000 | U | U | |
| 789026 | 2,4'-DDT | 0.086 | ~~0.170000~~ ~~0.12~~ | ~~N~~ | U | + |
| 33216659 | Endosulfan II | | 0.180000 | U | U | |
| 1031078 | Endosulfan sulfate | | 0.180000 | U | | |
| 50293 | 4,4'-DDT | | 0.130000 | U | | |
| 7421934 | Endrin aldehyde | | 0.120000 | U | | |
| 53494705 | Endrin ketone | | 0.120000 | U | | |
| 72435 | Methoxychlor | | 0.100000 | U | UJ | C |
| 2385855 | Mirex | | ~~0.031000~~ 0.079 | J | U | + |

MMP 1.14.97

*Analysis Not Validated

OGDEN VALIDATED

LEVEL D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MV037

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3008

**Sample wt/vol:** 0.0132 Kg **Lab File ID:** 3,1204963,27,1

**% Moisture:** 45.80 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

**Concentration Units: (ug/L or ug/Kg)** ug/Kg

| Cas No: | Compound | | | Q | Raw Qual | Qual Code |
|---|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1204963,27,1 | | | | |
| 319846 | alpha-BHC | ~~0.064000~~ | 0.083 | ~~NJ~~ | U | + |
| 3424826 | 2,4'-DDE | ~~0.110000~~ | 0.14 | ~~NJ~~ | U | + |
| 959988 | Endosulfan I | 0.190000 | | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1204962,27,1 | | | | |
| 118741 | Hexachlorobenzene | ~~0.008900~~ | 0.057 | ~~NJ~~ | U | + |
| 319857 | beta-BHC | 0.069000 | | U | U | |
| 58899 | gamma-BHC (Lindane) | 0.046000 | | J | U | |
| 319868 | delta-BHC | ~~0.094000~~ | 0.056 | ~~NJ~~ | U | + |
| 76448 | Heptachlor | ~~0.110000~~ | 0.047 | ~~NJ~~ | U | + |
| 309002 | Aldrin | 0.250000 | | U | U | |
| 5103742 | gamma-Chlordane | 0.250000 | | U | U | |
| 5103719 | alpha-Chlordane | 0.140000 | | U | U | |
| 5103731 | cis-Nonachlor | 0.130000 | | U | U | * |
| 39765805 | trans-Nonachlor | 0.130000 | | U | U | |
| 1024573 | Heptachlor epoxide | 0.086000 | | U | U | |
| 60571 | Dieldrin | 0.092000 | | U | U | |
| 72559 | 4,4'-DDE | 0.870000 | | | | |
| 53190 | 2,4'-DDD | 0.660000 | | | | |
| 72208 | Endrin | 0.064000 | | | | |
| 72548 | 4,4'-DDD | 0.380000 | | U | U | |
| 789026 | 2,4'-DDT | 0.330000 | | | | |
| 33216659 | Endosulfan II | 0.190000 | | U | U | |
| 1031078 | Endosulfan sulfate | 0.190000 | | U | U | |
| 50293 | 4,4'-DDT | ~~0.042000~~ | 0.14 | ~~NJ~~ | U | + |
| 7421934 | Endrin aldehyde | 0.130000 | | U | U | |
| 53494705 | Endrin ketone | 0.130000 | | U | U | |
| 72435 | Methoxychlor | 0.110000 | | U | U | |
| 2385855 | Mirex | ~~0.021000~~ | 0.083 | J | U | + |

MP 1.14.97

*Analysis Not Validated

OGDEN VALIDATED

LEVEL D

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV040

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019

**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT06

**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3009

**Sample wt/vol:** 0.0127 Kg **Lab File ID:** 3,1204963,28,1

**% Moisture:** 47.70 **decanted: (Y/N)** **Date Received:** 09/30/96

**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96

**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/05/96

**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000

**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 2.0000

**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1204963,28,1 | | | |
| 319846 | alpha-BHC | 0.130000 | | R | D |
| 3424826 | 2,4'-DDE | 0.080000 | NJ | | |
| 959988 | Endosulfan I | 0.190000 | U | | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1204962,28,1 | | | |
| 118741 | Hexachlorobenzene | 0.008900 | J | R | D |
| 319857 | beta-BHC | 0.072000 | U | | |
| 58899 | gamma-BHC (Lindane) | 0.043000 | J | | |
| 319868 | delta-BHC | 0.064000 | N | | |
| 76448 | Heptachlor | 0.049000 | U | | |
| 309002 | Aldrin | 0.260000 | U | | |
| 5103742 | gamma-Chlordane | 0.260000 | U | | |
| 5103719 | alpha-Chlordane | 0.150000 | U | | |
| 5103731 | cis-Nonachlor | 0.140000 | U | * | |
| 39765805 | trans-Nonachlor | 0.140000 | U | R | D |
| 1024573 | Heptachlor epoxide | 0.089000 | U | | |
| 60571 | Dieldrin | 0.095000 | U | | |
| 72559 | 4,4'-DDE | 0.480000 | J | | |
| 53190 | 2,4'-DDD | 0.440000 | | | |
| 72208 | Endrin | 0.130000 | | | |
| 72548 | 4,4'-DDD | 0.390000 | U | | |
| 789026 | 2,4'-DDT | 0.200000 | | | |
| 33216659 | Endosulfan II | 0.190000 | U | | |
| 1031078 | Endosulfan sulfate | 0.190000 | U | | |
| 50293 | 4,4'-DDT | 0.140000 | U | | |
| 7421934 | Endrin aldehyde | 0.130000 | U | | |
| 53494705 | Endrin ketone | 0.130000 | U | | |
| 72435 | Methoxychlor | 0.110000 | U | | |
| 2385855 | Mirex | 0.022000 | J | | |

*Analysis Not Validated

OGDEN VALIDATED

LEVEL D

1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MV040RE

**Lab Name:** Arthur D. Little, Inc. **Contract:** N62742-90-D-0019
**Lab Code:** ADLMA **Case No.:** CTO136 **ADL Project No.:** 69084 **SDG No.:** OMIIT0~~X~~ 6
**Matrix: (soil/water/tissue)** TISSUE **Lab Sample ID:** 96B3009REF
**Sample wt/vol:** 0.0127 Kg **Lab File ID:** 3,1219963,13,1
**% Moisture:** 47.70 **decanted: (Y/N)** **Date Received:** 09/30/96
**Extraction: (SepF/Cont/Sonc)** **Date Extracted:** 11/01/96
**Concentrated Extract Volume:** 0.5000(mL) **Date Analyzed:** 12/20/96
**Injection Volume:** 2 (uL) **Dilution Factor:** 1.0000
**GPC Cleanup: (Y/N)** **pH:** **Split Factor:** 4.0000
**Sulfur Cleanup: (Y/N)** N

| Cas No: | Compound | Concentration Units: (ug/L or ug/Kg) ug/Kg | Q | REV QUAL | QUAL CODE |
|---|---|---|---|---|---|
| Compound from Column: | DB-17 | Lab File ID: 3,1219963,13,1 | | | |
| 319846 | alpha-BHC | ~~0.140000~~ 0.170 | ~~NJ~~ | UJ | +,C |
| 3424826 | 2,4'-DDE | 0.290000 | U | U | |
| 959988 | Endosulfan I | 0.380000 | U | U | |
| Compound from Column: | RTX-5 | Lab File ID: 2,1219962,13,1 | | | |
| 118741 | Hexachlorobenzene | 0.120000 | U | U | |
| 319857 | beta-BHC | 0.140000 | U | U | |
| 58899 | gamma-BHC (Lindane) | 0.150000 | U | U | |
| 319868 | delta-BHC | ~~0.095000~~ 0.120 | ~~NJ~~ | UJ | +,C |
| 76448 | Heptachlor | 0.098000 | U | U | |
| 309002 | Aldrin | 0.520000 | U | U | |
| 5103742 | gamma-Chlordane | 0.510000 | U | U | |
| 5103719 | alpha-Chlordane | 0.290000 | U | U | |
| 5103731 | cis-Nonachlor | 0.270000 | U | U | * |
| 39765805 | trans-Nonachlor | 0.270000 | U | U | |
| 1024573 | Heptachlor epoxide | 0.180000 | U | U | |
| 60571 | Dieldrin | 0.190000 | U | U | |
| 72559 | 4,4'-DDE | 0.550000 | J | J | |
| 53190 | 2,4'-DDD | 0.320000 | U | U | |
| 72208 | Endrin | 0.110000 | U | U | |
| 72548 | 4,4'-DDD | 0.780000 | U | U | |
| 789026 | 2,4'-DDT | 0.190000 | U | U | |
| 33216659 | Endosulfan II | 0.380000 | U | U | |
| 1031078 | Endosulfan sulfate | 0.380000 | U | U | |
| 50293 | 4,4'-DDT | 0.280000 | U | J | C |
| 7421934 | Endrin aldehyde | 0.260000 | U | U | |
| 53494705 | Endrin ketone | 0.260000 | U | U | |
| 72435 | Methoxychlor | 0.220000 | U | U | |
| 2385855 | Mirex | 0.180000 | U | U | |

MAP 1·15·97

*Analysis Not Validated

OGDEN VALIDATED

LEVEL D

# Appendix G

## INTRODUCTION

Laboratory analyses in support of a site investigation of the Naval Air Facility on Midway Island (CTO-136) was initiated on September 19 and terminated on September 23, 1996. Testing was performed at the Ogden Bioassay Laboratory in San Diego, California. Toxicity tests using *Dendaster excentricus,* the sand dollar, were conducted to examine the embryo-larval development of fertilized eggs exposed to each sediment sample.

