Prepared for:

U.S. Fish and Wildlife Service
911 NE 11th Avenue
Portland, Oregon 97232

2016 ANNUAL REPORT CERCLA NON-TIME CRITICAL REMOVAL ACTION

MIDWAY ATOLL NATIONAL WILDLIFE REFUGE MIDWAY ISLAND

Contract No. F11PC00327

Prepared by:

NW Demolition and Environmental
A Joint Venture

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March 6, 2017

2016 Annual Report
CERCLA Non-time Critical Removal Action
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TABLE OF CONTENTS

Page

1.0 INTRODUCTION 1

2.0 BACKGROUND 1

3.0 2016 FIELD ACTIVITIES 2

3.1 Asbestos Abatement 2
3.2 Lead Based Paint Abatement 4
3.3 Demolition Services 4
3.4 Soil Treatment and Removal 5
3.5 Confirmation Soil Sampling 6
3.5.1 Confirmation Soil Sampling Results 6
3.6 Excavation Backfill 7
3.7 Additional Soil Characterization 7
3.7.1 Sample Results 8
3.8 Concrete Crushing 8
3.9 R-2 Area Work 9
3.9.1 Stockpiling of Buttress Material 9
3.9.2 Treatment Confirmation Sampling 9
3.9.3 R-2 Drainage Vault Modifications 9

4.0 REFERENCES 11

TABLE OF CONTENTS (Continued)

LIST OF TABLES

Table 1 Summary of Asbestos Abatement and Demolition Services – 2016

Table 2 Summary of Lead Based Paint Abatement Services – 2016

Table 3 Summary of Demolition and Backfill Load Counts – 2016

Table 4 Summary of MAECTITE® Usage and Volumes of Soil Transported to R-2 Unit – 2016

Table 5 Summary of Confirmation Soil Sampling Analytical Results – 2016

Table 6 Summary of Additional Soil Sampling Analytical Results – 2016

Table 7 Multi-Extraction Procedure Analytical Results – 2016

LIST OF FIGURES

Figure 1 Site Layout with Decision Units

Figure 2 Lead Results in Soil – Sand Island

Figures 3 through 29 Excavation Limits and Confirmation Soil Sample Results

Figure 3 Former Structure 170
Figure 4 Former Structure 180
Figure 5 Former Structure 200
Figure 6 Former Structure 300
Figure 7 Former Structure 340
Figure 8 Former Structure S464
Figure 9 Former Structure 502
Figure 10 Former Structure 503
Figure 11 Former Structure 520
Figure 12 Former Structure S1119
Figure 13 Former Structure S1123
Figure 14 Former Structure 2127
Figure 15 Former Structure 2411
Figure 16 Former Structure 3506
Figure 17 Former Structure 3509
Figure 18 Former Structure 3511
Figure 19 Former Structure 4201
Figure 20 Former Structure 4214
Figure 21 Former Structure 5267
Figure 22 Former Structure 5295
Figure 23 Former Structure 5301

TABLE OF CONTENTS (Continued)

Figure 24 Structure 5303 (R-2 Unit)
Figure 25 Former Structure 5340
Figure 26 Former Structure 5350
Figure 27 Former Structure 5360
Figure 28 Former Structure 5361
Figure 29 Former Structure 9149

Figures 30 through 37 Additional Soil Sampling Results

Figure 30 Bollards
Figure 31 Pipe
Figure 32 Structure 5303 (R-2 Unit)
Figure 33 Tanks S28, S29 and S30
Figure 34 Structure S3126, S3127, 3501 and 347
Figure 35 Structure 4205, 4206, 4207 and 4213
Figure 36 Former Structure 4214
Figure 37 Structure 5304 and 5305

LIST OF APPENDICES

Appendix A Daily Field Reports

Appendix B Select Site Photographs and Site Photograph Summary DVD

Appendix C Iniki ACM Monitoring Results

Appendix D Iniki LBP Monitoring Results

Appendix E Analytical Reports and Quality Assurance Report

Appendix F Field Procedures

Appendix G R2 Drainage Vault Modification Memo

1.0 INTRODUCTION

NW Demolition and Environmental (NWDE) has prepared this 2016 Annual Report for the U.S. Fish and Wildlife Service (FWS) as part of its contract to complete a non-time critical removal action (NTCRA) relating to the removal of lead-based paint (LBP) from structures and lead-contaminated soil at Sand Island, Midway Atoll National Wildlife Refuge (Refuge or Site) (Figure 1). The removal action is being performed by the FWS under the Comprehensive Environmental Response, Compensation, and Liability Act, (CERCLA) clean up authorities [42 United States Code (USC) 9604, 10 USC 2705], Federal Executive Order 12580 and the July 7, 2011 "*Action Memorandum for a Non-Time Critical Removal Action at Midway Atoll National Wildlife Refuge*".

This report documents the activities executed on-island as part of this contract between September 7 and October 25, 2016. The work was conducted in general accordance with the CERCLA Guidelines, NWDE's Removal Action Work Plan (RAWP) dated February 29, 2012, Geosyntec Consultants Inc. (Geosyntec) Soil Sampling Work Plan dated August 2013 and the revised Health and Safety Plan (HASP) (NWDE, 2012).

2.0 BACKGROUND

A January 2011 Engineering Evaluation/Cost Analysis (EE/CA) (GeoEngineers, 2011) evaluated CERCLA NTCRA alternatives based on a cleanup goal of 75 milligrams per kilogram (mg/kg) for lead in soil. Of the alternatives evaluated, the EE/CA identified Alternative 3 as the chosen method to complete the removal action in each of nine Decision Units (DU). Figure 1 shows the location of each DU on Sand Island.

In general, the scope of work involves: 1) LBP removal from existing structures and re-painting using encapsulation paint; 2) the removal/treatment and off-site disposal of asbestos containing materials (ACM); 3) excavation and on-site treatment and consolidation of lead-contaminated soil; and 4) demolition of numerous structures and aboveground oil storage tanks (AST).

The Removal Action is being conducted over multiple years during months when the majority of the birds are not present on the Site; generally, July through October of each year. Work elements by year are as follows:

- 2011 – Placing Shade Cloth over the excavation areas in DU1, DU2 and DU6; and lead abatement of structures 349, 363 and 357 in DU6 (Complete).
- 2012 – Design and retrofitting of R-2 (the former fresh water treatment unit in which treated soil will be encapsulated) and removal actions for DU1 and DU6. (Complete).
- 2013 – Removal action for DU2, including lead abatement of structures 259, 2403 and 2404 in DU4 (Complete).

- 2014 – Removal action for DU4 and DU7, and placement of shade cloth in DU5 and DU3 (Complete).
- 2015 – Removal action for DU3, DU5 and portions of DU8 (Complete).
- 2016 – Removal action for portions of DU9, modification of R-2 unit drainage vault, sizing concrete for the R-2 cover, stockpiling clean fill and the collection of additional soil characterization samples (this years' work).
- 2017 – Complete remaining removal actions in DU8 and DU9 and capping of the R-2 consolidation unit*.

* Planned activities may be adjusted depending on the availability of funding.

3.0 2016 FIELD ACTIVITIES

The following sections document 2016 activities. Copies of the Daily Field Reports for the 2016 field season are provided in Appendix A. Due to its volume, Appendix A has been provided in a separate binder. Appendix B contains printed copies of a limited number of Site photographs and a DVD that contains electronic versions of all project related photographs taken during the 2016 field season.

3.1 Asbestos Abatement

Iniki Enterprises Limited (Iniki) abated ACM from the interior and exterior of 19 structures during the 2016 field event. Table 1 contains a list of the structures where ACM abatement was completed and the date on which the abatement was completed.

In accordance with 40 Code of Federal Regulations (CFR) 61, SUBPART M, Iniki notified the Contracting Officer of the State of Hawaii, Department of Health, Noise and Radiation Branch and the Environmental Protection Agency (EPA) regional office 10 working days prior to the start of the work.

At the onset of this project, an Industrial Hygienist (IH) performed an inspection of the ACM in accordance with National Emissions Standards for Hazardous Air Pollutants (NESHAP) regulations to determine the condition and friability to ensure proper removal procedures were utilized.

3.1.1 Work Area Preparation and ACM Removal

Asbestos caution/warning signs were posted in and around the work area in accordance with 29 CFR 1926.1101, Hawaii Occupational Safety & Health (HIOSH) regulation 12-145.1 and all other federal, state, and local requirements. Warning signs were posted at all entrances to the asbestos removal work area. Signs were also posted at a distance far enough from the work area to permit a person to read the sign and take the necessary protective measures to avoid exposure.

Only personnel with appropriate personal protective equipment (PPE) were allowed to enter the asbestos control zone. Workers and personnel entering the asbestos removal work area at a minimum donned: disposable coverall equipped with hoods and booties; a NIOSH approved respirator for asbestos work equipped with disposable HEPA filter cartridges; eye protection; steel-toed boots/rubber boots; and hardhat.

Those not trained in ACM removal and not actively engaged in the work were restricted from entering the ACM removal work area during the removal effort.

6-millimeter polyethylene drop clothes were laid on the ground where the removal work was completed. ACM was removed using hand tools and packaged appropriately (see Section 3.1.4).

3.1.2 Asbestos Air Monitoring

Iniki personnel used personal air monitors to monitor asbestos fiber counts in air to verify that dust control measures were successful, and that the work was performed in a manner consistent with regulatory requirements. In total, 26 air samples were collected and analyzed in accordance with NIOSH Method 7400. Six samples contained asbestos fibers above method reporting limits (MRL). The detected concentrations ranged from 0.0052 fibers per cubic centimeter (f/cc) to 0.029 f/cc. The Occupational, Safety and Health Administration (OSHA) permissible exposure limit (PEL) for asbestos is 0.1 f/cc of air as a time weighted average. The detected concentrations were below the PEL. A copy of Iniki's reports for asbestos monitoring is included in Appendix C.

3.1.3 ACM Management

At the end of each work day/shift, all asbestos-containing waste, scrap, debris, bags, containers, equipment, and clothing or PPE were placed in sealed impermeable ACM disposal bags constructed of at least 6-mil plastic material. Each bag had the air removed and the top of the bag was twisted, goose-necked, and sealed with duct tape. Each bag was then placed in another impermeable ACM disposal bag, the air removed and the top of the bag was twisted, goose-necked, and sealed with duct tape. Bagged or wrapped wastes were stored in appropriate shipping containers that are staged at the airport hangar.

Procedures for transportation and disposal will comply with 40 CFR 61 (Subpart M), 40 CFR 241 and 257. Containers of ACM will be barged off Site for disposal at a landfill that complies with local regulations and that is permitted to receive ACM. Transportation and disposal will occur under appropriate bills of lading or manifest procedures and the documentation will be provided to FWS in the final report.

3.2 Lead Based Paint Abatement

Iniki abated LBP from the exterior of 63 features in 2016, including 15 buildings and structures, 43 manhole covers, three ASTs and two raised platforms. In addition, one building (144 [Power Plant]) was treated with MAECTITE®. Table 2 details the buildings and structures where LBP abatement services were completed in 2016.

Following establishment of an exclusion zone, the placement of plastic groundcover in the area, and sealing off surfaces that were not to be abated, a MAECTITE®/water solution was applied to the surface of each feature. Table 4 provides a summary of the volume of MAECTITE® applied during LBP abatement work or for pre-demolition purposes.

Following a reaction period (a minimum of three hours), loose, flaking paint chips were removed from all surfaces including doors, windows, and trim pieces using hand tools such as scrapers. Where surfaces were inaccessible or could not be safely reached, paint chips were removed using a power washer. Abated surfaces were rinsed clean using a power washer and a detergent (Simple Green®)/water solution. Clean, abated surfaces were then primed with one coat of Lead Stop® primer paint within 24 hours of abatement. Cracks in concrete were sealed with an acrylic latex caulk. Primed surfaces were then painted with one coat of a top coat paint.

During abatement, Iniki used personal air monitors to monitor air-borne lead to verify that dust control measures were successful, and that the work was performed in a manner consistent with regulatory requirements. Air samples were analyzed for total lead by EPA Method 7082M. In total, 19 personal air samples were collected. All sample results were below the MRLs. MRLs ranged from 4.4 to 14 micrograms per cubic meter ($\mu g/m^3$), well below the OSHA PEL for lead of 50 $\mu g/m^3$. A copy of Iniki's reports for lead monitoring is included in Appendix D.

Paint chips were swept and vacuumed up immediately following abatement and secured along with soiled polyethylene sheeting drop cloths, PPE and other LBP waste. LBP waste is secured in a shipping container for future transportation and off-site disposal.

3.3 Demolition Services

NWDE demolished 36 structures during the 2016 field season. Table 1 provides a summary of facilities demolished and the date on which the work was completed.

The FWS provided a cultural resources monitor to observe all demolition and excavation work and work was completed with little to no modification. The findings of the cultural resources monitor were provided directly to FWS staff.

Demolition of the structures was completed using a variety of heavy equipment, including a tracked skid steer, excavator, mini-excavator and off-road dumps. Demolition was

initiated by lowering materials to the ground within the structures footprint in a safe and controlled fashion to limit the production of fugitive dust and flying debris. Water was used for dust suppression purposes during demolition activities.

In accordance with the RAWP, demolition debris was separated into categories: 1) treated demolition debris; 2) clean concrete; and 3) scrap metal. Table 3 provides a summary of the debris generated during demolition activities. In summary:

- 42 loads of scrap metal were stockpiled in the designated staging area near the Sea Plane Hangar;
- 55 loads of clean concrete were hauled to the Sea Plane Hangar tarmac for crushing (see Section 3.8); and
- 109 loads of MAECTITE®-treated demolition debris were hauled to the R-2 unit for disposal.

3.4 Soil Treatment and Removal

Soil was treated and excavated from 27 locations during the 2016 field season. Table 1 summarizes the nature of the excavation (complete, incomplete, etc.), whether backfilling was completed, if confirmation samples were collected and if any concrete footings remain that will require demolition in the future. Figures 3 through 29 illustrate the dimensions of the facility or structure footprint as well as confirmation soil sample locations and results.