## METHODS AND MATERIALS

Method References: The echinoderm development bioassay was performed in accordance with the Puget Sound Dredged Disposal Analysis protocol (Puget Sound Estuary Program, July 1991). Test procedures are described below.

Test Materials: The materials tested were sediments collected from Sites MC165 and MC166A (duplicate sample identified as MC166B) located off the coast of Midway Island. Samples were shipped from Midway Island to Ogden personnel in Honolulu, Hawaii, then forwarded to the bioassay lab in San Diego. Chain-of-custody records are contained in Appendix B. Upon arrival at the laboratory, samples were checked in and placed in a coldroom maintained at 4°C until needed.

### Sand Dollar Development Analysis

Test Procedure: This method is used to estimate the toxicity of a marine sediment to developing echinoderm larvae during a 96-hour exposure period. Dual endpoints of survival and normality are evaluated at test termination. Results are contained in Table 1. Daily water quality measurements are outlined in Table 2.

Laboratory seawater: Dilution water for marine testing is obtained from Scripps Institution of Oceanography and trucked to the Bioassay Laboratory. Seawater is held in a flow-through system with an in-line system containing 20-µm fiber filters and a chiller unit. Laboratory control water is filtered through a 0.22-µm Millipore filter prior to use in testing.

Test animals: The test animal used was *Dendaster excentricus*, the sand dollar, collected during the week of testing in the Mission Bay Channel by Ogden personnel. Animals were returned to the laboratory in an ice chest, and placed in flow-through ten-gallon

**Table 1. Echinoderm Embryo-Larval Survival and Development Results**
**Naval Air Facility on Midway Island CTO-136**

| Site | Rep | Number Normal | Number Abnormal | Total Number | Average % Survival | Percent Normal | Average % Normal |
|---|---|---|---|---|---|---|---|
| Control | A | 124 | 13 | 137 | | 90.5 | |
| | B | 122 | 8 | 130 | | 93.8 | |
| | C | 141 | 7 | 148 | | 95.3 | |
| | D | 158 | 4 | 162 | | 97.5 | |
| | E | 142 | 5 | 147 | 100 | 96.6 | 94.8 |
| MC-165 | A | 113 | 7 | 120 | | 94.2 | |
| | B | 100 | 8 | 108 | | 92.6 | |
| | C | 100 | 6 | 106 | | 94.3 | |
| | D | 95 | 12 | 107 | | 88.8 | |
| | E | 105 | 21 | 126 | 100 | 83.3 | 90.6 |
| MC-166A | A | 105 | 2 | 107 | | 98.1 | |
| | B | 168 | 5 | 173 | | 97.1 | |
| | C | 137 | 3 | 140 | | 97.9 | |
| | D | 106 | 5 | 111 | | 95.5 | |
| | E | 120 | 4 | 124 | 100 | 96.8 | 97.1 |
| MC-166B | A | 88 | 13 | 101 | | 87.1 | |
| | B | 93 | 8 | 101 | | 92.1 | |
| | C | 105 | 15 | 120 | | 87.5 | |
| | D | 87 | 18 | 105 | | 82.9 | |
| | E | 122 | 23 | 145 | 100 | 84.1 | 86.7 |

**Table 2. Echinoderm Embryo-Larval Water Quality Results**
**Naval Air Facility on Midway Island CTO-136**

| Site | Dissolved Oxygen (mg/L) | | | | | pH (units) | | | | | Salinity (ppt) | | | | | Temperature (°C) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | hours | | | | | hours | | | | | hours | | | | | hours | | | | |
| | 0 | 24 | 48 | 72 | 96 | 0 | 24 | 48 | 72 | 96 | 0 | 24 | 48 | 72 | 96 | 0 | 24 | 48 | 72 | 96 |
| Control | 8.70 | 8.20 | 8.80 | 7.70 | 7.30 | 7.92 | 7.89 | 7.88 | 7.88 | 7.88 | 35 | 36 | 36 | 36 | 36 | 14.9 | 15.5 | 15.8 | 15.3 | 15.5 |
| MC-165 | 8.70 | 8.20 | 8.30 | 7.20 | 7.40 | 7.92 | 7.89 | 7.86 | 7.87 | 7.88 | 36 | 37 | 36 | 36 | 36 | 14.9 | 15.5 | 15.4 | 15.4 | 15.5 |
| MC-166A | 8.70 | 8.00 | 8.50 | 7.30 | 7.50 | 7.94 | 7.89 | 7.87 | 7.86 | 7.89 | 36 | 37 | 36 | 36 | 36 | 14.9 | 15.5 | 15.3 | 15.4 | 15.4 |
| MC-166B | 8.70 | 8.00 | 8.50 | 7.10 | 7.40 | 7.96 | 7.90 | 7.88 | 7.87 | 7.89 | 36 | 37 | 36 | 36 | 36 | 15.0 | 15.4 | 15.3 | 15.4 | 15.5 |

glass aquaria. The sand dollars were maintained at approximately 15°C during the transport and holding periods prior to test initiation and held in the laboratory for no more than one week.

Reference toxicant tests: In addition to sediment testing, a concurrent reference toxicant test was conducted. Nominal concentrations of 40, 20, 10, 5, and 2.5 µg/L copper chloride (as copper) were tested. A control consisting of untreated laboratory dilution water was also tested.

Sample Preparation: Five test replicates and one surrogate chamber for measuring water quality indicators without disturbing test animals were prepared for each sample. Twenty gram increments of each sample were weighed using an Ohaus balance and placed in the six replicate glass test chambers. The containers were then filled with 0.22µm-filtered laboratory seawater to 800 mL. Following a three hour settling period, basic water quality parameters were measured and recorded on data sheets.

Gamete Collection and Test Initiation: Male and female gametes were collected by injecting at least ten sand dollars with 0.50 mL of 0.5 M KCl. Spawning began immediately following injection. After distinguishing the sexes (males with white sperm, females with red eggs), each animal was placed upside down over a glass beaker containing 50 mL of filtered seawater. The sand dollars were allowed to spawn for 10 minutes. Following spawning, sperm from at least four males were combined into one solution and held at 15°C.

Eggs from at least four females were then collected and pooled in a glass beaker. The egg concentration of this solution was determined by adding 1 mL of egg suspension to a Sedgwick-Rafter counting chamber and counting it at 100X under a American Optics compound microscope. A diluted egg suspension was prepared from the stock to yield 25,000 eggs per mL.

The eggs in this suspension were then fertilized by adding sperm from the concentrated stock solution two mL increments while gently aerating to resuspend the eggs throughout the process. Fertilization success was monitored by periodically removing an aliquot of eggs to a counting chamber and making a direct visual count of percent fertilized eggs until 90 to 100 percent fertilization was obtained. The fertilized eggs were then carefully rinsed several times with filtered seawater to remove excess sperm. Test chambers are inoculated with one mL of this suspension. One mL was also added to each of three

laboratory blanks to establish the original number of embryos inoculated to each chamber, these test vials are immediately preserved with 1 mL of 5 percent buffered formalin. Water quality parameters are measured and recorded daily for the duration of the test.

Test termination and observation: The test was terminated approximately 96 hours following inoculation by pouring the contents of each test chamber through a 35 µm screen, rinsing the embryos into a 30-mL scintillation vial, and dispensing 1 mL of 5 percent buffered formalin to each vial. Following test termination, a subset of the embryos in each vial were visually inspected for normality. Embryos reaching the four-armed pluteus stage in 96 hours were evaluated as normal. Survival was based upon the number of normal embryos remaining at test termination divided by the average number of embryos contained in the three initiation blanks. Normality was defined as the number of normal embryos per replicate divided by the total number of embryos (normal and abnormal) observed.

Test acceptability: The acceptability criterion for test validity are expressed in the protocol as a minimum of 70 percent survival and 90 percent normality observed in the laboratory controls. Both data sets successfully met these acceptance criterion.

## RESULTS

### Sand Dollar Development

Survival and development results for Sites MC165, MC166A, and MC166B are contained in Table 1.

Average survival observed in the test sites was 100 percent. Average normality among control replicates was 94.8 percent. Sand dollar normality in the test sites ranged from 86.7 to 97.1 percent.

A reference toxicant test using copper chloride ($CuCl_2$) was conducted to assess the health of the test organisms. Control survival and normality was determined to be 100 and 94.7 percent, respectively. Point estimates were calculated using linear interpolation. The $LC_{50}$ was >40 µg/L $CuCl_2$ for survival data; the $EC_{50}$ was 26.3 µg/L $CuCl_2$ for development data.

Daily water quality measurements for each site and reference toxicant assay are outlined in Table 2 and Appendix A.

## REFERENCES

Puget Sound Estuary Program (PSEP). 1991. Recommended Guidlines for Conducting Laboratory Bioassays on Puget Sound Sediments. Interim Final Report. Prepared for the Puget Sound Estuary Program. U.S. Environmental Protection Agency, Seattle, Washington.

Tidepool Scientific Software, 1992-1994. TOXCALC Comprehensive Toxicity Data Analysis and Database Software, Version 5.0.

# Appendix A

## Reference Toxicant

## Test Data and Statistical Summaries

**Appendix Table A-1. Echinoderm Embryo-Larval Results**
**Reference Toxicant Survival and Development Results**
**Naval Air Facility on Midway Island CTO-136**

| $CuCl_2$ Concentration (ug/L) | Rep | Number Normal | Number Abnormal | Total Number | Average % Survival | Percent Normal | Average % Normal |
|---|---|---|---|---|---|---|---|
| Control | A | 111 | 6 | 117 | | 94.9 | |
| | B | 113 | 9 | 122 | | 92.6 | |
| | C | 130 | 4 | 134 | | 97.0 | |
| | D | 118 | 7 | 125 | 100 | 94.4 | 94.7 |
| 2.5 | A | 129 | 19 | 148 | | 87.2 | |
| | B | 134 | 7 | 141 | | 95.0 | |
| | C | 125 | 5 | 130 | | 96.2 | |
| | D | 150 | 9 | 159 | 100 | 94.3 | 93.2 |
| 5 | A | 127 | 21 | 148 | | 85.8 | |
| | B | 129 | 7 | 136 | | 94.9 | |
| | C | 133 | 6 | 139 | | 95.7 | |
| | D | 148 | 8 | 156 | 100 | 94.9 | 92.8 |
| 10 | A | 90 | 11 | 101 | | 89.1 | |
| | B | 123 | 11 | 134 | | 91.8 | |
| | C | 104 | 16 | 120 | | 86.7 | |
| | D | 113 | 12 | 125 | 100 | 90.4 | 89.5 |
| 20 | A | 66 | 47 | 113 | | 58.4 | |
| | B | 68 | 40 | 108 | | 63.0 | |
| | C | 83 | 18 | 101 | | 82.2 | |
| | D | 73 | 27 | 100 | 100 | 73.0 | 69.1 |
| 40 | A | 0 | 115 | 115 | | 0.0 | |
| | B | 0 | 106 | 106 | | 0.0 | |
| | C | 0 | 104 | 104 | | 0.0 | |
| | D | 0 | 109 | 109 | 100 | 0.0 | 0.0 |

**Appendix Table A-2. Echinoderm Embryo-Larval Development**
**Reference Toxicant Water Quality**
**Naval Air Facility on Midway Island CTO-136**

| $CuCl_2$ Conc. (ug/L) | Dissolved $O_2$ (mg/L) | | | | | pH (units) | | | | | Salinity (ppt) | | | | | Temperature (°C) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 24 | 48 | 72 | 96 | 0 | 24 | 48 | 72 | 96 | 0 | 24 | 48 | 72 | 96 | 0 | 24 | 48 | 72 | 96 |
| Control | 8.5 | 8.2 | 8.8 | 7.7 | 7.9 | 7.90 | 7.86 | 7.86 | 7.87 | 7.91 | 36 | 35 | 36 | 37 | 37 | 15.0 | 15.5 | 15.7 | 15.3 | 15.3 |
| 2.5 | 8.7 | 8.2 | 8.8 | 7.7 | 7.9 | 7.90 | 7.87 | 7.87 | 7.88 | 7.93 | 36 | 36 | 36 | 37 | 37 | 14.6 | 15.2 | 15.3 | 15.2 | 15.1 |
| 5 | 8.7 | 8.2 | 8.9 | 7.5 | 8.1 | 7.91 | 7.87 | 7.87 | 7.89 | 7.94 | 36 | 37 | 37 | 37 | 37 | 14.6 | 15.1 | 15.2 | 15.2 | 15.1 |
| 10 | 8.7 | 8.2 | 8.9 | 7.7 | 8.0 | 7.92 | 7.87 | 7.88 | 7.89 | 7.94 | 36 | 37 | 37 | 36 | 37 | 14.6 | 15.1 | 15.2 | 15.2 | 15.1 |
| 20 | 8.7 | 8.2 | 8.9 | 7.8 | 8.1 | 7.91 | 7.87 | 7.87 | 7.89 | 7.94 | 36 | 37 | 37 | 36 | 37 | 14.7 | 15.1 | 15.2 | 15.1 | 15.1 |
| 40 | 8.6 | 8.2 | 8.9 | 7.8 | 8.1 | 7.90 | 7.87 | 7.87 | 7.89 | 7.94 | 36 | 37 | 37 | 36 | 37 | 14.8 | 15.0 | 15.1 | 15.0 | 15.0 |

## Echinoderm Larval Survival and Development Test-Proportion Normal

| | | | | | |
|---|---|---|---|---|---|
| Start Date: | 9/19/96 | Test ID: | 9609DEDEV | Sample ID: | REF-Ref Toxicant |
| End Date: | 9/23/96 | Lab ID: | CAOEE-Ogden Bioassay | Sample Type: | CUCL-Copper chloride |
| Sample Date: | | Protocol: | PSEP 1991 | Test Species: | DE-Dendaster excentricus |
| Comments: | Reference Toxicant for Midway CTO136 | | | | |

| Conc-ug/L | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| L-Lab Control | 0.9487 | 0.9262 | 0.9701 | 0.9440 |
| 2.5 | 0.8716 | 0.9504 | 0.9615 | 0.9434 |
| 5 | 0.8581 | 0.9485 | 0.9568 | 0.9487 |
| 10 | 0.8911 | 0.9179 | 0.8667 | 0.9040 |
| 20 | 0.5841 | 0.6296 | 0.8218 | 0.7300 |
| 40 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

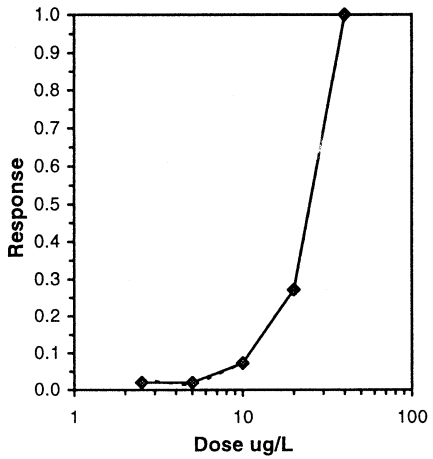
| | | | Transform: Arcsin Square Root | | | | | | 1-Tailed | | Isotonic | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conc-ug/L | Mean | N-Mean | Mean | Min | Max | CV% | N | t-Stat | Critical | MSD | Mean | N-Mean |
| L-Lab Control | 0.9473 | 1.0000 | 1.3418 | 1.2957 | 1.3972 | 3.128 | 4 | | | | 0.9438 | 1.0000 |
| 2.5 | 0.9317 | 0.9836 | 1.3136 | 1.2044 | 1.3734 | 5.706 | 4 | 0.519 | 2.360 | 0.1280 | 0.9248 | 0.9799 |
| 5 | 0.9280 | 0.9797 | 1.3076 | 1.1846 | 1.3615 | 6.311 | 4 | 0.630 | 2.360 | 0.1280 | 0.9248 | 0.9799 |
| 10 | 0.8949 | 0.9447 | 1.2419 | 1.1970 | 1.2802 | 2.840 | 4 | 1.842 | 2.360 | 0.1280 | 0.8750 | 0.9271 |
| *20 | 0.6914 | 0.7299 | 0.9864 | 0.8699 | 1.1350 | 11.992 | 4 | 6.551 | 2.360 | 0.1280 | 0.6872 | 0.7281 |
| 40 | 0.0000 | 0.0000 | 0.1525 | 0.1480 | 0.1557 | 2.193 | 4 | | | | 0.0000 | 0.0000 |

| Auxiliary Tests | Statistic | Critical | Skew | Kurt |
|---|---|---|---|---|
| Shapiro-Wilk's Test indicates normal distribution (p > 0.01) | 0.93556 | 0.868 | -0.2268 | 0.18958 |
| Bartlett's Test indicates equal variances (p = 0.31) | 4.7516 | 13.2767 | | |

| Hypothesis Test (1-tail, 0.05) | NOEC | LOEC | ChV | TU | MSDu | MSDp | MSB | MSE | F-Prob | df |
|---|---|---|---|---|---|---|---|---|---|---|
| Dunnett's Test | 10 | 20 | 14.1421 | | 0.07061 | 0.07445 | 0.08463 | 0.00589 | 5.1E-05 | 4, 15 |

### Linear Interpolation (80 Resamples)

| Point | ug/L | SD | 95% CL(Exp) | | Skew |
|---|---|---|---|---|---|
| IC05 | 7.833 | 1.931 | 2.730 | 12.450 | -1.1708 |
| IC10 | 11.363 | 0.664 | 11.202 | 15.297 | 0.8083 |
| IC15 | 13.876 | 1.342 | 12.692 | 21.319 | 1.2921 |
| IC20 | 16.389 | 1.684 | 14.179 | 23.463 | 0.7565 |
| IC25 | 18.902 | 1.566 | 15.502 | 23.875 | 0.0992 |
| IC40 | 23.520 | 1.095 | 20.477 | 26.861 | 0.0122 |
| IC50 | 26.266 | 0.912 | 23.731 | 29.051 | 0.0122 |