The lateral and vertical extent of the soil removed around each structure was based either on historical sampling results or on a prescriptive excavation plan. In areas where existing analytical results were available, the extent of excavation was based on the presence of lead in soil above 75 mg/kg. In areas where lead results in soil were not available, soils were excavated to a depth of 1-foot and to a distance from the base of the structure equal to the structure's height. For example, if a structure was 10-foot high, the removal area would extend to a distance of 10 feet from the foundation. In general, this prescriptive approach was used on smaller structures and features (monuments, memorials, etc.).

Prior to excavation, liquid MAECTITE® solution was applied to soil in 10x10-foot grids. Based on the 2012 treatment study completed by Geosyntec and Sevenson Environmental Inc. (Sevenson), the minimum application rate was established at 0.75 gallons of MAECTITE® per cubic yard (gal/cy) of soil. After the MAECTITE® had soaked into the target area; the soil was mixed to homogeneity to the excavation depths. Following an approximate three-hour reaction time period, the soil was transported to the R-2 unit. Water was used to prevent fugitive dust during excavation.

Table 4 provides a summary of the quantity of MAECTITE® applied to soils in DU9 and DU5, the quantity of soil treated with MAECTITE® and the total volume of soil excavated and transported to the R-2 unit during the 2016 field season.

3.5 Confirmation Soil Sampling

Following the completion of any single excavation (i.e. that associated with a single structure), confirmation soil samples were collected to document the remaining concentration of lead in soil. 5-point composite samples were collected from within the confirmation sampling boundaries (shown in the attached figures) based on excavation limits and building or structure layouts.

All soil samples were submitted for laboratory analysis of total lead by EPA Method 6010. Table 5 provides a summary of the confirmation sampling results and Figures 3 through 29 show the locations of all confirmation soil samples. Appendix E contains a copy of Test America's laboratory report, which also includes a quality assurance/quality control (QA/QC) evaluation of the analytical data and a data review checklist and a discussion of data usability for each of the laboratory analytical packets. Based on the data quality review, all results are considered valid and usable.

3.5.1 Confirmation Soil Sampling Results

In total, 158 confirmation soil samples (including duplicates) were collected from 27 excavations. Lead was detected in all but two samples (including duplicates) at concentrations ranging from 0.15 to 320 mg/kg.

The following table summarizes the samples that exceeded the 75 mg/kg cleanup level.

Structure	Sample ID	Lead (mg/kg)
503 (Figure 10)	P101 0-2"	110
520 (Figure 11)	P105 0-2"	180
	P105 0-2" DUP	200
5303 (R-2 unit) (Figure 24)	NW A 0-2"	110
	NW A 0-2" DUP	110
	NW B 0-2"	98
	NW B 0-2" DUP	87
	NW D 0-2"	320
	NW D 0-2" DUP	270
	E A 0-2"	120
	E B 0-2"	190
	E B 0-2" DUP	87

P101 0-2" contained 110 mg/kg of lead the corresponding duplicate (P101 0-2" DUP) contained 70 mg/kg, slightly lower than the cleanup level of 75 mg/kg. The average of the two is 90 mg/kg and as such, we have retained P101 0-2" as a sample exceeding the cleanup level. Similarly, the duplicate sample E A 0-2" DUP contained only 7.7 mg/kg of lead, well below the cleanup level. However, based on the large number of lead detections around the R-2 unit (Structure 5303), we have assumed that the primary sample result (120 mg/kg) is representative of the lead present in the soil.

3.6 Excavation Backfill

Most excavated areas were backfilled with clean sand from the borrow area between the fuel pier and cargo pier. The clean sand was excavated with an excavator and transported in an off-road truck to each excavation area. The sand was dumped and spread to match the existing grade. Some excavations were not backfilled due to the presence of footings that will require additional removal work in 2017 (See Table 1).

3.7 Additional Soil Characterization

In total, 153 soil samples (including duplicates) were collected from 17 locations in an effort to further define contaminant distribution in soils around structures not previously characterized.

Appendix F provides a description of the field procedures used to collect soil samples. In general, soil samples were collected in the intervals between 0 to 6-inches, 12 to 18-inches and in some locations 24 to 30-inches below ground surface (bgs). The collection of deeper samples was not possible at all locations due to auger refusal. In addition, one duplicate sample was collected and analyzed for every 20 primary samples. Soil sampling in the 0 to 6-inch interval was completed using composite sampling techniques, whereby a five-point composite sample was collected from a 10-foot radius of each exploration. The use of the composite sample was intended to provide a more thorough characterization in the most exposed soil profile.

The sample locations shown on Figures 30 through 37 were selected in the field by FWS staff. The following provides a brief summary of the sampling methodology for these additional soil samples.

- Bollards (Figure 30) – one sample was collected near one bollard and a second was collected mid-point between two bollards.
- Pipe (Figure 31) – samples were collected at approximately every 100-feet along the former pipe run.
- S28 and S30 (Figure 33) – samples were collected in a step-out fashion around previous sample locations that contained lead above 75 mg/kg.
- S29 (Figure 33) – a similar sampling pattern to previous events (around S28 and S30) were implemented.
- Water Plant (Figure 34) – additional samples were placed in a step-out fashion around previous sample locations that contained lead above 75 mg/kg.
- Ava Maria and the 4-Plex (Figure 35) – two samples were collected on each side of the structures.
- Structure 4214 (Figure 36) – one shallow (0-6 inch) composite sample was collected due to the presence of a buried CATV utility in the vicinity.
- Water towers (Figure 37) – one sample was collected outside the footprint of the active tower, one beneath the active tower and one within the footprint of the former tower.

All soil samples were submitted for laboratory analysis of total lead by EPA Method 6010. Table 6 summarizes the lead in soil results and laboratory analytical deliverables and QA/QC checklists are presented in Appendix E. Based on the data quality review, all results are considered valid and usable.

3.7.1 Sample Results

Of the 153 soil samples collected, lead was detected in all but seven samples (including duplicates) at concentrations ranging from 0.6 to 6,200 mg/kg. The following table summarizes the samples that exceeded the 75 mg/kg cleanup level.

Structure	Sample ID	Lead (mg/kg)
Bollard	P2 NEAR 0-6"	81
PIPE	P11 0-6"	120
	P14 0-6"	100
	P18 0-6"	92
	P19 0-6"	290
	P20 0-6"	310
	P22 0-6"	120
	P23 0-6"	460
	P24 0-6"	91
	P24 0-6" DUP	79
347	P9 0-6"	78
3127W	P6 0-6"	91
	P6 12-18"	84
3501	P8 0-6"	530
	P10 0-6"	110
4213	P5 0-6"	78
5304	WT P1 0-6"	6,200
	WT P2 0-6"	110
5305	WT P1 0-6"	650
	WT P1 12-18"	82

3.8 Concrete Crushing

As part of the 2016 field event, NWDE processed clean concrete to be used as the final erosion protection layer for the R-2 unit. Excavators equipped with a hydraulic concrete processor and crusher bucket were used to size clean concrete from large blocks down to the required 3-inch minus specification. Approximately 4,000 cy (~8,000 tons) of clean concrete was crushed and staged in windrows on the Sea Plane Hangar tarmac.

3.9 R-2 Area Work

The R-2 unit is being used for the permanent internment of the stabilized waste materials. The current design includes the filling of the R-2 unit with waste material to the top of the exterior walls, then capped with clean sand and crushed concrete. In addition, the exterior of the R-2 wall will be buttressed with clean sand to provide structural support for the walls and allow for the filling of the R-2 unit to the top of the existing concrete blocks.

Based on volume calculations completed at the end of the 2016 field season, the R-2 unit has approximately 8,000 cy of capacity remaining assuming the unit is filled to its design capacity (top of concrete blocks with soil buttress on sidewalls).

3.9.1 Stockpiling of Buttress Material

During the 2016 field event, approximately 150 truckloads (2,250 cy) of clean sand was excavated from the borrow area between the fuel pier and cargo pier, and transported to the R-2 area, where it was stockpiled for future use as the buttress material.

3.9.2 Treatment Confirmation Sampling

Two season-end confirmation samples (R2 Cell 3 and R2 Cell 4) were collected on October 23, 2016 and analyzed using Multiple Extraction Procedure (MEP) by EPA Method 1320. The MEP testing was conducted on treated soils from the 2016 season and subjects the samples to successive leaches of an acidic solution. The MEP method is designed to understand leachability from solid waste caused by infiltration of acid rain and is intended to simulate 1,000 years of soil exposure to a leaching medium. The method, by subjecting the same solid matrix to successive leaches, effectively subjects the sample to increasing acidity. Therefore, the procedure provides a long-term estimate of metal mobility to groundwater from buried waste.

The analytical results are included in Table 7. The leachate samples did not contain lead concentrations above the MRL of 0.10 milligrams per liter (mg/L). These results are consistent with MAECTITE® performance expectations, and are well below the toxicity characteristic leaching procedure (TCLP) limit (5 mg/L) for lead.

3.9.3 R-2 Drainage Vault Modifications

The R-2 unit drainage vault was modified by the removal of non-essential piping and sediment in the bottom of the drainage vault and the installation of a Rainstore3 (RS3) stormwater management system in the drainage vault between the inlet and the outlet, and backfilling the remaining portions of the drainage vault with clean sand. The installation of the RS3 system is designed to maintain effective stormwater conveyance through the R-2 unit drainage vault while permitting the construction of the clean soil buttress above the drainage vault area. Appendix G contains a summary memorandum documenting the drainage vault modifications.

The RS3 system was installed in general accordance with the project Technical Specifications dated May 2015. In general, the installation included the removal of the existing pumps and pipes, the placement of a geogrid within the vault for sedimentation control, and the placement of RS3 stacks into the open stormwater conveyance area of the vault. The entire system was then covered with a filter geotextile fabric to minimize future sediment accumulation. Those portions of the vault that were open to the surface were then were covered with ¼-inch thick steel plates and ports were installed for future inspection and maintenance of the drainage system.

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TABLES

Table 1
Summary of Asbestos Abatement and Demolition Services - 2016
Midway Atoll NWR

Structure #	Name	Asbestos Abatement Completed (date)	Demolition Completed (date)	Soil Excavation Summary	Backfilling Complete	Confirmation Samples Collected at Bottom of Excavation	Concrete Footing Demo Work to Complete in 2017
170	Switch Station Electrical Feeder 1	09/10/2016	09/21/2016	Full dig 09/22/16	Yes	Yes	No
180	Electrical Building	09/09/2016	09/21/2016	Full dig 09/22/16	Yes	Yes	No
200	Switch Station	09/29/2016	10/11/2016	Full dig 10/11/16	Yes	Yes	No
300	Fuel Farm Transform Bank (Fuels Office)	09/15/2016	09/28/2016	Full dig 09/29/16	Yes	Yes	No
340	Carpentry Shop substation	09/19/2016	10/14/2016	Full dig 10/15/16	Yes	Yes	No
S464	Fuel Oil Pumphouse	N/A	09/29/2016	Full dig 10/01/16	No	Yes	Yes Footings
502	AT&T Shed	09/12/2016	10/07/2016	Full dig 10/08/16	No	Yes	Yes Footings
503	Barracks Substation	N/A	10/13/2016	Full dig 10/13/16	Yes	Yes	No
520	Fire Dept. Storage	09/24/2016	10/06/2016	Full dig 10/06/16	Yes	Yes	No
S1119	Tug Pier Substation	N/A	09/21/2016	Full dig 09/22/16	Yes	Yes	No
S1123	Electric Distribution Building	N/A	09/21/2016	Full dig 09/22/16	Yes	Yes	No
2127	POL Office	09/15/2016	09/27/2016	Full dig 09/29/16	Yes	Yes	No
2411	Fuel Farm Lab	N/A	09/28/2016	Full dig 09/29/16	Yes	Yes	No
3506	Liquid Oxygen Storage	09/29/2016	10/10/2016	Full dig 10/10/16	Yes	Yes	No
3509	Oxy/Acetylene Storage	N/A	10/01/2016	Full dig 10/03/16	Yes	Yes	No
3511	Sk1 Warehouse Transformer (substation)	09/20/2016	10/01/2016	Full dig 10/03/16	Yes	Yes	No
3514	Security Bldg. Storage @TOC	09/14/2016	10/17/2016	2017	No	No	No
3524	Steam heat bldg.	N/A	10/08/2016	2017	No	No	No
3529	Midway Laundry	N/A	10/11/2016	2017	No	No	No
4201	JP-5 Pumping Station	N/A	10/01/2016	Full dig 10/01/16	No	Yes	Yes Footings
4214	Substation electrical feeder 4	N/A	10/11/2016	Scrape 10/11/16 [1]	Yes	Yes	No
5126	Sewage Pump station	09/27/2016	10/13/2016	2017	No	No	Yes 12'x12'x15' sump
5267	Sewage Pump Transformer	09/20/2016	10/04/2016	Full dig 10/04/16	Yes	Yes	No
5295	Hangar Aux. Generator Bldg.	09/26/2016	10/07/2016	Full dig 10/07/16	No	Yes	Yes Blocks
5301	Runway light controls	N/A	10/12/2016	Full dig 10/12/16	Yes	Yes	No
5338	Electric Transformer near 5339	N/A	10/13/2016	Full dig 10/21/16	Yes	Yes	No
5339	Water treatment Bldg. @ R2 east side	09/28/2016	10/13/2016	Full dig 10/21/16	Yes	Yes	No
5340	Substation	09/29/2016	10/11/2016	Full dig 10/12/16	Yes	Yes	No
5341	R2 Chlorinator Bldg	N/A	10/14/2016	Partial dig 10/21/16	Yes	Yes	No
5342	Telephone Switch Bldg.	09/13/2016	10/08/2016	2017	No	No	Yes Footings
5350	Electrical Switch station	N/A	10/11/2016	Full dig 10/12/16	Yes	Yes	No
5360	Substation	09/20/2016	10/03/2016	Full dig 10/06/16	Yes	Yes	No
5361	Switch Station Electrical Feeder 9	09/16/2016	10/02/2016	Full dig 10/06/16	Yes	Yes	No
5378	Metal Shed near R2	N/A	10/15/2016	2017	No	No	No
9149	Power Plant shed	N/A	10/13/2016	Full dig 10/14/16	Yes	Yes	No
R2	Tanks on West side	N/A	10/14/2016	Full dig 10/21/16	Yes	Yes	No

Table 2
Summary of Lead Based Paint Abatement Services - 2016
Midway Atoll NWR

Structure #	Name	LBP Abatement and Repainting Completed (date)
140	Radionuclide Unit	09/19/2016
144	Power Plant	9/14/2016 [1]
S228	High Voltage Bldg.	09/19/2016
309	Power Plant #3	09/27/2016
347	Water System Bldg.	09/30/2016
S361	Pesticide Storage	09/28/2016
400	BEQ Transformer Bldg.	10/05/2016
1124	Waste Storage Building	09/15/2016
S1126	Harbor Office/Buddhist Temple	09/15/2016
3501	Main Freshwater Pump station	09/30/2016
5150	Sewage Pump Station	10/04/2016
8106	Freshwater Substation	10/04/2016
8105	R1 Concrete block/vault	10/05/2016
--	Ave Maria memorial	10/03/2016
--	Cross	09/15/2016
--	Platforms (2) R3 S3126W/S3127E	09/30/2016
--	Manholes (43)	10/06/2016
--	3 red AST by generator building 309	09/26/2016
--	FAA Bldg near R2	10/07/2016

Notes:
1 -Maectite only. No painting was completed

Table 3
Summary of Demolition and Backfill Load Counts - 2016
Midway Atoll NWR

Date	Steel (Loads)[1]	Clean Concrete (Loads)[2]	Concrete with Paint (Loads)[3]	Clean Backfill for 2016 Excavations (Loads)[4]	Clean Backfill for 2016 Slab Removal Areas (Loads)[4]	Clean Backfill Stockpile (Loads)[5]
09/07/2016	0	0	0	0	0	0
09/08/2016	0	0	0	0	0	0
09/09/2016	0	0	0	0	0	0
09/10/2016	0	0	0	0	0	0
09/11/2016	0	0	0	0	0	0
09/12/2016	0	0	0	0	0	0
09/13/2016	0	0	0	0	0	0
09/14/2016	0	0	0	0	0	0
09/15/2016	0	0	0	0	0	0
09/16/2016	0	0	0	0	0	0
09/17/2016	0	0	0	0	0	0
09/18/2016	0	0	0	0	0	0
09/19/2016	0	0	0	0	0	0
09/20/2016	0	0	0	0	0	0
09/21/2016	1	1	5	0	0	0
09/22/2016	0	7	0	0	0	0
09/23/2016	0	36	0	0	0	0
09/24/2016	0	0	0	0	32	14
09/25/2016	0	0	0	0	0	0
09/26/2016	0	0	0	16	0	32
09/27/2016	0	0	4	0	0	28
09/28/2016	0	1	0	0	0	0
09/29/2016	7	0	6	0	0	0
09/30/2016	2	0	5	0	0	0
10/01/2016	3	1	10	0	0	0
10/02/2016	0	0	0	0	0	0
10/03/2016	6	0	8	0	0	0
10/04/2016	2	0	9	0	0	0
10/05/2016	1	1	6	0	0	0
10/06/2016	0	0	0	0	0	0
10/07/2016	0	0	0	0	0	0
10/08/2016	6	0	6	0	0	0
10/09/2016	0	0	0	0	0	0
10/10/2016	2	0	13	0	0	0
10/11/2016	1	0	12	0	0	0
10/12/2016	1	2	6	0	0	0
10/13/2016	2	1	9	0	0	0
10/14/2016	6	4	5	0	0	0
10/15/2016	2	1	3	0	0	0
10/16/2016	0	0	0	0	0	0
10/17/2016	1	0	3	8	0	0
10/18/2016	0	0	0	45	0	0
10/19/2016	0	0	0	0	0	0
10/20/2016	0	0	0	32	2	0
10/21/2016	0	0	0	0	0	8
10/22/2016	0	0	0	0	0	32
10/23/2016	0	0	0	1	0	36
10/24/2016	0	0	0	0	0	0
10/25/2016	0	0	0	0	0	0
Total Load Count	42	55	109	102	34	150
Total CY Estimate	630 [6]	440 [7]	981 [8]	1,530 [6]	510 [6]	2,250 [6]

Notes
1. Steel was hauled to Sea Plane tarmac and staged with the existing scrap metal pile.
2. Clean concrete was hauled to Sea Plane tarmac for crushing.
3. Concrete with paint was disposed of in the R2 Unit.
4. Clean backfill was placed in daily excavation areas.
5. Clean backfill was staged by R2 Unit.
6. Estimates are based on an assumed 15 CY per truck load.
7. Estimates are based on an assumed 8 CY per truck load. Load sized varied from 7 to 10 CY per truck
8. Estimates are based on an assumed 9 CY per truck load. Load sized varied from 7 to 12 CY per truck
CY = cubic yard

TABLE 4
SUMMARY of MAECTITE USAGE AND VOLUMES OF SOIL TRANSPORTED TO R2 UNIT - 2016
MIDWAY ATOLL NWR

Date	Maectite Totals (gal)				Treated Soil Totals[1]		
	Applied to Soils (DU9)	Applied to Soils (DU5)	Applied to Structures (DU9)	Cumulative Total	Treated Soil (Loads)[2]	Excavated / Hauled to R-2 Unit (LCY)	Excavated / Hauled to R-2 Unit Cumulative Total (LCY)
09/07/2016	0	0	0	0	0	0	0
09/08/2016	0	0	0	0	0	0	0
09/09/2016	0	0	0	0	0	0	0
09/10/2016	0	0	0	0	0	0	0
09/11/2016				0			0
09/12/2016	0	0	0	0	0	0	0
09/13/2016	0	0	0	0	0	0	0
09/14/2016	0	0	0	0	0	0	0
09/15/2016	0	0	0	0	0	0	0
09/16/2016	0	0	0	0	0	0	0
09/17/2016	0	0	0	0	0	0	0
09/18/2016				0			0
09/19/2016	0	0	0	0	0	0	0
09/20/2016	0	0	54	54	0	0	0
09/21/2016	22	0	26	103	3	38	38
09/22/2016	98	0	0	201	8	120	158
09/23/2016	0	0	0	201	0	0	158
09/24/2016	0	0	0	201	0	0	158
09/25/2016				201			158
09/26/2016	0	0	0	201	0	0	158
09/27/2016	36	0	0	237	0	0	158
09/28/2016	76	0	0	313	14	210	368
09/29/2016	105	0	0	417	9	135	503
09/30/2016	102	0	0	519	10	150	653
10/01/2016	86	0	0	605	12	180	833
10/02/2016				605			833
10/03/2016	36	0	0	640	4	60	893
10/04/2016	58	0	0	698	4	60	953
10/05/2016	131	0	0	829	14	210	1,163
10/06/2016	160	0	0	988	10	150	1,313
10/07/2016	70	0	0	1,058	10	150	1,463
10/08/2016	5	0	0	1,062	3	45	1,508
10/09/2016				1,062			1,508
10/10/2016	29	0	0	1,091	3	45	1,553
10/11/2016	58	0	0	1,149	6	90	1,643
10/12/2016	112	0	0	1,261	12	180	1,823
10/13/2016	18	0	0	1,279	1	15	1,838
10/14/2016	81	0	0	1,360	8	120	1,958
10/15/2016	0	0	0	1,360	0	0	1,958
10/16/2016				1,360			1,958
10/17/2016	0	0	0	1,360	0	0	1,958
10/18/2016	0	0	0	1,360	0	0	1,958
10/19/2016	0	0	0	1,360	0	0	1,958
10/20/2016	0	0	0	1,360	0	0	1,958
10/21/2016	0	154	0	1,514	6	90	2,048
10/22/2016	0	0	0	1,514	0	0	2,048
10/23/2016				1,514			2,048
10/24/2016	0	0	0	1,514	0	0	2,048
10/25/2016	0	0	0	1,514	0	0	2,048
Totals	1,280	154	81	1,514	137	2,048	2,048

Notes
1. Estimates are based on MAECTITE volume usage with an application rate rate of 0.75 gallons per cubic yard.
2. Treated soil was hauled to and deposited in the R-2 Unit.
LCY = loose cubic yard
gal = gallon

TABLE 5
SUMMARY OF CONFIRMATION SOIL SAMPLING ANALYTICAL RESULTS - 2016
MIDWAY ATOLL NWR

Structure	Sample ID	Date	Lead (mg/kg)	Difference %
170	P100 0-2"	09/23/2016	30	3
	P100 0-2" DUP	09/23/2016	31	
	P101 0-2"	09/23/2016	5.9	16
	P101 0-2" DUP	09/23/2016	6.9	
180	P100 0-2"	09/23/2016	11	23
	P100 0-2" DUP	09/23/2016	8.7	
	P101 0-2"	09/23/2016	0.23 J	16
	P101 0-2" DUP	09/23/2016	0.27 J	
200	P100 0-2"	10/12/2016	ND	NA
	P100 0-2" DUP	10/12/2016	ND	
	P101 0-2"	10/12/2016	1.2	15
	P101 0-2" DUP	10/12/2016	1.4	
300	P100 0-2"	10/04/2016	37	31
	P100 0-2" DUP	10/04/2016	27 B	
	P101 0-2"	10/04/2016	16	13
	P101 0-2" DUP	10/04/2016	14 B	
340	P100 0-2"	10/17/2016	0.97 J B	27
	P100 0-2" DUP	10/17/2016	0.74 J B	
	P101 0-2"	10/17/2016	8.5 B	6
	P101 0-2" DUP	10/17/2016	8 B	
S464	P100 0-2"	10/04/2016	37	90
	P100 0-2" DUP	10/04/2016	14	
	P101 0-2"	10/04/2016	28	29
	P101 0-2" DUP	10/04/2016	21 B	
	P102 0-2"	10/04/2016	19 B	5
	P102 0-2" DUP	10/04/2016	18 B	
	P103 0-2"	10/04/2016	29	7
	P103 0-2" DUP	10/04/2016	31	
	P104 0-2"	10/04/2016	34	6
	P104 0-2" DUP	10/04/2016	36	
502	P100 0-2"	10/09/2016	3.6	11
	P100 0-2" DUP	10/09/2016	4	
	P101 0-2"	10/09/2016	9.4	117
	P101 0-2" DUP	10/09/2016	36	
	P102 0-2"	10/09/2016	22	59
	P102 0-2" DUP	10/09/2016	12	
	P103 0-2"	10/09/2016	9.9	1
	P103 0-2" DUP	10/09/2016	10	
503	P100 0-2"	10/14/2016	47	4
	P100 0-2" DUP	10/14/2016	45	
	P101 0-2"	10/14/2016	110	44
	P101 0-2" DUP	10/14/2016	70 B	

TABLE 5
SUMMARY OF CONFIRMATION SOIL SAMPLING ANALYTICAL RESULTS - 2016
MIDWAY ATOLL NWR

Structure	Sample ID	Date	Lead (mg/kg)	Difference %
520	P100 0-2"	10/07/2016	17	6
	P100 0-2" DUP	10/07/2016	16	
	P101 0-2"	10/07/2016	48	11
	P101 0-2" DUP	10/07/2016	43	
	P102 0-2"	10/07/2016	2.5	21
	P102 0-2" DUP	10/07/2016	3.1	
	P103 0-2"	10/07/2016	3.1	3
	P103 0-2" DUP	10/07/2016	3.2	
	P104 0-2"	10/07/2016	9	2
	P104 0-2" DUP	10/07/2016	9.2	
	P105 0-2"	10/07/2016	180	11
	P105 0-2" DUP	10/07/2016	200	
S1119	P100 0-2"	09/23/2016	9.7	7
	P100 0-2" DUP	09/23/2016	9	
	P101 0-2"	09/23/2016	18	0
	P101 0-2" DUP	09/23/2016	18	
S1123	P100 0-2"	09/23/2016	8.1	12
	P100 0-2" DUP	09/23/2016	7.2	
	P101 0-2"	09/23/2016	3.9	29
	P101 0-2" DUP	09/23/2016	5.2	
2127	P100 0-2"	10/04/2016	41	29
	P100 0-2" DUP	10/04/2016	55 B	
	P101 0-2"	10/04/2016	71 B	58
	P101 0-2" DUP	10/04/2016	39	
	P102 0-2"	10/04/2016	4.5	22
	P102 0-2" DUP	10/04/2016	5.6 B	
2411	P100 0-2"	10/09/2016	1 J	10
	P100 0-2" DUP	10/09/2016	1.1 J	
	P101 0-2"	10/09/2016	35	33
	P101 0-2" DUP	10/09/2016	49	
3506	P100 0-2"	10/12/2016	28	7
	P100 0-2" DUP	10/12/2016	30	
	P101 0-2"	10/12/2016	5.5	10
	P101 0-2" DUP	10/12/2016	5	
3509	P100 0-2"	10/09/2016	5.7	7
	P100 0-2" DUP	10/09/2016	6.1	
	P101 0-2"	10/09/2016	27	8
	P101 0-2" DUP	10/09/2016	25 B	
3511	P100 0-2"	10/09/2016	6.6 B	26
	P100 0-2" DUP	10/09/2016	8.6 B	
	P101 0-2"	10/09/2016	8 B	11
	P101 0-2" DUP	10/09/2016	7.2 B	