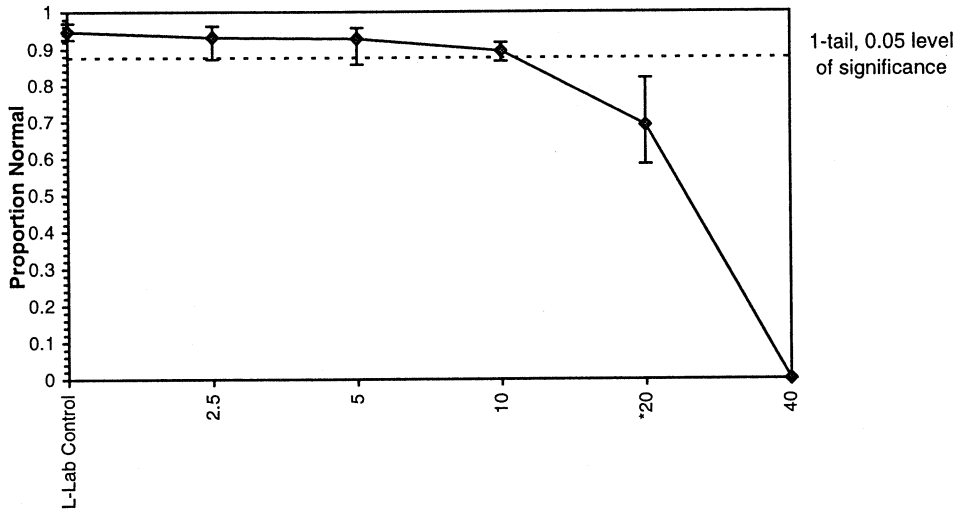

ToxCalc v5.0

Reviewed by: MS

## Echinoderm Larval Survival and Development Test-Proportion Normal

| | | | | | |
|---|---|---|---|---|---|
| Start Date: | 9/19/96 | Test ID: | 9609DEDEV | Sample ID: | REF-Ref Toxicant |
| End Date: | 9/23/96 | Lab ID: | CAOEE-Ogden Bioassay | Sample Type: | CUCL-Copper chloride |
| Sample Date: | | Protocol: | PSEP 1991 | Test Species: | DE-Dendaster excentricus |
| Comments: | Reference Toxicant for Midway CTO136 | | | | |

### Dose-Response Plot






ToxCalc v5.0

Reviewed by:

## Echinoderm Larval Survival and Development Test-Proportion Alive

| | | | | | |
|---|---|---|---|---|---|
| Start Date: | 9/19/96 | Test ID: | 9609DEDEV | Sample ID: | REF-Ref Toxicant |
| End Date: | 9/23/96 | Lab ID: | CAOEE-Ogden Bioassay | Sample Type: | CUCL-Copper chloride |
| Sample Date: | | Protocol: | PSEP 1991 | Test Species: | DE-Dendaster excentricus |
| Comments: | Reference Toxicant for Midway CTO136 | | | | |

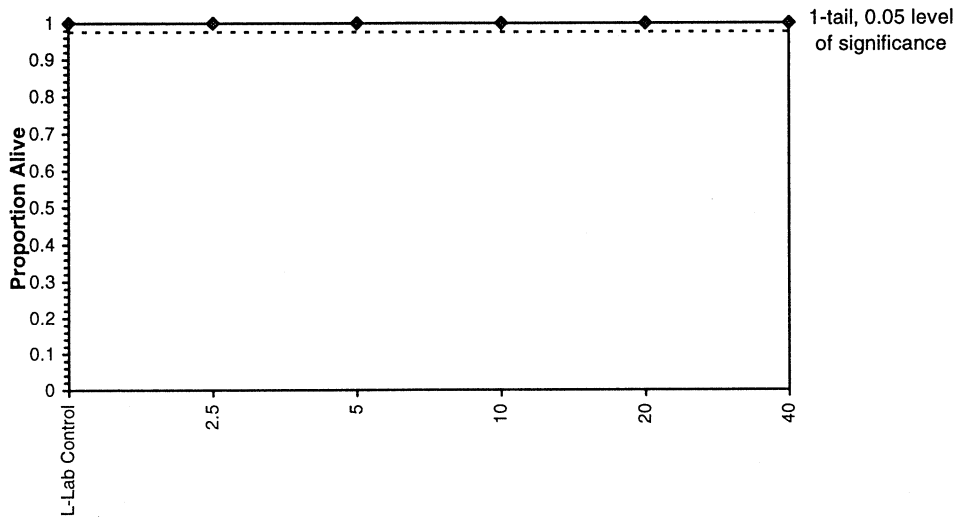
| Conc-ug/L | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| L-Lab Control | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 2.5 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 5 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 20 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 40 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

| | | | Transform: Arcsin Square Root | | | | | | 1-Tailed | |
|---|---|---|---|---|---|---|---|---|---|---|
| Conc-ug/L | Mean | N-Mean | Mean | Min | Max | CV% | N | t-Stat | Critical | MSD |
| L-Lab Control | 1.0000 | 1.0000 | 1.3718 | 1.3718 | 1.3718 | 0.000 | 4 | | | |
| 2.5 | 1.0000 | 1.0000 | 1.3718 | 1.3718 | 1.3718 | 0.000 | 4 | 0.000 | 2.410 | 0.0539 |
| 5 | 1.0000 | 1.0000 | 1.3718 | 1.3718 | 1.3718 | 0.000 | 4 | 0.000 | 2.410 | 0.0539 |
| 10 | 1.0000 | 1.0000 | 1.3718 | 1.3718 | 1.3718 | 0.000 | 4 | 0.000 | 2.410 | 0.0539 |
| 20 | 1.0000 | 1.0000 | 1.3718 | 1.3718 | 1.3718 | 0.000 | 4 | 0.000 | 2.410 | 0.0539 |
| 40 | 1.0000 | 1.0000 | 1.3718 | 1.3718 | 1.3718 | 0.000 | 4 | 0.000 | 2.410 | 0.0539 |

| Auxiliary Tests | Statistic | Critical | Skew | Kurt |
|---|---|---|---|---|
| Shapiro-Wilk's Test indicates normal distribution (p > 0.01) | 1 | 0.884 | | |
| Equality of variance cannot be confirmed | | | | |

| Hypothesis Test (1-tail, 0.05) | NOEC | LOEC | ChV | TU | MSDu | MSDp | MSB | MSE | F-Prob | df |
|---|---|---|---|---|---|---|---|---|---|---|
| Dunnett's Test | 40 | >40 | | | 0.02352 | 0.02447 | 0 | 0.001 | 1 | 5, 18 |

### Dose-Response Plot






ToxCalc v5.0

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# Appendix H

# APPENDIX H - TOXICITY PROFILES

Appendix H is a report of the toxicity profiles for contaminants of potential ecological concern.

## 1.0 POLYCHLORINATED BIPHENYLS (PCBs)

### 1.1 Physicochemical Properties

Polychlorinated biphenyls (PCBs) are multi-substituted chlorinated aromatic hydrocarbons with a possible 209 isomers. Earlier toxicological studies focused on biological effects of PCB mixtures, such as the Aroclors or their European counterparts (Clophens). More recently the analytical emphasis has been shifted away from PCB mixtures and toward individual congeners, due to the recognized differential in both accumulation and toxicity based on chlorine substitution patterns of the individual compounds. The structural features of PCB congeners enable determination of structure-activity relationships for relative toxicological activity, environmental occurrence, and persistence. Toxicological and pharmacokinetic properties of PCBs are based on their isomeric configurations. Non- and mono-ortho substituted biphenyls which are substituted at the meta and para positions are coplanar and tend to have greater biological activity than lesser substituted congeners or those with more than one substituted ortho position (nonplanar).

### 1.2 Environmental Distribution

PCBs are lipophilic and as a result tend to associate with benthic and suspended sediments, phytoplankton and zooplankton, and natural surface oil films. Assimilation of PCBs into aquatic and terrestrial food chains generally begins at this level as they are incidentally ingested by fish and invertebrates, or taken up by aquatic plants and algae. Exposure of a particular organism to PCBs is related to the chemical fate and environmental compartmentalization of the compounds, as well as to the trophic level or niche of the organism. PCBs are currently recognized as ubiquitous in marine, estuarine and freshwater food chains, with the highest biological concentrations occurring in fish-eating aquatic seabirds and marine mammals. PCBs are generally not subject to chemical

transformation processes (i.e. oxidation and hydrolysis) in aqueous media, such that natural degradation in the aqueous environment is from limited photolysis and biodegradation. Chemical half-lives of PCBs in this media tend to be on the order of months to years.

## 1.3 Ecotoxicological Effects

### 1.3.1 General Toxicology

PCBs are generally present as complex mixtures in association with other organochlorine compounds, including the dioxins (PCDD and PCDF), DDT and DDE. Much attention has been given to dioxin exposure effects in wildlife during the past decade. However, in recent years it has become apparent that many dioxin-like effects can be attributed to specific coplanar PCB congeners which mimic the biochemical activity of dioxins. Many toxic effects of both PCBs and dioxins are mediated through the cytosolic aryl hydrocarbon (Ah) receptor. These effects include induction of hepatic monooxegenase (detoxification) enzymes, reproductive and immunological toxicity, dermal disorders, hepatomegaly, reduced body weight gain and, in birds, chick edema syndrome. Non-planar PCB congeners cause toxic effects which are different from Ah-mediated effects. These include induction of certain hepatic enzymes, hypovitaminosis A, hypothyroidism, and neurotoxic and carcinogenic effects. In conjunction with coplanar PCB congeners and/or dioxins, these congeners may cause various additive or mixed toxic responses.

One approach toward assessing toxic exposures of PCB mixtures to wildlife is to calculate Toxicity Equivalency Factors (TEFs) to specific PCB congeners. TEFs quantify the toxicity of a congener as a fraction equivalent of the known toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD), yielding standardized TCDD-based toxicity values (TCDD-eq). Safe (1990) has reported TEFs for non-, mono- and di-ortho substituted PCBs, which were derived by standardized hepatic microsome enzyme induction assays. Toxic effects to wildlife appear to be correlated more with total toxicity equivalents than with absolute PCB concentrations. Giesy et al. (1994) propose the use of TEF values to determine levels of acceptable risk toward the protection of wildlife and human health.

### 1.3.2 Aquatic Invertebrates and Fish

Trace concentrations of persistent PCBs are detected globally in fish and invertebrates from major rivers and the oceans. Dispersal of contaminated sediments, atmospheric and ongoing use and deposition all contribute to the ubiquity of PCBs in aquatic organisms (Eisler, 1986). Crustacean and insect larvae play important roles in the cycling and transport of PCBs in aquatic systems. Larvae transport PCBs from one compartment to another through ingestion and egestion processes, and diurnal vertical migration. Larvae are also a significant route of entry into the food chain as prey items for fish and other invertebrates (Eisler 1986, and references within).

Diet is the principle route of PCB uptake and assimilation in fish, and absorption from water is minor or negligible. However, some species-specific differences have been reported regarding the proportional contribution of these routes to total body burden. For example, uptake from water is a major route of ingestion for the coho salmon and food consumption is the major route of uptake in lake trout and flounder (Grieg et al. 1983; Rohrer et al. 1982). Elevated levels of total PCBs in fish gonad tissue and eggs were suggested to be responsible for reproductive impairment or failure in several species, including striped bass, rainbow trout, flounder and Atlantic salmon (Eisler, 1986, and references within).

Due to the lipophilic properties of PCBs, they bioaccumulate in fat and fatty tissues of aquatic organisms to levels four to five orders of magnitude of PCB levels in water. Differences in the magnitude of PCB bioaccumulation among fishes may be due to diet, temperature variation, molecular composition of body lipids and metabolic state (Eisler, 1986, and references within). PCB persistence is a reflection of the extent of metabolic activity. Rates of PCB metabolism appear to occur on a congener-specific basis, such that accumulated PCB profiles in fish tissues are frequently different from the source profile (Boon et al. 1984; Bright, et al. 1995).

Toxicity Reference Values (TRV) for Aroclor-1254 and -1260 are the National Ambient Water Quality Criteria (NAWQC) derived by USEPA for the protection of wildlife (Suter et al. 1992)(Table 21-1). The NAWQC represents ambient CPEC levels in water which result in no adverse impacts on wildlife that consume, feed from, contact, or otherwise

interact with waters of an aquatic system (USEPA 1986). In the absence of applicable dose-response data for representative prey species, and in recognition of the potential variation in toxicological response to PCB exposure by different marine organisms, the NAWQC was selected as a TRV in order to establish a conservative threshold for PCB exposure levels. The TRV for individual PCB congeners in aquatic organisms were adopted from the National Ambient Water Quality Criteria for Aroclor-1248 since this level (2.0e-07 mg/L) represents a more conservative toxicity threshold than Aroclors-1260 or 1254 (1.1e-04 mg/L and 2.0e-05 mg/L, respectively).

### 1.3.3 Amphibians and Reptiles

There is a paucity of information on the presence and effects of PCBs in marine or aquatic reptiles.

#### 1.3.3.1 Exposure and Metabolism

PCB exposure for the reptile target receptor (green turtle) is probably through dietary intake. The diet of the green turtle consists mainly of sea grasses and algae. There is no available data on PCB accumulation in sea grasses, and it has been suggested that low PCB concentrations in tissues of green turtle yearlings reflect low concentrations in plant tissues (McKim and Johnson 1983). BCF values of 2,100 were calculated for tri-substituted PCBs and 10,750 for Arochlor-1254 in an aquatic vascular plant species, demonstrating the occurrence of PCB bioaccumulation. PCB sorption on macroalgal surfaces and partitioning into algal lipids have been cited as routes of introduction into the aquatic food chain (Rohrer et al. 1982).

There is currently very little information and other reptiles. Presently there is no literature available on biological activity of organochlorines in turtles, or the presence of an Ah receptor protein which would give some indication of the sensitivity reptiles may have for the persistent coplanar PCBs. Efforts to detect Ah receptors in amphibians have been inconclusive (USEPA 1993).

### 1.3.3.2 Ecotoxicological Effects

There are no available reports on adverse effects from acute PCB exposure to green turtles or turtles of any other species. Hepatic mixed function oxidase (MFO) enzyme induction was reported in Marsh turtles (*Mauremys caspica rivulata*) after a series of Aroclor-1254 injections, but this effect was not accompanied by any observable toxicological responses (Yawetz et al. 1993).

Some studies addressing PCB toxicity in turtles involve tissue disposition analysis of the terrestrial snapping turtles as an ecotoxicological screen (Olafsson et al. 1983; Bryan, et al. 1987a, b). Adipose tissue levels of PCBs as high as 300 mg/kg which were observed in both snapping turtles and marsh turtles did not have apparent toxic effects on either individual condition or reproductive success (Bryan et al. 1987a; Yawetz et al. 1993). However, PCB levels of 57-62 mg/kg in snapping turtle adipose tissue were reported by Bishop et al., (1991) to be associated with decreased hatching success and developmental impairments in newborn turtles. Bryan et al., (1987a), reported that snapping turtles from a contaminated area bioaccumulated mono-substituted PCBs to levels 2-3 orders of magnitude higher than in specimens from clean areas. They suggested the ability of turtles to store and sequester high concentrations of PCBs in adipose fat protects them from adverse toxic effects.

Concentrations of several individual PCB isomers were quantified in liver and fat tissues of the Kemp's Ridley sea turtle (Lake et al. 1994). Measured levels of total PCBs were as high as 0.73 mg/kg in liver and 1.25 mg/kg in fat tissue. These levels were considerably lower than those reported by Bishop et al. (1991) to be associated with reproductive impairment in snapping turtles. Postyearlings of the Atlantic green turtle and loggerhead turtle were analyzed for total PCB levels in muscle and liver tissue (McKim and Johnson, 1983). Neither turtle exhibited high levels of PCBs in their tissues. Their herbivorous (green turtle) and omnivorous (loggerhead) diets were cited as probable explanations for the lack of PCB accumulation.

### 1.3.4 Birds

Only a few published reports detail organochlorine contamination in sea birds of the Northwestern Hawaiian Islands (Fisher 1973; Ohlendorf and Harrison 1986; Ryan et al. 1988). However, there are ample reports of PCB assimilation, body burdens, and effects in populations of phylogenetically and ecologically similar birds.

#### 1.3.4.1 Exposure and Metabolism

PCB exposure to seabird target receptor species is primarily through ingestion of contaminated prey items. PCBs typically accumulate in lower trophic level aquatic organisms, such as crustaceans, mollusks and fish, which constitute the prey base for high-level consumers. PCB levels in organisms at the apex of the marine food chain with diets consisting of these prey items have been reported to be three to six orders of magnitude greater than ambient (i.e. plankton and sediment) PCB levels (Borlakoglu and Dils 1990), indicating the high biomagnification potential of these compounds. Seabirds and marine mammals occupy the trophic apex of the marine food chain and thus, through prey ingestion, accumulate high levels of PCBs in their muscle and fatty tissues. To a much lesser extent, birds may be exposed to PCBs through incidental ingestion of contaminated soil. Birds may also be exposed to localized contaminated soils through burrowing, foraging, and nesting behavior.

Bioaccumulation of PCBs through the food chain varies depending on both chemical- and species-specific characteristics. Five sea bird species demonstrated 9-10 fold interspecific differences in enrichment factors for some persistent PCB congeners (Borlakoglu et al. 1990abc). Yamashita et al. (1992a) concluded from comparative PCB assays in cormorant and Caspian tern eggs taken from the same area that cormorants have greater metabolic capacity to denature PCBs and other organochlorines. Residual planar PCB levels and differences in the relative capacities for enzyme induction between the black-headed sea gull and the black-tailed sea gull suggested species-specific differences associated with the ability to metabolize PCBs (Yamashita et al. 1992b).

### 1.3.4.2 Ecotoxicological Effects

Due to the complexities of environmental interactions on the fate and metabolism of contaminant mixtures, it is difficult to use the results of laboratory dose-response studies to predict acute (and chronic) exposures in natural conditions. $LD_{50}$ values of 460 and 750 pg/g TCDD-eq units were reported in laboratory studies of the adult cormorant and Caspian tern embryo, respectively (Giesy et al. 1994). Brain tissue PCB levels of 310 ppm were reported in corpses of ring-billed gulls whose death was attributed to organochlorine toxicity (Sileo et al. 1977). Relatively high total PCB levels of 480 ppm were reported in breast muscle of sea eagle corpses whose cause of death was unknown (Falandysz et al. 1994).