TABLE 5
SUMMARY OF CONFIRMATION SOIL SAMPLING ANALYTICAL RESULTS - 2016
MIDWAY ATOLL NWR

Structure	Sample ID	Date	Lead (mg/kg)	Difference %
4201	P100 0-2"	10/08/2016	1.6	0
	P100 0-2" DUP	10/08/2016	1.6	
	P101 0-2"	10/08/2016	6.1	32
	P101 0-2" DUP	10/08/2016	8.4 B	
	P102 0-2"	10/08/2016	20	10
	P102 0-2" DUP	10/08/2016	22	
	P103 0-2"	10/08/2016	12	29
	P103 0-2" DUP	10/08/2016	16	
	P104 0-2"	10/08/2016	44 B	38
	P104 0-2" DUP	10/08/2016	30	
4214	P100 0-2"	10/15/2016	3.2 B	21
	P100 0-2" DUP	10/15/2016	2.6 B	
5267	P100 0-2"	10/09/2016	4.4	50
	P100 0-2" DUP	10/09/2016	7.3	
	P101 0-2"	10/09/2016	0.15 J	24
	P101 0-2" DUP	10/09/2016	0.19 J	
5295	P100 0-2"	10/07/2016	64	9
	P100 0-2" DUP	10/07/2016	70	
	P101 0-2"	10/07/2016	51	0
	P101 0-2" DUP	10/07/2016	51	
	P102 0-2"	10/07/2016	28	28
	P102 0-2" DUP	10/07/2016	37	
	P103 0-2"	10/07/2016	38	3
	P103 0-2" DUP	10/07/2016	37	
	P104 0-2"	10/07/2016	6.2	5
	P104 0-2" DUP	10/07/2016	6.5	
	P105 0-2"	10/07/2016	9	3
	P105 0-2" DUP	10/07/2016	9.3	
5301	P100 0-2"	10/17/2016	4.1 B	8
	P100 0-2" DUP	10/17/2016	3.8 B	
	P101 0-2"	10/17/2016	6.1 B	3
	P101 0-2" DUP	10/17/2016	6.3 B	
	P102 0-2"	10/17/2016	7.9 B	5
	P102 0-2" DUP	10/17/2016	7.5 B	
	P103 0-2"	10/17/2016	14 B	0
	P103 0-2" DUP	10/17/2016	14 B	
5303	NW A 0-2"	10/21/2016	110	0
	NW A 0-2" DUP	10/21/2016	110	
	NW B 0-2"	10/21/2016	98	12
	NW B 0-2" DUP	10/21/2016	87 B	
	NW C 0-2"	10/21/2016	13	8
	NW C 0-2" DUP	10/21/2016	12	
	NW D 0-2"	10/21/2016	320	17
	NW D 0-2" DUP	10/21/2016	270	
	E A 0-2"	10/22/2016	120	176
	E A 0-2" DUP	10/22/2016	7.7	
	E B 0-2"	10/22/2016	190	74
	E B 0-2" DUP	10/22/2016	87	
	E C 0-2"	10/22/2016	14	15
	E C 0-2" DUP	10/22/2016	12	
	E D 0-2"	10/22/2016	40	12
	E D 0-2" DUP	10/22/2016	45	

TABLE 5
SUMMARY OF CONFIRMATION SOIL SAMPLING ANALYTICAL RESULTS - 2016
MIDWAY ATOLL NWR

Structure	Sample ID	Date	Lead (mg/kg)	Difference %
5340	P100 0-2"	10/12/2016	0.87 J B	2
	P100 0-2" DUP	10/12/2016	0.85 J B	
	P101 0-2"	10/12/2016	4 B	49
	P101 0-2" DUP	10/12/2016	6.6	
5350	P100 0-2"	10/12/2016	8.4	4
	P100 0-2" DUP	10/12/2016	8.1	
	P101 0-2"	10/12/2016	7	7
	P101 0-2" DUP	10/12/2016	6.5	
5360	P100 0-2"	10/08/2016	6.9	21
	P100 0-2" DUP	10/08/2016	5.6	
	P101 0-2"	10/08/2016	1.7	82
	P101 0-2" DUP	10/08/2016	0.71 J B	
5361	P100 0-2"	10/08/2016	5.5	10
	P100 0-2" DUP	10/08/2016	5	
	P101 0-2"	10/08/2016	7.3	1
	P101 0-2" DUP	10/08/2016	7.2 B	
9149	P100 0-2"	10/15/2016	16 B	12
	P100 0-2" DUP	10/15/2016	18 B	
	P101 0-2"	10/15/2016	8.6 B	10
	P101 0-2" DUP	10/15/2016	7.8 B	
	P102 0-2"	10/15/2016	11 B	0
	P102 0-2" DUP	10/15/2016	11 B	

Notes

1. Lead was analyzed by Environmental Protection Agency Method 6010B .

B = Lead was detected in the blank and the sample.

J = Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

mg/kg = milligram per kilogram

ND = non detect

TABLE 6
SUMMARY OF ADDITIONAL SOIL SAMPLING ANALYTICAL RESULTS - 2016
MIDWAY ATOLL NWR

Structure	Sample ID	Date	Lead (mg/kg)	Difference %
Bollard	P1 MID 0-6"	10/16/2016	63	NA
	P2 NEAR 0-6"	10/16/2016	81	NA
PIPE	P1 0-6"	10/16/2016	25	NA
	P2 0-6"	10/16/2016	16	NA
	P3 0-6"	10/16/2016	4.5	NA
	P4 0-6"	10/16/2016	0.68 J B	NA
	P5 0-6"	10/16/2016	8.3 B	NA
	P6 0-6"	10/16/2016	5.8 B	NA
	P7 0-6"	10/16/2016	48 B	NA
	P8 0-6"	10/16/2016	34 B	NA
	P9 0-6"	10/16/2016	9.1 B	NA
	P10 0-6"	10/16/2016	31 B	NA
	P11 0-6"	10/16/2016	120 B	NA
	P12 0-6"	10/16/2016	31 B	NA
	P13 0-6"	10/16/2016	25 B	NA
	P14 0-6"	10/16/2016	100 B	NA
	P15 0-6"	10/16/2016	36 B	NA
	P16 0-6"	10/16/2016	61 B	NA
	P17 0-6"	10/16/2016	44 B	NA
	P18 0-6"	10/16/2016	92 B	NA
	P19 0-6"	10/16/2016	290 B	NA
	P20 0-6"	10/16/2016	310	NA
	P21 0-6"	10/16/2016	63	NA
	P22 0-6"	10/16/2016	120	NA
	P23 0-6"	10/16/2016	460	NA
	P24 0-6"	10/16/2016	91	14
	P24 0-6" DUP	10/16/2016	79	
R2	Cell 3 0-6"	10/23/2016	41 B	NA
	Cell 4 0-6"	10/23/2016	14 B	NA
S28	P12 0-6"	10/22/2016	19	NA
	P13 0-6"	10/22/2016	19	NA
	P14 0-6"	10/22/2016	20	NA
S29	P1 0-6"	10/16/2016	9.8	NA
	P2 0-6"	10/16/2016	29	NA
	P3 0-6"	10/16/2016	18	NA
	P4 0-6"	10/16/2016	18	NA
	P5 0-6"	10/16/2016	21	NA
	P6 0-6"	10/16/2016	24	NA
	P7 0-6"	10/16/2016	21	NA
	P8 0-6"	10/16/2016	26	21
	P8 0-6" DUP	10/16/2016	32	
	P9 0-6"	10/16/2016	9.2	NA
S30	P11 0-6"	10/22/2016	14	NA
	P12 0-6"	10/22/2016	59	NA
	P13 0-6"	10/22/2016	0.74 J	NA
	P14 0-6"	10/23/2016	21	NA
	P15 0-6"	10/23/2016	13	NA
	P16 0-6"	10/23/2016	36	NA
347	P9 0-6"	10/09/2016	78	NA
	P9 12-18"	10/09/2016	36	NA
	P9 24-30"	10/09/2016	18	NA

TABLE 6
SUMMARY OF ADDITIONAL SOIL SAMPLING ANALYTICAL RESULTS - 2016
MIDWAY ATOLL NWR

Structure	Sample ID	Date	Lead (mg/kg)	Difference %
3126E	P7 0-6"	10/23/2016	63	NA
	P7 12-18"	10/23/2016	59	NA
	P7 24-30"	10/23/2016	14 B	NA
	P8 0-6"	10/23/2016	73 B	NA
	P8 12-18"	10/23/2016	0.6 J B	NA
	P8 24-30"	10/23/2016	1.3 B	NA
	P6 0-6"	10/23/2016	61 B	NA
	P6 12-18"	10/23/2016	3.2 B	NA
	P6 24-30"	10/23/2016	ND	NA
3127W	P6 0-6"	10/09/2016	91 B	NA
	P6 12-18"	10/09/2016	84 B	NA
	P6 24-30"	10/09/2016	20 B	NA
	P7 0-6"	10/16/2016	24	NA
	P7 12-18"	10/16/2016	17	NA
	P7 24-30"	10/16/2016	2.2	NA
	P8 0-6"	10/16/2016	21	NA
	P8 12-18"	10/16/2016	7.3 B	NA
	P8 24-30"	10/16/2016	4.5 B	NA
3501	P8 0-6"	10/09/2016	530	NA
	P8 12-18"	10/09/2016	52	NA
	P8 24-30"	10/09/2016	4.9	NA
	P9 0-6"	10/09/2016	25	NA
	P9 12-18"	10/09/2016	24 B	NA
	P9 24-30"	10/09/2016	17	NA
	P10 0-6"	10/09/2016	110	NA
	P10 12-18"	10/09/2016	70	NA
	P10 24-30"	10/09/2016	6.9	NA
	P11 0-6"	10/09/2016	63	NA
	P11 12-18"	10/09/2016	17	NA
	P11 24-30"	10/09/2016	0.83 J	NA
4205	P1 0-6"	10/20/2016	19 B	NA
	P1 12-18"	10/20/2016	20 B	NA
	P1 24-30"	10/20/2016	21 F1 B	NA
	P1 30-36"	10/20/2016	12 B	NA
	P2 0-6"	10/20/2016	7.5 B	NA
	P2 12-18"	10/20/2016	21 B	NA
	P2 24-30"	10/20/2016	12 B	NA
	P3 0-6"	10/20/2016	20 B	NA
	P3 12-18"	10/20/2016	5.2 B	NA
	P3 24-30"	10/20/2016	5.7 B	NA
	P4 0-6"	10/20/2016	18 B	NA
	P4 12-18"	10/20/2016	10 B	NA
	P4 24-30"	10/20/2016	7.4 B	NA

TABLE 6
SUMMARY OF ADDITIONAL SOIL SAMPLING ANALYTICAL RESULTS - 2016
MIDWAY ATOLL NWR

Structure	Sample ID	Date	Lead (mg/kg)	Difference %
4206	P1 0-6"	10/21/2016	5.2 B	NA
	P1 12-18"	10/21/2016	5.7 B	NA
	P1 24-30"	10/21/2016	ND	NA
	P2 0-6"	10/21/2016	7.8 B	NA
	P2 12-18"	10/21/2016	1.2 B	NA
	P2 24-30"	10/21/2016	3.6 B	NA
	P3 0-6"	10/21/2016	24 B	NA
	P3 12-18"	10/21/2016	1.4 B	NA
	P3 24-30"	10/21/2016	1.8 B	NA
	P4 0-6"	10/21/2016	15 B	NA
	P4 12-18"	10/21/2016	1.8 B	NA
	P4 24-30"	10/21/2016	ND	NA
4207	P1 0-6"	10/21/2016	6.8 B	NA
	P1 12-18"	10/21/2016	8.6 B	NA
	P1 24-30"	10/21/2016	1.9 B	NA
	P2 0-6"	10/22/2016	15 B	NA
	P2 12-18"	10/22/2016	22 B	NA
	P2 24-30"	10/22/2016	6.2 B	NA
	P3 0-6"	10/22/2016	14 B	33
	P3 0-6" DUP	10/22/2016	10 B	
	P3 12-18"	10/22/2016	16 B	17
	P3 12-18" DUP	10/22/2016	19 B	
	P3 24-30"	10/22/2016	19 B	15
	P3 24-30" DUP	10/22/2016	22	
	P4 0-6"	10/22/2016	8	NA
	P4 12-18"	10/22/2016	6.2	NA
	P4 24-30"	10/22/2016	1.8	NA
4213	P1 24-30"	10/19/2016	ND	NA
	P1 0-6"	10/19/2016	10 B	NA
	P1 12-18"	10/19/2016	4.4	NA
	P2 0-6"	10/19/2016	5.3	NA
	P2 12-18"	10/19/2016	ND	NA
	P2 24-30"	10/19/2016	ND	NA
	P3 0-6"	10/19/2016	7.7 B	4
	P3 0-6" DUP	10/19/2016	8 B	
	P3 12-18"	10/19/2016	4 B	28
	P3 12-18" DUP	10/19/2016	5.3 B	
	P3 24-30"	10/19/2016	1.8 B	40
	P3 24-30" DUP	10/19/2016	1.2 J B	
	P4 0-6"	10/19/2016	8.9 B	NA
	P4 12-18"	10/19/2016	5.9 B	NA
	P4 24-30"	10/19/2016	0.64 J B	NA
	P5 0-6"	10/19/2016	78 B	NA
	P5 12-18"	10/19/2016	20 B	NA
	P5 24-30"	10/19/2016	1.6 B	NA
	P6 0-6"	10/19/2016	15 B	NA
	P6 12-18"	10/19/2016	12 B	NA
	P6 24-30"	10/19/2016	3.1 B	NA
4214	P1 0-6"	10/15/2016	19 B	NA
	P2 0-6"	10/15/2016	65	NA

TABLE 6
SUMMARY OF ADDITIONAL SOIL SAMPLING ANALYTICAL RESULTS - 2016
MIDWAY ATOLL NWR

Structure	Sample ID	Date	Lead (mg/kg)	Difference %
5304	WT P1 0-6"	10/23/2016	6,200	NA
	WT P1 12-18"	10/23/2016	9.9	NA
	WT P1 24-30"	10/23/2016	5.1	NA
	WT P2 0-6"	10/23/2016	110	NA
	WT P2 12-18"	10/23/2016	3.2	NA
	WT P2 24-30"	10/23/2016	ND	NA
5305	WT P1 0-6"	10/23/2016	650	NA
	WT P1 12-18"	10/23/2016	82	NA
	WT P1 24-30"	10/23/2016	ND	NA

Notes

1. Lead was analyzed by Environmental Protection Agency Method 6010B .

B = Lead was detected in the blank and the sample.

J = Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

mg/kg = milligram per kilogram

ND = non detect

TABLE 7
MULTI-EXTRACTION PROCEDURE ANALYTICAL RESULTS - 2016
MIDWAY ATOLL NWR

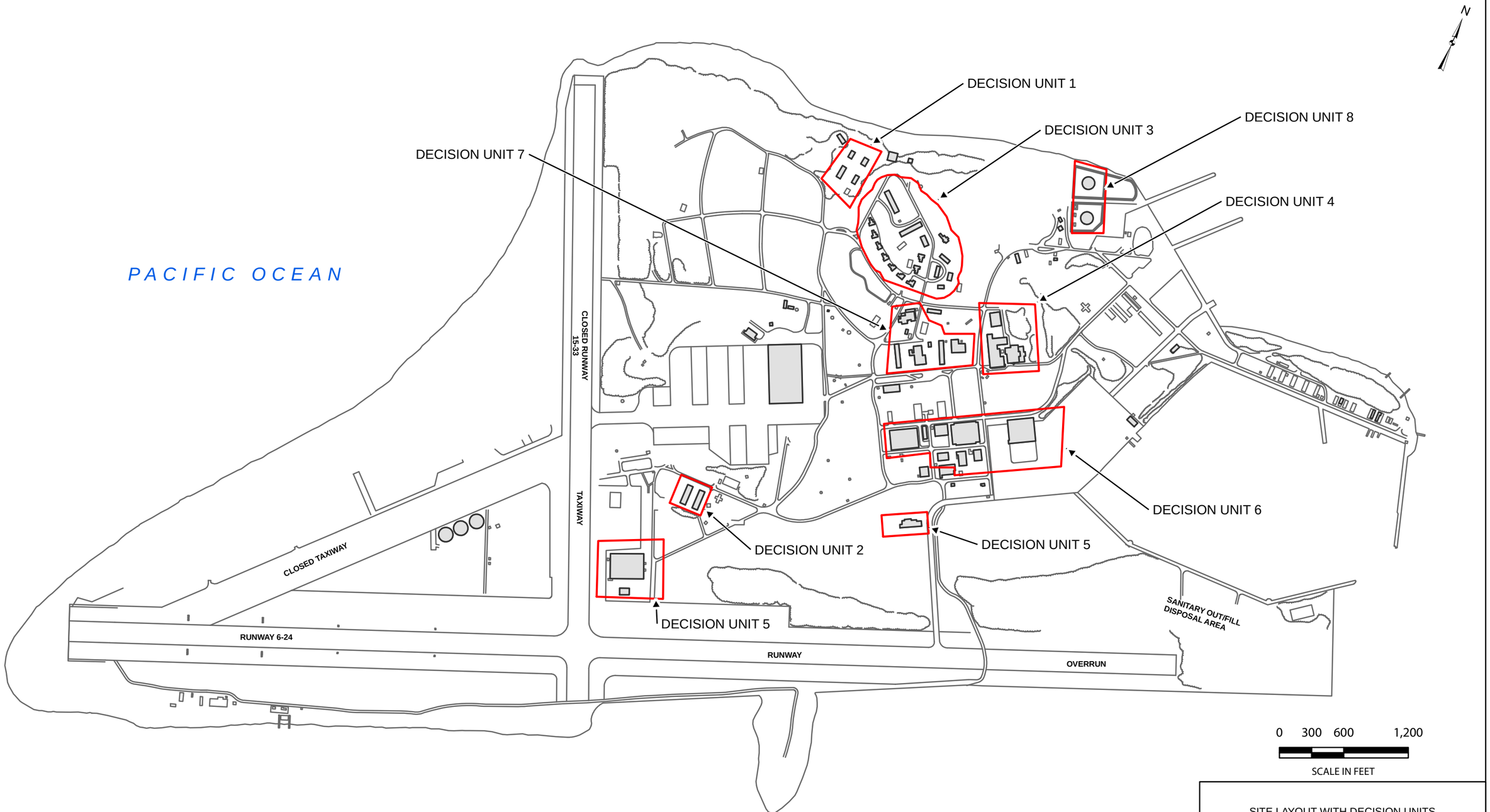
Sample Identification	Date	Lead Concentration (mg/l)
R2 Cell 3	10/23/2016	<0.10
		<0.10
		<0.10
		<0.10
		<0.10
		<0.10
		<0.10
		<0.10
		<0.10
R2 Cell 4	10/23/2016	<0.10
		<0.10
		<0.10
		<0.10
		<0.10
		<0.10
		<0.10
		<0.10
		<0.10

Notes

1. Lead was analyzed by Environmental Protection Agency Method 6010C-Leachability

2. The Toxicity Characteristic Leaching Procedure (TCLP) threshhold for lead is 5 milligrams per liter (mg/l)

FIGURES



LEGEND

Decision Units Structures

Notes:
1. The location of all features shown are approximate.
2. This drawing is for information purposes.
3. Decision Unit 9 covers all remaining structures.

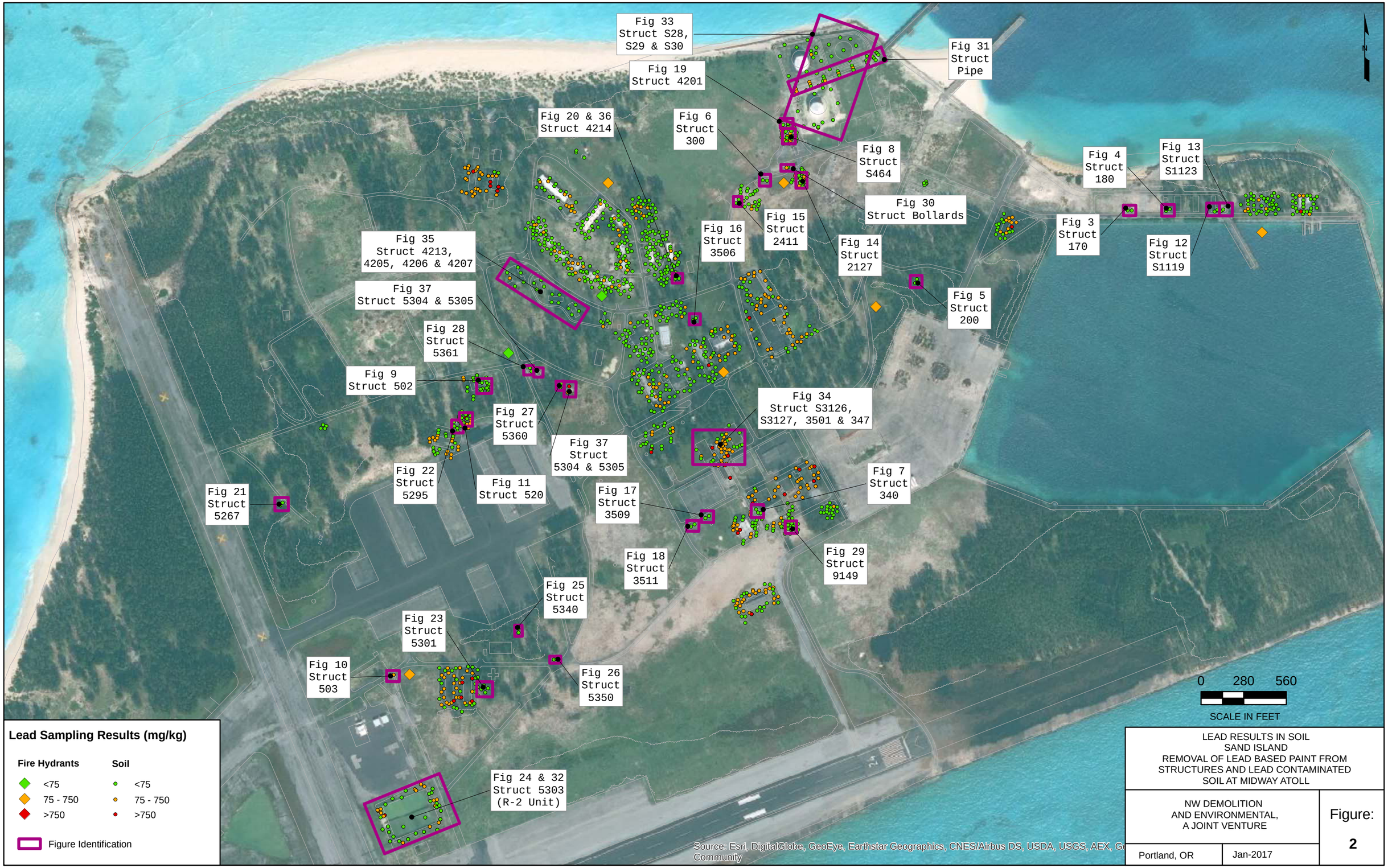
SITE LAYOUT WITH DECISION UNITS
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

JANUARY 2015

Figure: 1

Path: P:\GIS\Projects\Midway\Maps\2014_Joint format_Fig1.mxd

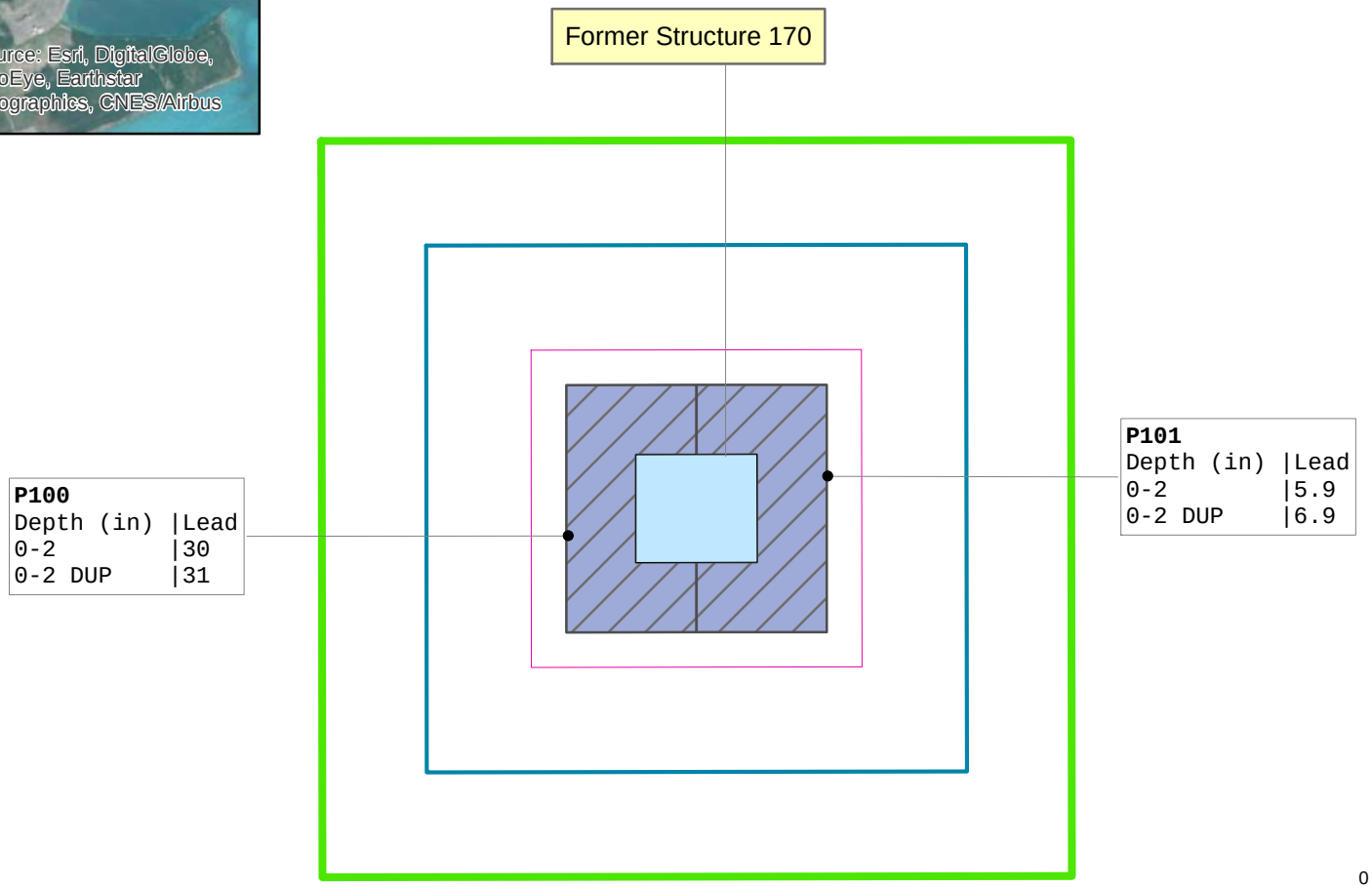


LEAD RESULTS IN SOIL
SAND ISLAND
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Portland, OR | Jan-2017