Much of the recent work has generally focused on reproductive success of birds and bird colonies with long-term exposure to contaminants. Studies of reproductive impairment in correlation with residue levels in eggs and hatchlings of the Forster's tern identified multiple PCB congeners, in addition to dioxins and insecticides (Kubiak et al. 1989; Harris et al. 1993). It was determined from these studies that the great majority of toxic effects was attributed to two planar PCB congeners (PCB 126 and 105). Similar findings were reported in a study on embryotoxicity of the double-crested cormorant and the Caspian tern from the Great Lakes Region in which Ah-mediated effects (enzyme induction, increased liver weight, low birth weight and chick edema) were observed in embryos in association with high levels of non- and mono-ortho substituted PCBs (Yamashita et al. 1992a). In addition to these observable intrinsic impairments, extrinsic effects involving parental inattentiveness are reported to be associated with elevated levels of PCBs. More frequent incidences of negligent parental care and egg abandonment were observed in Forster's terns (Kubiak et al. 1989) and herring gulls (Fox et al. 1978) when eggs contained high levels of PCBs, suggesting corresponding high levels in tissues of adults may be responsible for aberrant parental behavior.

### 1.3.5 Marine Mammals

Recent studies have addressed ecotoxicological effects associated with increasing levels of PCB and other organochlorines in marine mammal tissues. Kannan et al. (1989) reported that there is an increasing threat of PCB toxicity from terrestrial to aquatic environments

as a result of transport and distribution processes which favor PCB dispersion in aquatic systems. Carnivorous marine mammals are thought to be particularly susceptible to uptake and accumulation, and therefore toxicity, of PCBs. Currently, PCB concentrations in carnivorous marine mammals are reported to be in ranges where they may be contributing to observed decreases in populations (Kannan et al. 1989; Storr-Hansen and Spliid 1993a).

### 1.3.5.1 Exposure and Metabolism

Exposure of PCBs to marine mammals is primarily through ingestion of contaminated prey items such as crustaceans, mollusks and fish. PCBs tend to biomagnify to higher levels in tissues of seals and delphinids than in any other mammal (or bird) at the apex of the marine food chain. Seal diets consist of fish, crustaceans and shellfish, and PCB compounds accumulated in fatty tissues of this prey base will continue to accumulate and biomagnify in seal tissues. Seals may also be exposed to contaminated soils during haul-out periods, or they may be exposed to contaminated sediments while foraging and hunting. Both of these exposure routes are likely to be of much less significance than direct consumption.

Recent studies addressing specific congener identification and TCDD-eq toxicity characterization demonstrate that significant levels of both coplanar and nonplanar PCBs are deposited in fat and organ tissues of harbour seals (Bernhoft and Skaare 1994; Haraguchi et al. 1992; Hong et al. 1993; Storr-Hansen and Spliid, 1993ab), ringed seals (Daelemans et al. 1993) and grey seals (Haraguchi et al. 1992). As with aquatic avian species, causal relationships of PCB effects on seal populations are rooted in biological activity at the organismal and cellular levels. Biological effects associated with PCB toxicity observed in mammalian (mostly terrestrial species) laboratory studies, appear to be Ah-mediated symptoms characteristic of coplanar PCB congeners. Some of these effects have been noted in individuals of impacted harbour seal populations possibly exposed to high levels of PCBs (Reijnders 1986).

### 1.3.5.2 Ecotoxicological Effects

There were no reports available on the acute effects of PCB ingestion in seals. Reported $LD_{50}$ values for Arochlor mixtures have been reported in mink to range from 750 to 4,000 mg/kg (Eisler 1986). Environmental exposure of PCBs to seals typically results from long-term, low-level accumulation through the food chain. Thus, acute effects extrapolations from laboratory mammal studies are probably not accurate reflections of acute responses to PCB exposure to seals in the aquatic environment.

Reproductive failure was reported in harbor seals as a result of ingesting fish contaminated with PCBs over a two-year period (Reijnders 1986). It was determined that reproductive failure was not due to diminished hormone levels or activity and occurs post-ovulatory; however, the actual mechanism was not defined. Other studies with seals have identified PCB mixtures as causative factors in pathological changes in the uterine system, vitaminosis A, thyroid hormone deficiency, hepatic MFO enzyme induction, and reduced resistance to microbial infections (Bernhoft and Skaare 1994).

Declines in common seal populations of the Dutch Wadden Sea due to reproductive failure were conclusively attributed to PCB ingestion from contaminated fish. Populations from a reference area were exposed to significantly lower PCB levels from their food sources and did not undergo a decline in size (Reijnders 1986). Dead or moribund seals found during a viral epidemic in England were found to have higher than average PCB levels in blubber tissues. Although death was not attributed to chemical toxicity, it suggests possible increased susceptibility to diseases (immunosuppression), which in turn will have adverse population effects (Bernhoft and Skaare 1994).

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# 2.0 ORGANOCHLORINE PESTICIDES (OCPs)

## 2.1 Chemical Categories

There are five chemical groupings of organochlorine pesticides (OCP) based on molecular structure. These groupings are notably different from each other structurally, so it is difficult to generalize physicochemical effects and toxicity of OCPs as a chemical species. Four of the chemical groupings are relevant to this assessment: (1) DDT and its analogs or metabolites; (2) benzene hexachlorides (BHCs); (3) cyclodienes (chlordanes, endosulfans, endrin, etc.); and (4) caged structures (mirex and photomirex).

## 2.2 Environmental Distribution

Depending on the chemical nature of the OCP, organismal exposure can be through ingestion, dermal, or respiratory routes. These compounds are lipophilic and tend to sequester or accumulate in the lipid fraction of tissues and organs. Persistence and metabolism of OCPs vary widely from species to species. While some pesticides are quick to metabolize once taken up by an organism, their metabolites may be both persistent and toxic. Examples include heptachlor and aldrin, and their metabolites heptachlor epoxide and dieldrin. Pesticide compounds which do not metabolize rapidly tend to the bioaccumulate to high levels. Fish-eating birds (herring gull and brown pelican) have been reported to have tissue and egg OCP levels of 30 to 100 times that of prey items (Blus et al. 1977).

## 2.3 Ecotoxicological Effects

### 2.3.1 General Toxicology

OCPs are neurotoxic agents, affecting either the ion permeability of the axon or mimicing binding substrates of nerve receptors (Matsumura 1985). As with other organochlorines, some OCPs induce hepatic mixed function oxidase enzyme activity. The extent of induction and metabolic efficiency of the liver varies from species to species, affecting both persistence and toxic effects of the compounds. OCPs including DDT analogs and the cyclodienes affect hormonal activity in test animals. The breakdown by DDT and DDE of sex hormones which mobilize calcium is the mechanism responsible for eggshell thinning in wild bird populations (Peakall 1967). Other reported adverse effects involve thyroid and adrenal function, immunosuppression, and pathological hepatic conditions (Blus 1995; Dikshith 1991).

**DDT and Analogs (DDE, DDD and methoxyclor):** DDT is transformed through microbial and enzymatic pathways in animal tissues to toxic metabolites, with the capacity for transformation varying from species to species (Dikshith 1991). At high acute and chronic doses, DDT is a potent neurotoxin and has been implicated in population die-offs of wildlife, most notably in birds. (Blus 1995 and citations within). DDT effects have been implicated in overall reproductive failure in many species of fish-eating and raptorial birds, including the double-crested cormorant, osprey, bald eagle, brown pelican, common loon and many others (Blus 1995 and citations within). It is widely held that DDT burdens are accumulated in tissues of birds and other wildlife through ingestion of contaminated prey.

### 2.3.1.2 Benzene hexachloride (BHC)

BHC, more commonly known as hexachlorocyclohexane (HCH), is an organochlorine compound with a cyclic chair-conformation. The three isomers of interest are alpha-, beta- and gamma-BHC (lindane). Compared to DDT, BHC is less persistent in the body because it is rapidly metabolized to excretable metabolites, and therefore represents less of a biological hazard. BHC has a relatively short half-life in tissues and eggs compared to other organochlorine pesticides (Cummings et al. 1966). To date, BHC (lindane) has not been implicated in any population declines, and it has been reported that residues do not readily bioaccumulate in the food chain (Blus et al. 1985). In high concentration applications, however, lindane has been demonstrated to increase embryonic mortality and eggshell thinning in birds (Sauter and Steele 1972).

**Cyclodienes:** The cyclodienes of interest include chlordane, heptachlor, trans-nonachlor, aldrin, dieldrin, endrin and endosulfan. Some of the compounds are rapidly metabolized to isomers which become the toxic agent. Aldrin is metabolized to dieldrin, endrin is a metabolite of isodrin, and heptachlor is metabolized to heptachlor epoxide.

Aldrin and dieldrin are highly toxic and have been implicated in incidental wildlife mortality related to agricultural application. These include adults and eggs of ring-necked pheasants, bald eagles, golden eagles, pelicans, herons, falcons and various terrestrial mammals, including bats (Blus 1995 and citations within). Population declines associated with aldrin and dieldrin exposure have often been related to adult die-off, rather than reproductive failure. Chronic dieldrin exposure results in induced hepatic MFO enzyme activity, hepatomegaly and other hepatotoxic effects (Dikshith 1991).

Endrin is considered the most acutely toxic organochlorine pesticide. Levels of endrin in brains of pelicans whose death was attributed to endrin toxicity were approximately 8 ppm. Endrin toxicity has been implicated in the deaths of other terrestrial mammalian and avian species in relation to agricultural applications. The chemical is rapidly degraded and dissipated in nature, so incidents of wildlife mortality have quickly declined after discontinued usage.

Heptachlor was once a widely used pesticide which was gradually phased out in the early 1980's. As with other cyclodienes, it has been implicated in the deaths of terrestrial birds and mammals in relation to agricultural applications, and it has been demonstrated to biomagnify through the food chain particularly in tissues of carnivorous mammals and birds (Henny et al. 1983; Blackmore 1963).

**Mirex and photomirex:** Mirex has been used as an insecticide to replace the banned pesticides dieldrin and heptachlor. Mirex has also been used as an industrial fire retardant. Photomirex is a natural degradation product of the mirex parent compound. Mirex has been reported to bioaccumulate in systems of mammal and bird wildlife species (Eisler, 1985). Mirex metabolism is only partial in animal systems, and as a result is implicated in chronic adverse effects in wildlife. It accumulates as a parent compound in fat, muscle, liver and kidney. Chronic exposure to mirex results in hepatomegaly and hepatobiliary misfunction. Acute exposure results in fatty buildup and glycogen depletion in the liver. It has also been demonstrated to produce morphological changes in the thyroid gland (Dikshith, 1991).

### 2.3.2 Aquatic Invertebrates and Fish

Organoclorine pesticides are lipophilic and tend to accumulate in the lipid fraction of tissues and organs of aquatic organisms. Bioconcentration of organochlorine pesticides in tissues of aquatic organisms is reported to be in the range of five to six orders of magnitude greater than ambient water concentrations (Blus, 1995 and references within). Some evidence suggests food intake is not the primary source of OCP body burden in aquatic invertebrates and in some fish, as it is in higher trophic consumers and in terrestrial organisms (Moriarity, 1990).

Some OCPs bioaccumulate not as the parent compound in animal tissues, but as metabolites or natural degradation products. However, metabolites are generally as toxic, or nearly as toxic, as the parent compound. DDT accumulates rapidly in tissues of invertebrates, up to thousands of times of ambient exposure levels, and is metabolized to DDE. $LC_{50}$ values for DDT have been reported to range from 0.2 to 7.4 ug/L in various test invertebrates including insects (larvae), amphipods, decapods, isopods, shrimp and crayfish (Johnson and Finley, 1980). DDT $LC_{50}$ values for various sportfish (bass, trout,

pike, catfish, bluegill, perch) were reported to range from 1.5 to 21.5 ug/L. By contrast DDE $LC_{50}$s in sportfish have been reported to range from 32-240 ug/L.

The cyclodiene compounds generally demonstrate greater toxicity to aquatic organisms than other OCP compound classes. LC50 values for endrin, perhaps the most toxic of all OCPs, was reported to range from 0.2 to 5 ug/L in most invertebrate test organisms. $LC_{50}$ values for sportfish were reported to be 0.15 to 1.1 ug/L. Bioaccumulation of endrin in fish was reported to be 400 to 2,000 times as high as ambient water concentrations (Johnson and Finley 1980). Dieldrin is also toxic to fish in low ambient water concentrations. $LC_{50}$ values for sportfish generally ranged from 1.2 to 11 ug/L. Some test invertebrates (daphnids, amphipods, crayfish) were comparatively resistant to dieldrin toxicity, with reported $LC_{50}$s ranging from 240 to 740 ug/L (Johnson and Finley et al. 1980). Invertebrates were reported to bioconcentrate dieldrin to levels two to three orders of magnitude of ambient water concentrations. Invertebrate test species were not as sensitive to aldrin as they are to the other highly toxic cyclodienes. Reported $LC_{50}$ values ranged from 18 to 50 ug/L for daphnids and shrimp, but were as high as 4,300 for amphipods. Insect larvae (midge and mayfly) and daphnids were reported to bioconcentrate low concentration of aldrin (16 ug/L) 23,000 and 100,000 times ambient levels (Johnson and Finley 1980). Aldrin toxicity to fish was approximately on the same order as for dieldrin, with reported $LC_{50}$s in sportfish ranging from 2.6 to 14.3 ug/L.

Mirex does not present a toxic threat to fishes and invertebrates to the same degree as the cyclodienes and DDT. Aquatic organisms are comparatively resistant to acute or short term mirex toxicity. $LC_{50}$ values were not obtained at concentrations less than 1,000 for invertebrates (daphnids, amphipods and insects) and 100,000 for sportfish (perch, trout and bluegill) (Johnson and Finley 1980). Mirex toxicity is generally from to chronic exposure since it is only partly metabolized and not rapidly eliminated (Norstrom et al. 1978). Invertebrates and fish have been reported to bioconcentrate mirex two to four orders of magnitude of the ambient water concentrations (Eisler 1985 and references within).

Toxicity Reference Values (TRV) for the organochlorine pesticides are National Ambient Water Quality Criteria (NAWQC) derived by USEPA for the protection of wildlife (Suter et al. 1992; USEPA 1986)(Table 21-1). The NAWQC represents ambient CPEC levels in

water which result in no adverse impacts on wildlife which consume, feed from, contact or otherwise interact with waters of an aquatic system (USEPA, 1986). In the absence of applicable dose-response data for representative prey species, and in recognition of the potential variation in toxicological response to OCP exposure by different marine organisms, they were selected as TRVs in order to maintain a conservative threshold for OCP exposure evaluation.

TRVs were selected for OCP exposure in aquatic organisms as follows:

1. Available NAWQC values were selected from Suter et al. 1992 or USEPA 1986.
2. Isomers, metabolites or products of OCP compounds for which their were no NAWQC values available were assigned the NAWQC available for the parent compound (e.g. NAWQC for heptachlor was used as a surrogate for heptachlor epoxide, and NAWQC for mirex was a surrogate for photomirex).

### 2.3.3 Reptiles

Few studies have been conducted on organochlorine pesticide exposure to the reptilian target receptor (green turtle) or similar sea turtle species. McKim and Johnson (1983) reported DDE levels in liver and muscle of green and loggerhead turtles. However no adverse exposure effects were reported in association with liver DDE levels of 0.01 mg/kg. Thompson et al. (1974) reported that total organochlorine levels in green and loggerhead embryos had no deleterious effects on reproductive success.

#### 2.3.3.1 Exposure and Metabolism

Organochlorine pesticide exposure to the green turtle is through ingestion of contaminated food items. However, the herbivorous feeding habits of the green turtle probably limit the intake and bioaccumulation of persistent OCPs (DDE, dieldrin, chlordanes) in turtle tissues, since these compounds do not biomagnify in plant tissues to the high levels observed in fish and shellfish. Although no data is available relating OCP levels in plant tissues to uptake by turtles, McKim and Johnson (1983) suggested that low DDE concentrations in turtle tissues reflect low rates of chemical accumulation in plants.

### 2.3.3.2 Exposure Effects

No reports on adverse effects of acute exposure to organochlorine pesticides by reptiles were reported in the reviewed literature. Measured levels of DDE were reported in liver and muscle of yearling green and loggerhead turtles although neither turtle demonstrated levels higher than 0.01 mg/kg, and no chronic exposure effects were observed (McKim and Johnson 1983). Thompson et al. (1974) reported that observed levels of DDE and other organochlorine compounds in green turtle embryos had no adverse effects on hatching success.

### 2.3.4 Birds

Organochlorine pesticide effects on birds and bird populations have been studied in depth since the early 1960s when it became apparent that DDT and its analogs had significant deleterious effects on wild bird populations. Some early studies have reported levels of DDT and DDT metabolites in tissues and eggs of seabird species similar to those common to the Northwestern Hawaiian Islands (Fisher 1973; King and Lincer 1973; Wurster and Wingate 1968). No conclusions were drawn from these reports relating tissue levels to adverse effects of DDT on individuals or populations. However, there have been numerous reports on the adverse effects of DDT and DDE in other species of colonial, fish-eating water birds (CFEWB) and the impact of these compounds on bird populations (Harris et al. 1993; Henny et. al 1977; Kubiak et al. 1989

Organochlorine pesticide toxicity patterns in wildlife vary depending on dose level and exposure time. OCP exposure to wildlife has often been an incidental occurrence associated with agricultural or horticultural applications. In such cases, population impacts result from massive adult mortality within a short time frame as a result of acute toxic effects, in contrast to low-level, long-term exposures which result in reproductive impairment.

### 2.3.4.1 Exposure and Metabolism

Organochlorine pesticides tend to bioaccumulate and biomagnify through the food chain, such that uptake in receptors at high trophic levels is through ingestion of contaminated prey items. To a lesser extent birds may incidentally ingest contaminated soil, or be exposed to localized contaminated soils through nesting, burrowing or foraging behavior. High-dose, short-term exposures generally result from incidental ingestion of pesticides deposited on food items, soil or body surfaces.