Figure:
2



0 9 18 27

SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

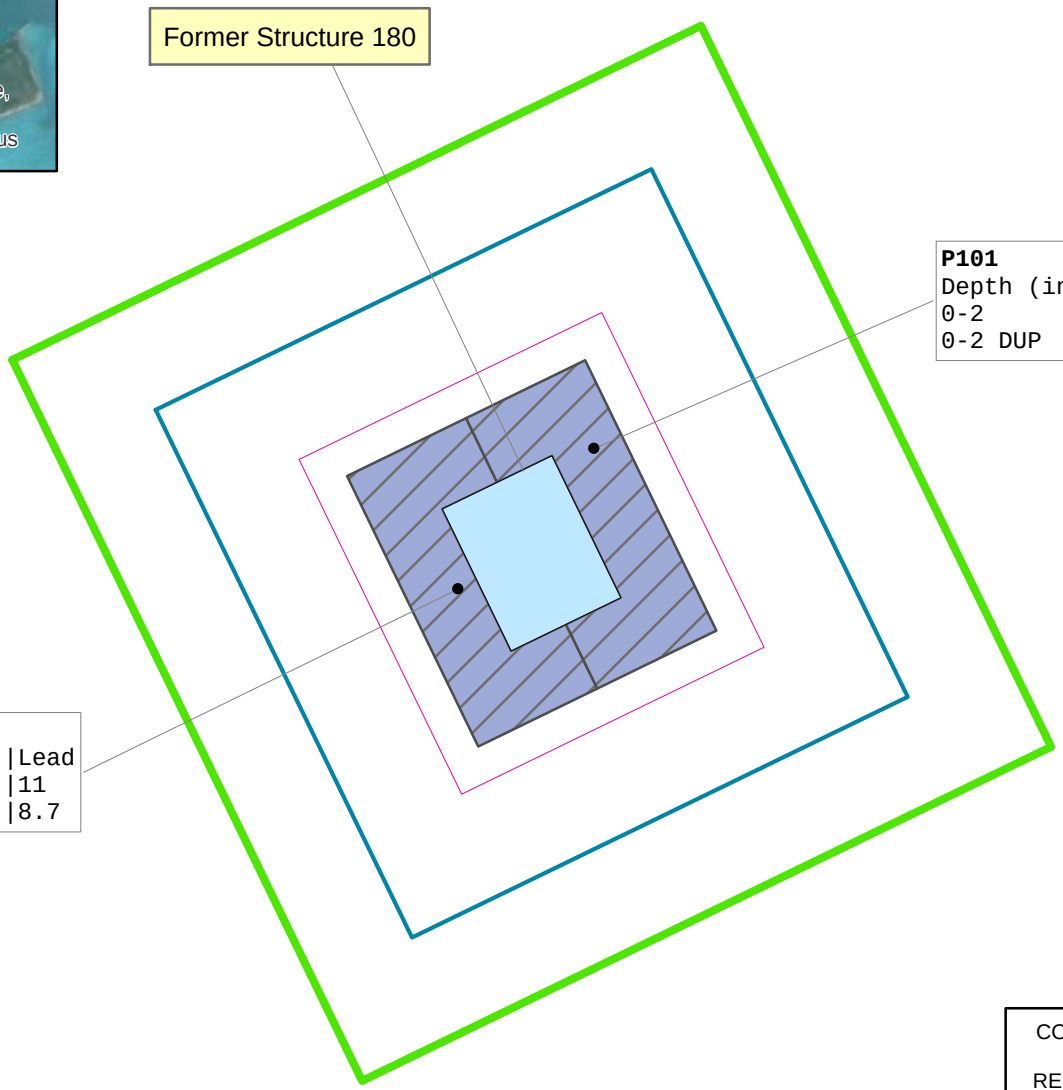
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 170
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 3



0 9 18 27

SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

J indicates estimated amount

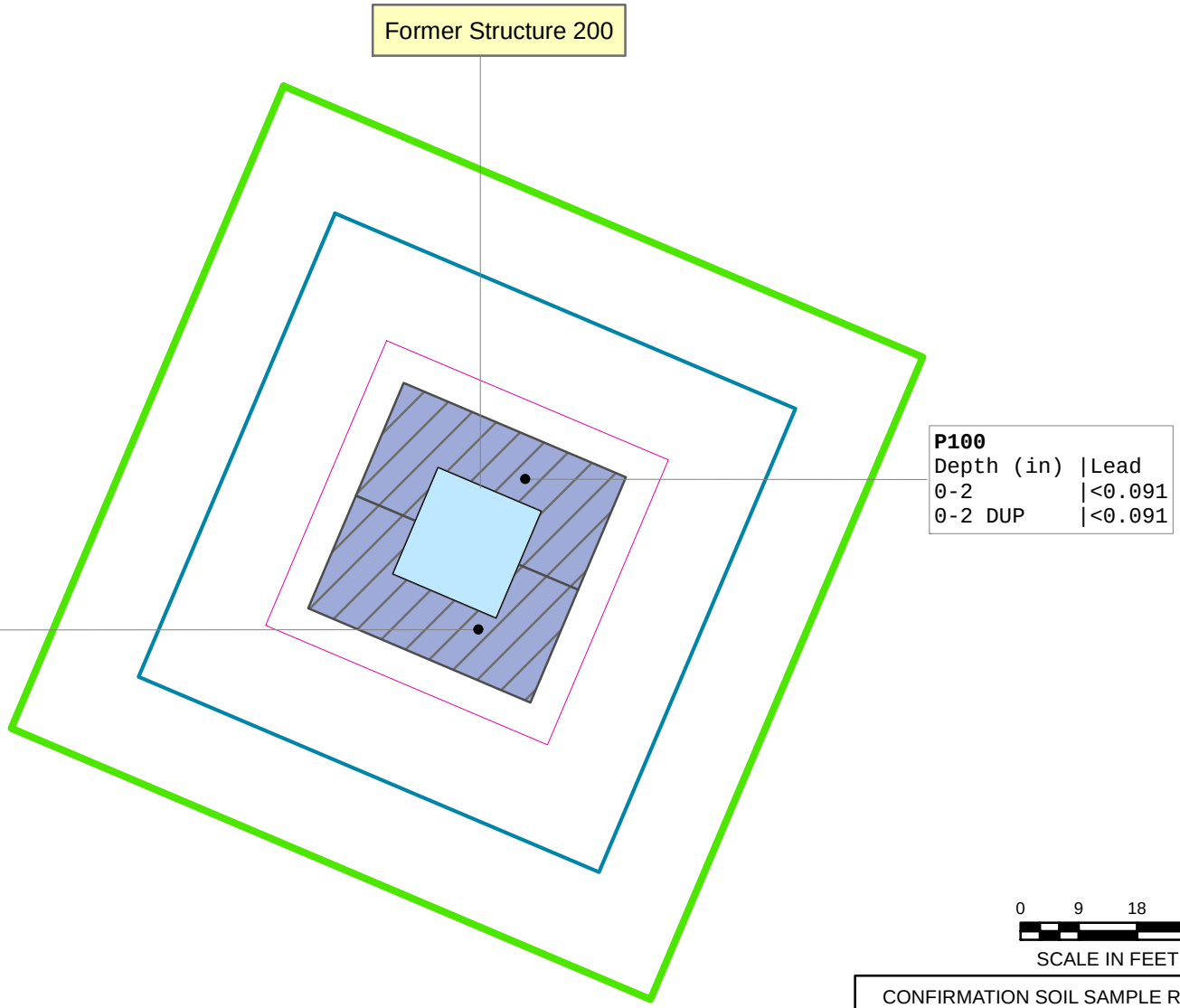
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 180
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 4



0 9 18 27

SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

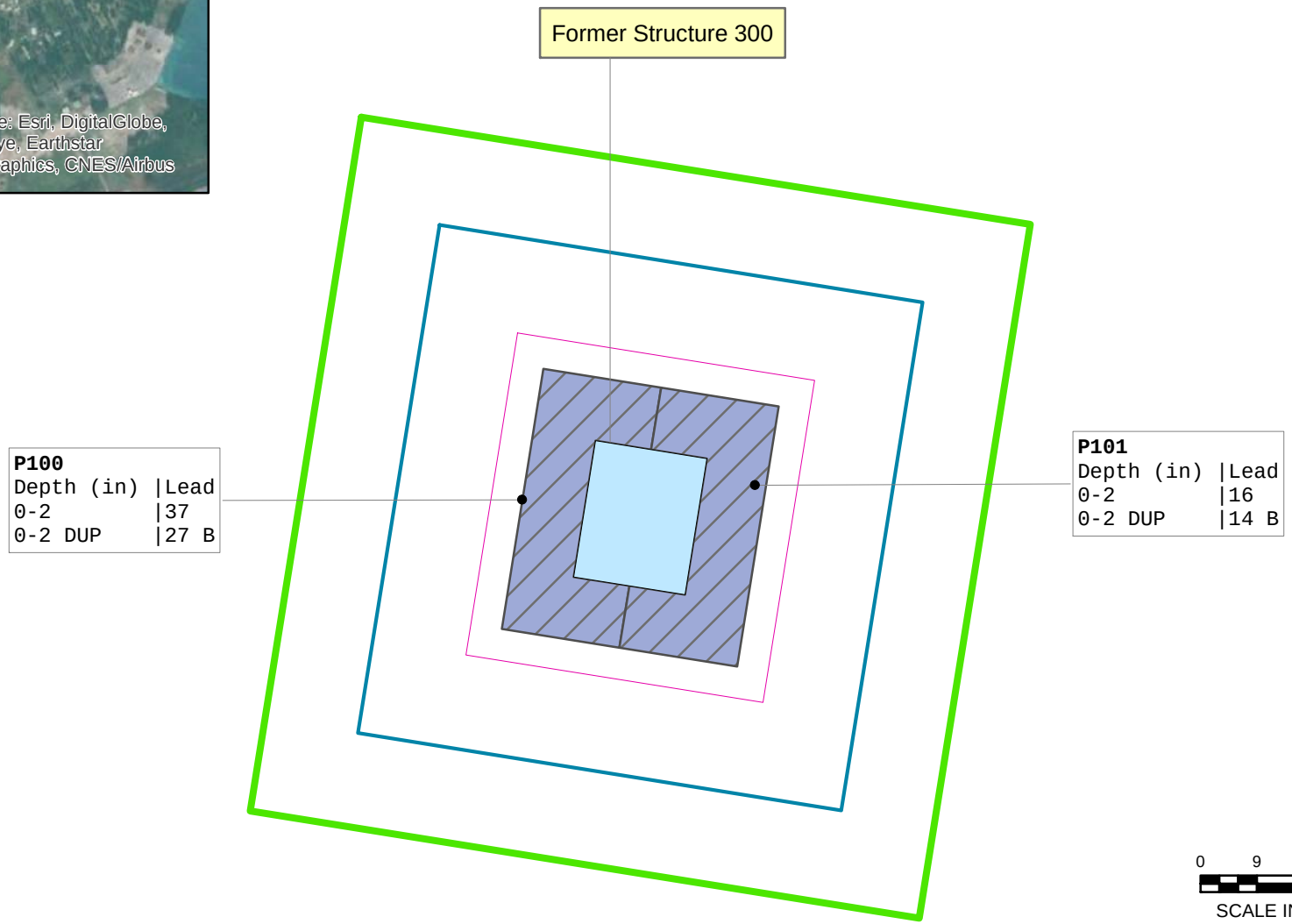
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 200
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 5



15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

B indicates lead was found in blank

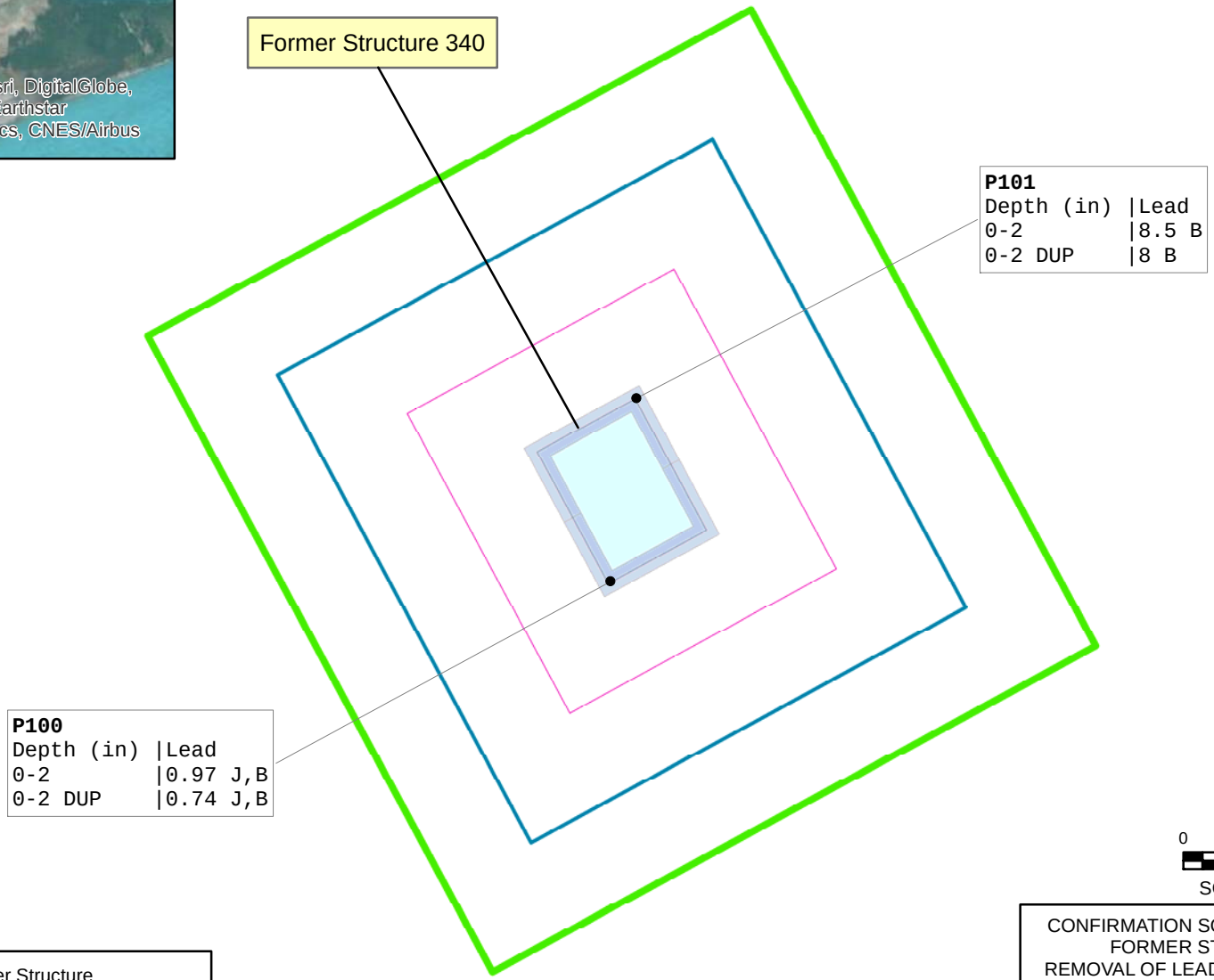
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 300
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 6



15' Buffer
30' Buffer
45' Buffer
Former Structure
Composite Sample

J indicates estimated amount
B indicates lead was found in blank

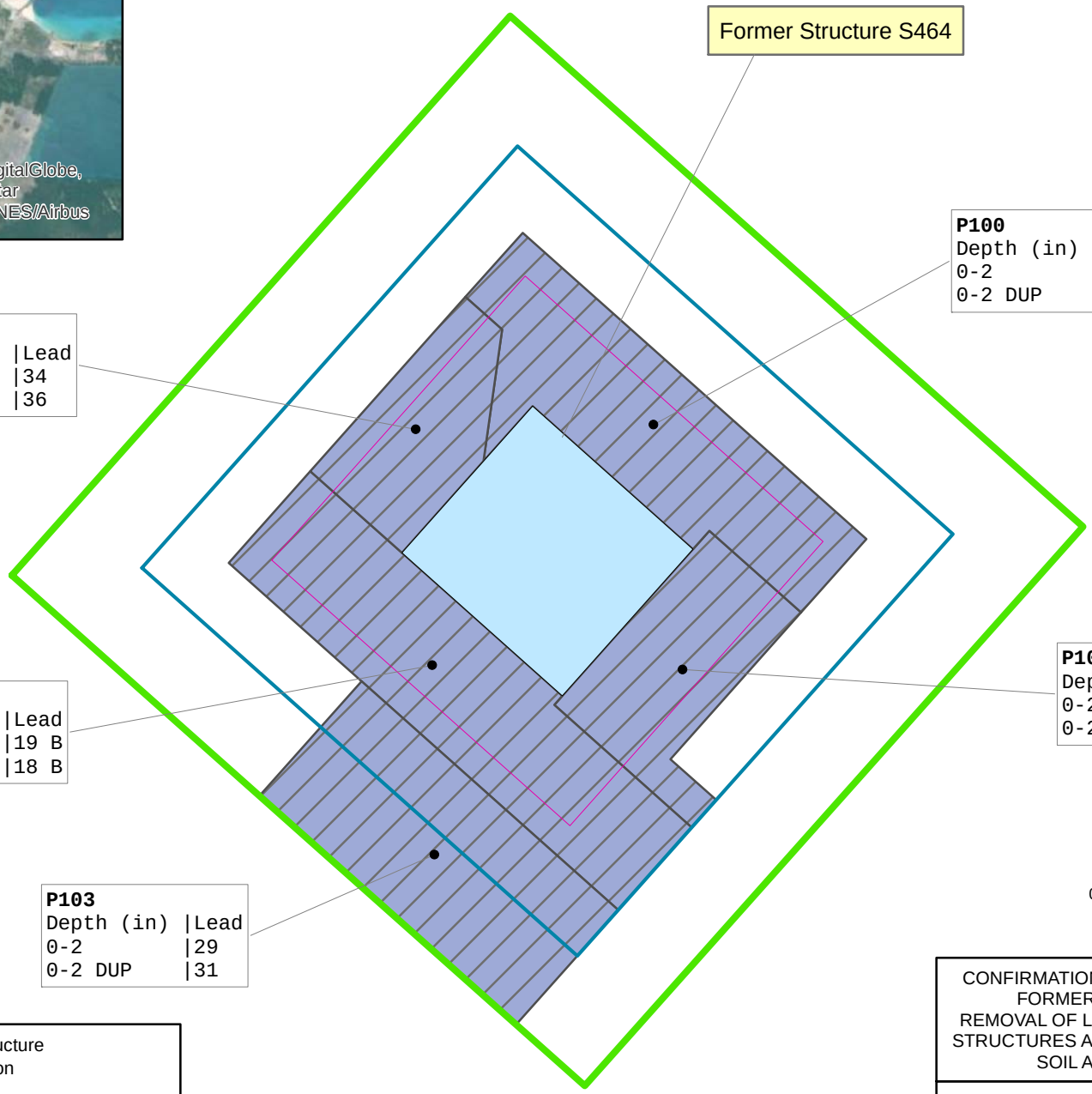
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 340
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 7



15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

B indicates lead was found in blank

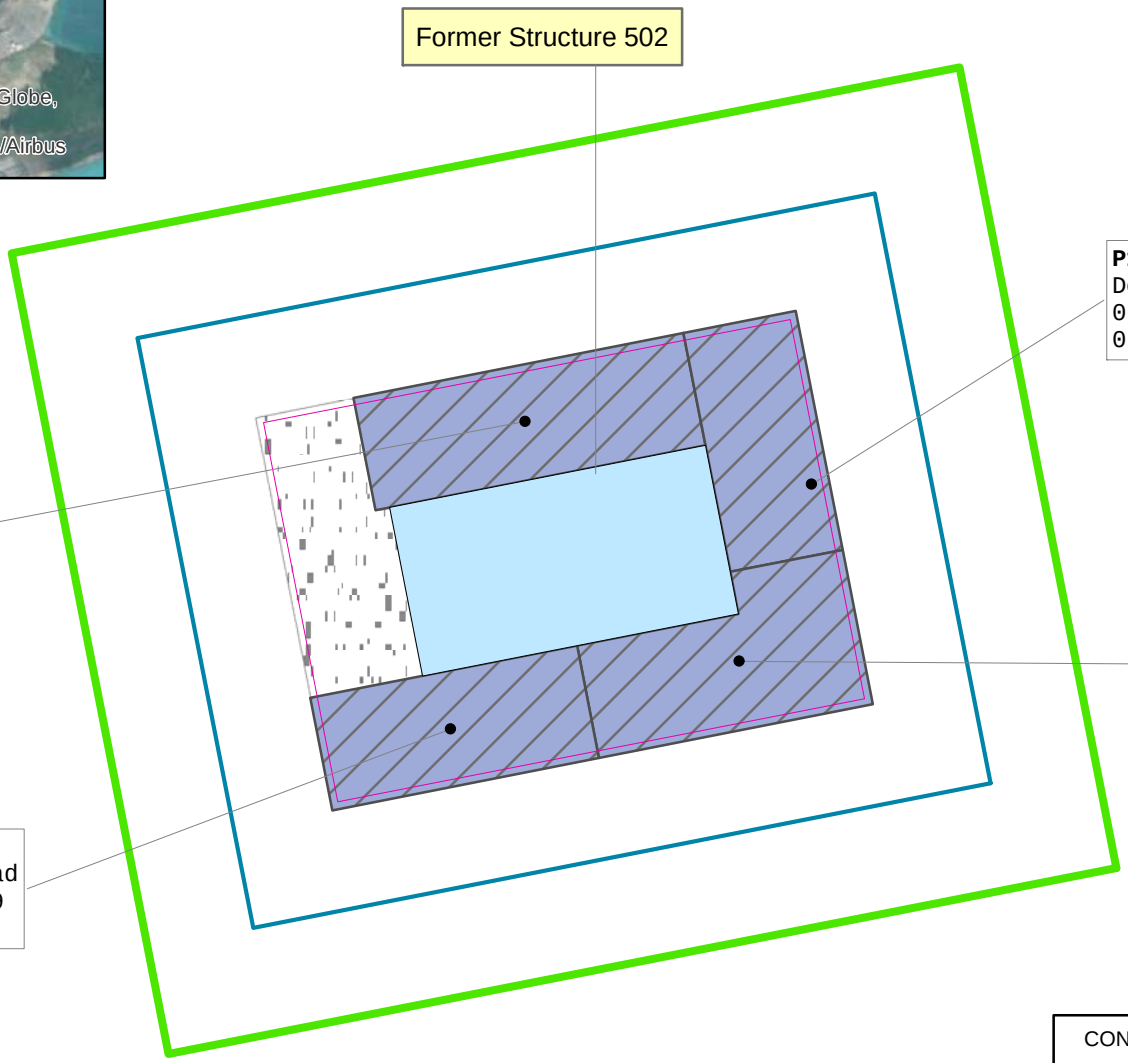
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE S464
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 8



0 9 18 27

SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation
Concrete Slab

Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 502
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 9

0 10 20
SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

B indicates lead was found in blank

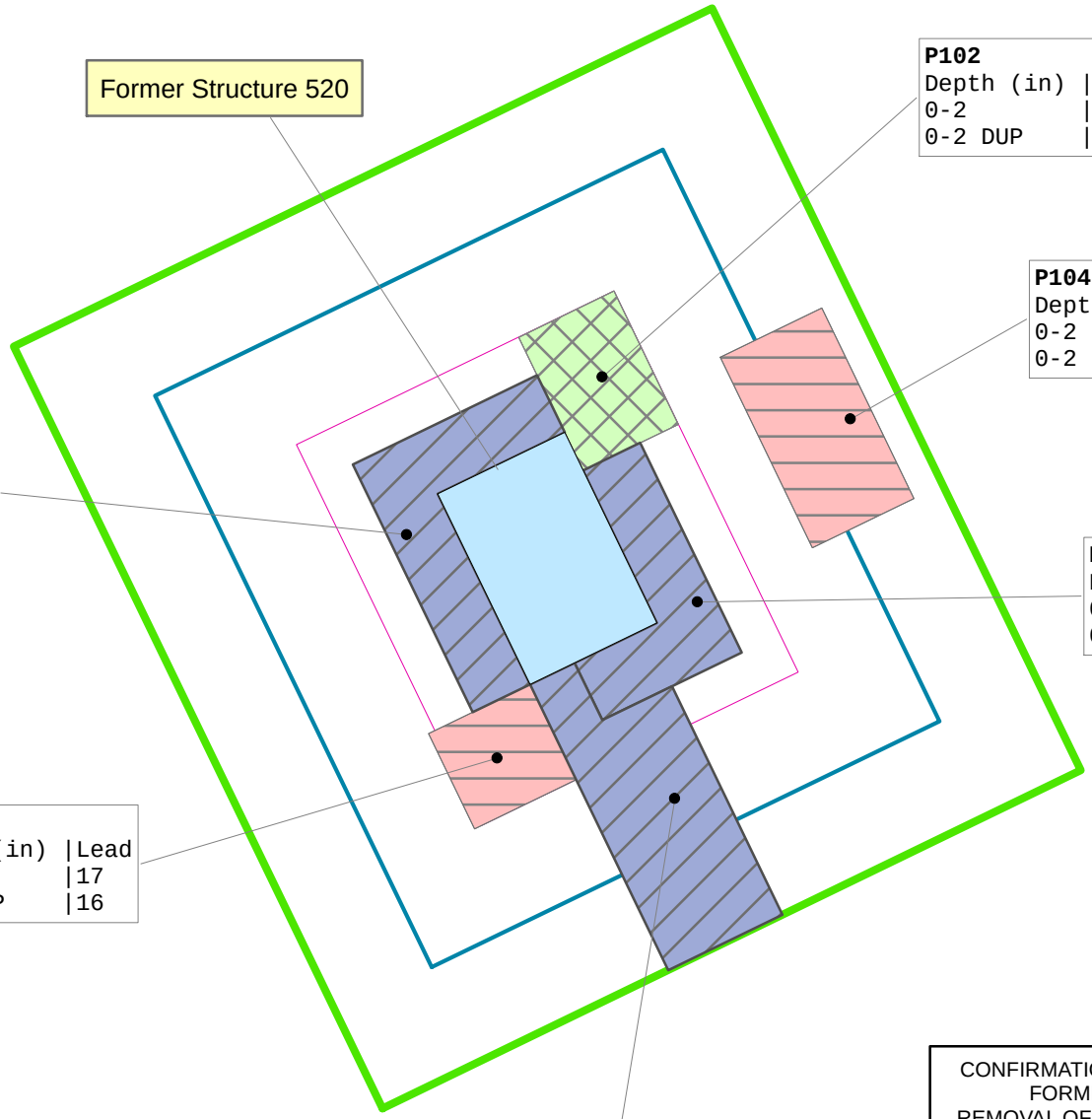
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 503
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 10



15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation
2' Excavation
3' Excavation