Persistent OCPs are lipophilic and associate with particulate matter such as benthic and suspended sediments in the aquatic environment. At this level they become assimilated with the food chain and bioaccumulate as they move through the trophic levels. Studies on CFEWB species including the shag, cormorant and gannet demonstrated that dieldrin and DDE bioaccumulate to levels 50-fold greater than that of prey items (Robinson et al. 1967). OCP levels have been demonstrated to biomagnify up to 100-fold in herring gull and brown pelican (Anderson and Hickey 1976; Blus et al. 1977)

### 2.3.4.2 Exposure Effects

**Acute Effects**. In high doses, DDT is a potent neurotoxin which affects ion permeability and axon polarity in nerve cells. $LD_{50}$ values ranging from 430 to 4,000 mg/kg are reported for various avian wildlife species (Hudson 1984). Symptoms include neural abnormalities such as tremors, jerkiness and convulsions, followed by death in a matter of hours or days. Cyclodiene compounds and BHC are nerve receptor agents which interfere with normal neurotransmission. Two of the most potent cyclodienes, dieldrin and endrin, have $LD_{50}$ values that range from 10 to over 1,000 mg/kg, and from 0.5 to 12 mg/kg, respectively. Death from exposure to these compounds occurs in a matter of several days (Hudson, 1984). In high acute dosage situations, incidental ingestion, dermal absorption and respiration are all major exposure routes.

Lethal OCP levels in brain tissues have been reported for aquatic birds. In the absence of other apparent causes of death, concentrations of 9 ppm of dieldrin, 0.8 ppm endrin, 250 ppm DDE or 30 ppm total DDE and DDT in brain tissues are considered lethal (Ohlendorf et al. 1981). Based on these lethal levels, some heron mortality of otherwise unknown

causes has been attributed to dieldrin, endrin, DDE and DDT poisoning. These deaths occurred numerous years after the ban of DDT and dieldrin, demonstrating the environmental persistence of these contaminants (Ohlendorf et al. 1981). Death by dieldrin poisoning has been suspected in ospreys with brain tissue levels of 4 ppm (Wiemeyer et al. 1980) and in bald eagles with brain tissue levels of 5-7 ppm (Reichel et al. 1984).

**Chronic Effects.** Long-term, low-level exposure of organochlorine pesticide toxicity has been reported primarily in association with reproductive impairment. DDT and its metabolites have been implicated in reproductive impairments of two types, eggshell thinning and embryotoxicity. Eggshell thinning (which has been well-documented in wildlife bird species) is caused by an enzymatic alteration of calcium-mobilizing steroids induced by DDT and DDE. Other adverse physiological effects from OCP exposure which have been reported but not extensively studied in wildlife include thyroid function, adrenal function, immunosuppression and behavioral effects (Blus 1995 and citations within).

Eggshell thinning has been reported in many aquatic bird species, and it has been demonstrated that there are notably different degrees of interspecies sensitivity to DDT. Pelicans have been reported to be one of the most sensitive species, with DDE levels of 3 ppm in eggs resulting in deleterious eggshell thinning resulting in near total reproductive failure (Blus 1982). The white-faced ibis demonstrated significantly reduced reproductive capacity and increased eggshell thinning associated with egg DDE levels of 8 ppm (Henny and Herron 1989). Significant declines in osprey (Henny et al. 1977), bald eagle (Wiemeyer et al. 1984) and falcon (Peakall et al. 1975) populations were attributed to egg DDE levels in the range of 15-30 ppm which resulted in eggshell thinning and breakage. Conversely, other raptorial or piscivorous species have displayed no adverse eggshell thinning or embryotoxicity associated with similar or higher egg DDE levels. Kestrels, herons and herring gulls have demonstrated little or no reproductive impairment associated with egg DDE levels greater than 100 ppm (Henny et al. 1983; Blus et al. 1980; Keith 1966). Dietary dosage effects of DDT and DDT metabolites on reproductive impairment has been reported for two piscivorous birds, the brown pelican and American kestrel; reduced reproductive success (hatchability or survivability) resulted from dietary doses as low as 0.15 mg/kg and 3.0 mg/kg, respectively (Anderson 1975; Lincer 1975).

### 2.3.4.5 Toxicity Reference Value Derivation

TRVs for seabird target receptors were derived from reported OCP tissue levels or dose-response levels. TRV derivation for seabirds was consistent with the approach described earlier for reptilian target receptors (Section 2.3.3.5). Reported endpoint values for OCP CPECs included dose-response levels, tissue levels in healthy adults which exhibited no obvious adverse toxicological effects, and levels in eggs from impacted populations. Tissue levels were the predominant available test endpoint for the OCP CPECs. The highest available value reported in target tissues was used as a surrogate for analytically determined NOEL or NOAEL values.

Selection of OCP CPEC toxicological endpoints were based on the following guidelines:

1. Priority was given to endpoint values in the order: (a) reported laboratory dose-response studies conducted with representative wildlife species; (b) standard $LD_{50}$ dose-response studies conducted on the mallard duck.
2. The same endpoint values were used to represent isomeric, metabolite or by-product OCP CPECs (endosulfan/endosulfan sulfate, endrin/endrin ketone, mirex/photomirex, heptachlor/heptachlor epoxide, chlordane isomers) for TRV derivation.

### 2.3.5 Marine Mammals

OCPs are strongly lipophilic and not rapidly metabolized in invertebrates and lower vertebrates. As a result, OCPs biomagnify through the food chain, reaching potentially high levels in the fatty tissues of marine mammals, including cetaceans, porpoises and pinnipeds. The primary route of exposure to OCPs by marine mammals is through ingestion of contaminated prey items. It is clear that bioaccumulation of OCPs readily occurs in seals and other marine mammals, and that various physiological and environmental factors determine the extent of accumulation. OCPs bioaccumulate due to their slow rate of metabolism in animal systems. OCPs tend to accumulate in most body tissues, although in seals they have much higher levels of accumulation in blubber compared to organ or brain tissues.

Transplacental transfer of OCPs has been demonstrated to be a significant metabolic mechanism in several species of seals in which mother/fetal pairs had comparable tissue levels of DDT and other organochlorine compounds (Ronald et al. 1984). Lactational exchange has been reported to significantly decrease (up to 30 percent) female DDT loads in the process of transferring it to nursing pups (Addison and Brodie 1977).

### 2.3.5.3 Exposure Effects

Effects of acute organochlorine pesticide exposure have not been directly addressed in any of the studies reviewed here, and it appears that direct lethal or sub-lethal adverse effects have yet to be demonstrated in aquatic mammalian wildlife. Environmental exposure by marine mammals (seals) is generally through low-level chronic doses associated with fish and shellfish ingestion.

Chronic effects of organochlorine pesticides to marine mammals in the wild is usually associated with exposure to organochlorine mixtures through ingestion. Chronic exposure effects include reproductive impairment or failure and immuno-suppressive responses resulting in susceptibility to pathogenic infection (Blomkvist et al. 1992; Haraguchi et al. 1992; Reijnders 1986). It has been reported that OCP and other organochlorines can disrupt hormone formation (steroidogenesis) which results in infertility or abortion (Jensen et al. 1979; Reijnders 1979). Increased incidence of adrenocortical hyperplasia was reported for seals with elevated levels of DDE and other organochlorines in body tissues (Brandt et al. 1992). Seals suffering from starvation were found to have high tissue levels of DDT and DDT metabolites (Blomkvist et al. 1992). Hepatic disfunction related to nutrient metabolism and assimilation has also been demonstrated as a chronic exposure effect in some mammalian species (Yarbrough et al. 1979). This response in seals could potentially contribute to both starvation and immunosuppressive effects.

### 2.3.5.5 Toxicity Reference Value Derivation

The approach for TRV derivation for organochlorine pesticides in marine mammal target receptors was the same that reported earlier for reptile target receptors (Section 2.3.3.5). OCP CPEC endpoint values were predominantly reported as residue levels in tissues of healthy adult seals or porpoises which displayed no observable adverse effects. Standard

laboratory-derived $LD_{50}$ values for rodents or other mammals were used where marine mammal OCP tissue values were not available. Guidelines for endpoint value selection are as follows:

1. Endpoint values (NOAEL, $LD_{50}$) from laboratory dose-response studies of terrestrial mammals were used for TRV derivation if no marine mammal tissue levels were available.
2. The same endpoint values were used to represent isomeric, metabolite or byproduct OCP CPECs (endrin/endrin ketone, mirex/photomirex, heptachlor/heptachlor epoxide) for TRV derivation.

## 2.4 Population and Community Effects

Exposure effects of organochlorines on avian populations is largely reproductive impairment in association with eggshell thinning. In most cases reproductive impairment results from a combination of chemical stressors, however eggshell thinning is associated primarily with elevated levels of DDT and its metabolites. DDT has been implicated or suggested in impacts in seabird populations including the pelican (Risebrough et al. 1969) and Bermuda petrel (King and Lincer 1973).

Eggshell thinning as an exposure effect to DDT and its metabolites has been demonstrated for a multitude of bird species in at least ten taxonomic orders (Peterle 1991). However, the extent and severity of its effect on bird population recruitment varies considerably from species to species. The possible effects of DDT metabolites and other OCPs on reproductive impairment of the target receptors of interest remain uncertain from the available literature.

DDT and DDT metabolites have been suggested or implicated in reduced reproductive success or susceptibility to disease in some marine mammals including the sea lion (DeLong et al. 1973), ringed seals (Helle et al. 1976), harbour seals (Reijnders 1979), and Baltic seals (Jensen et al. 1979). It was concluded that ingestion of organochlorine compounds, including DDE, at relatively low levels in fish was a causative factor in reduced reproductive success in harbour seals in the Dutch Wadden Sea (Reijnders 1986).

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