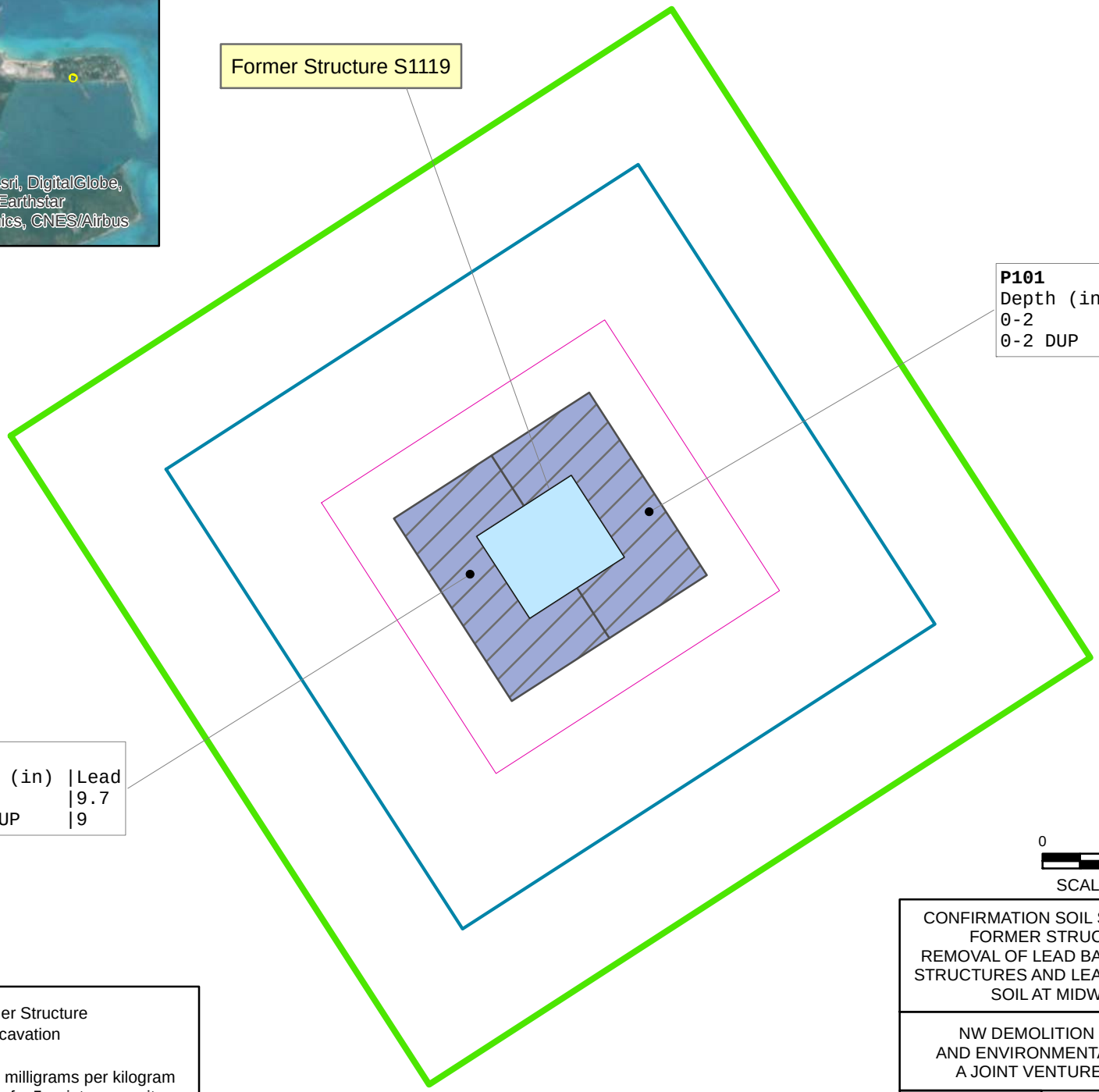
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 520
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 11



15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

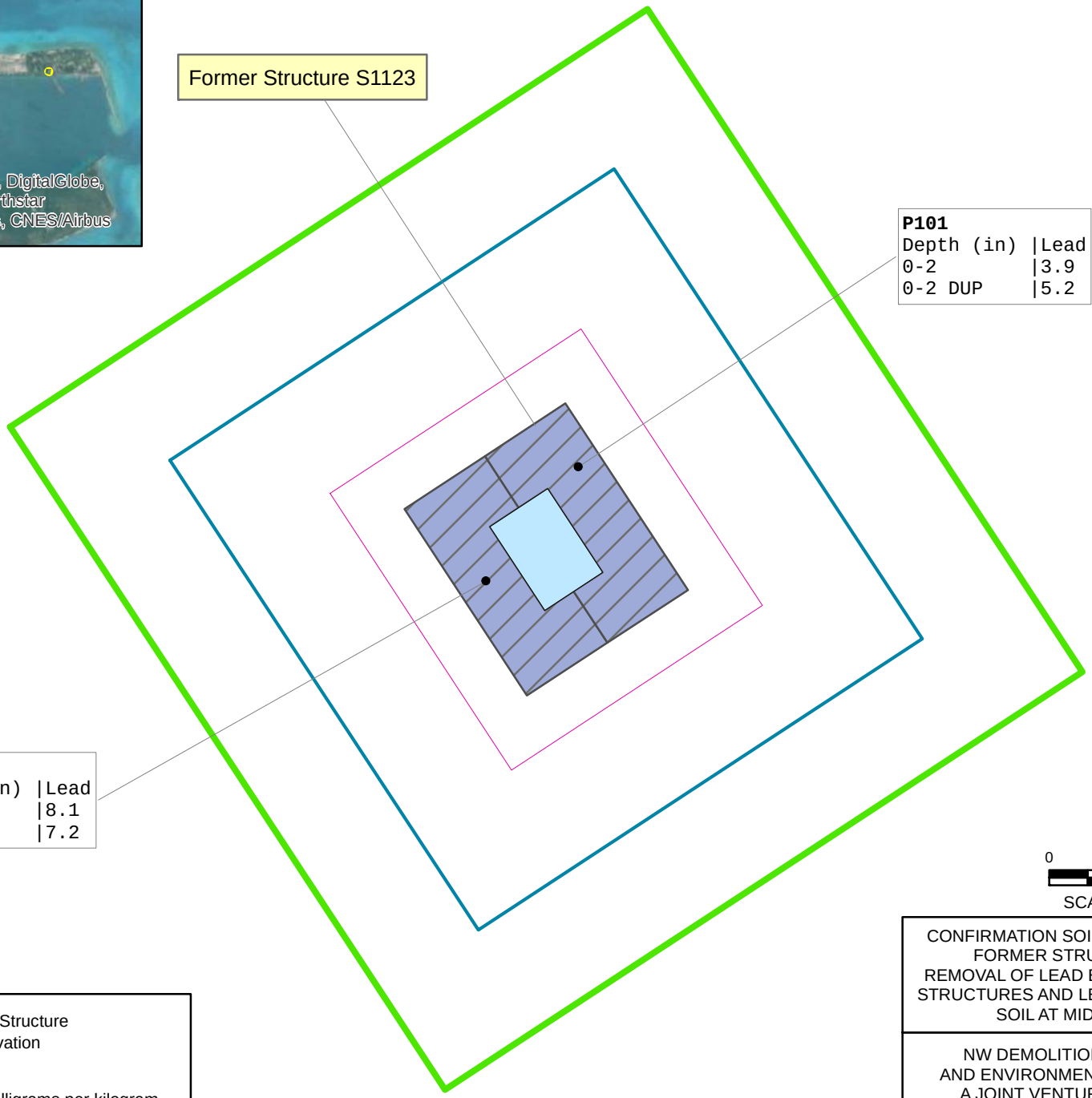
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE S1119
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 12



15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

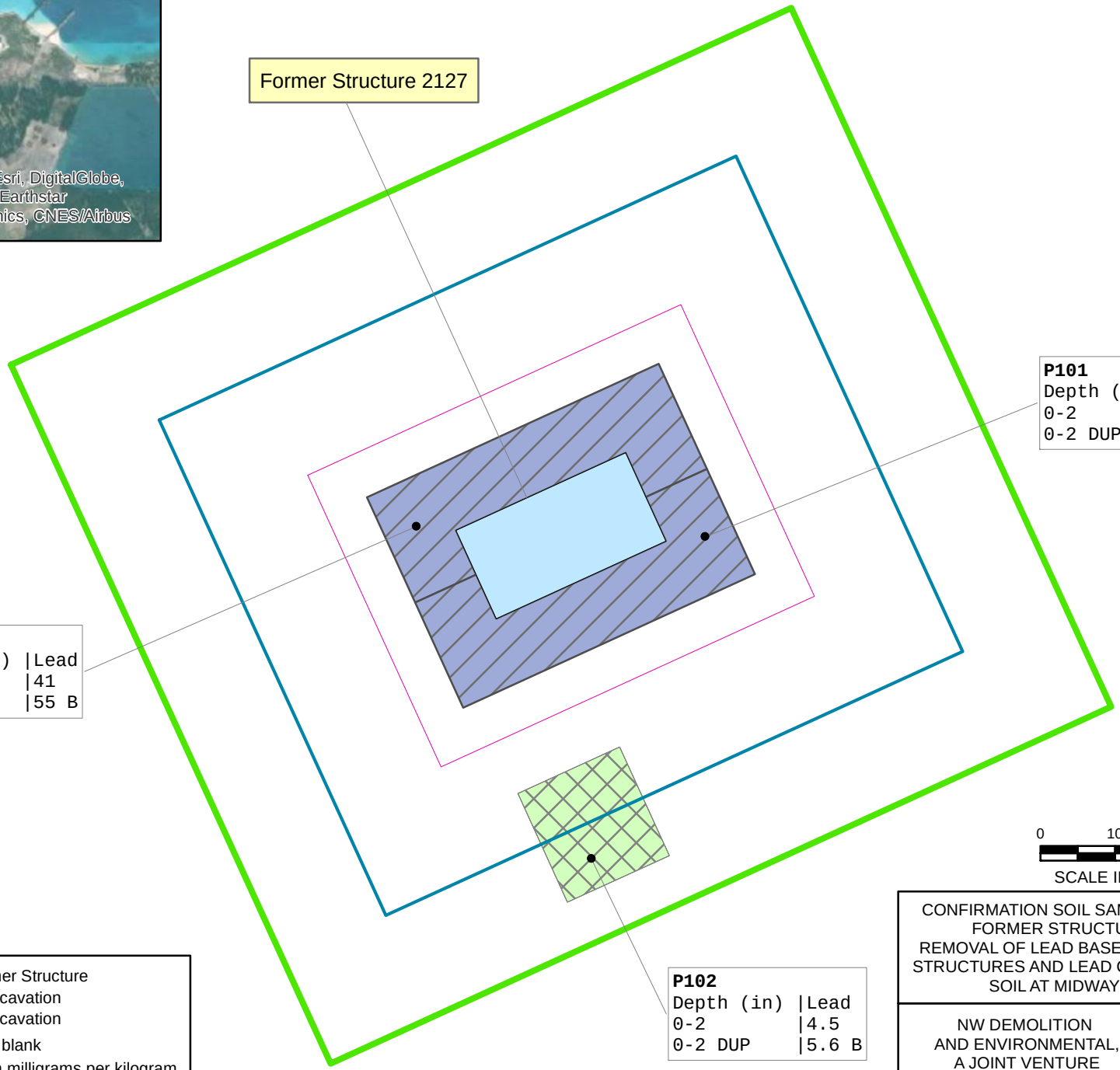
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE S1123
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 13



15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation
2' Excavation

B indicates lead was found in blank

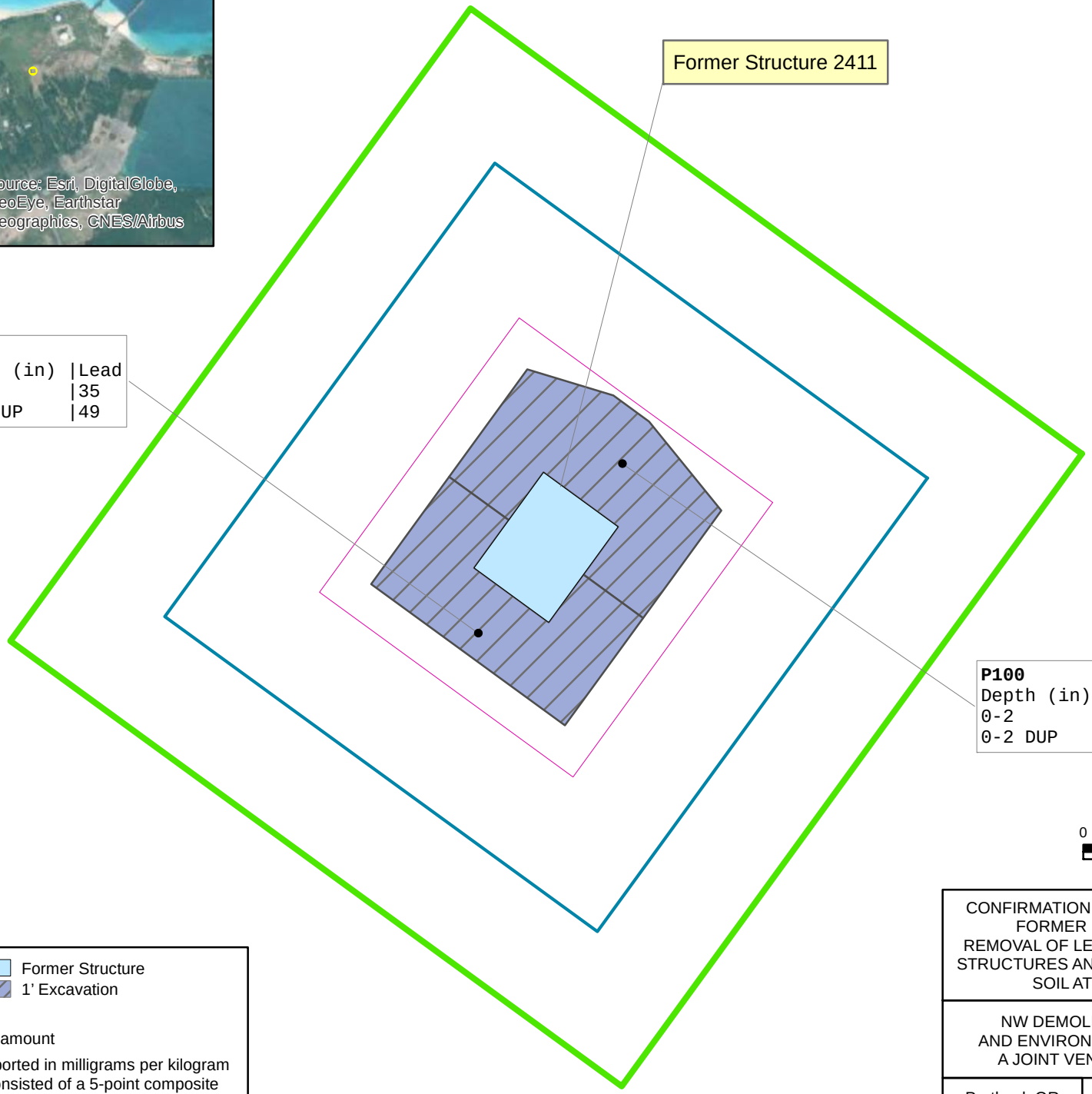
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 2127
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 14



15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

J indicates estimated amount

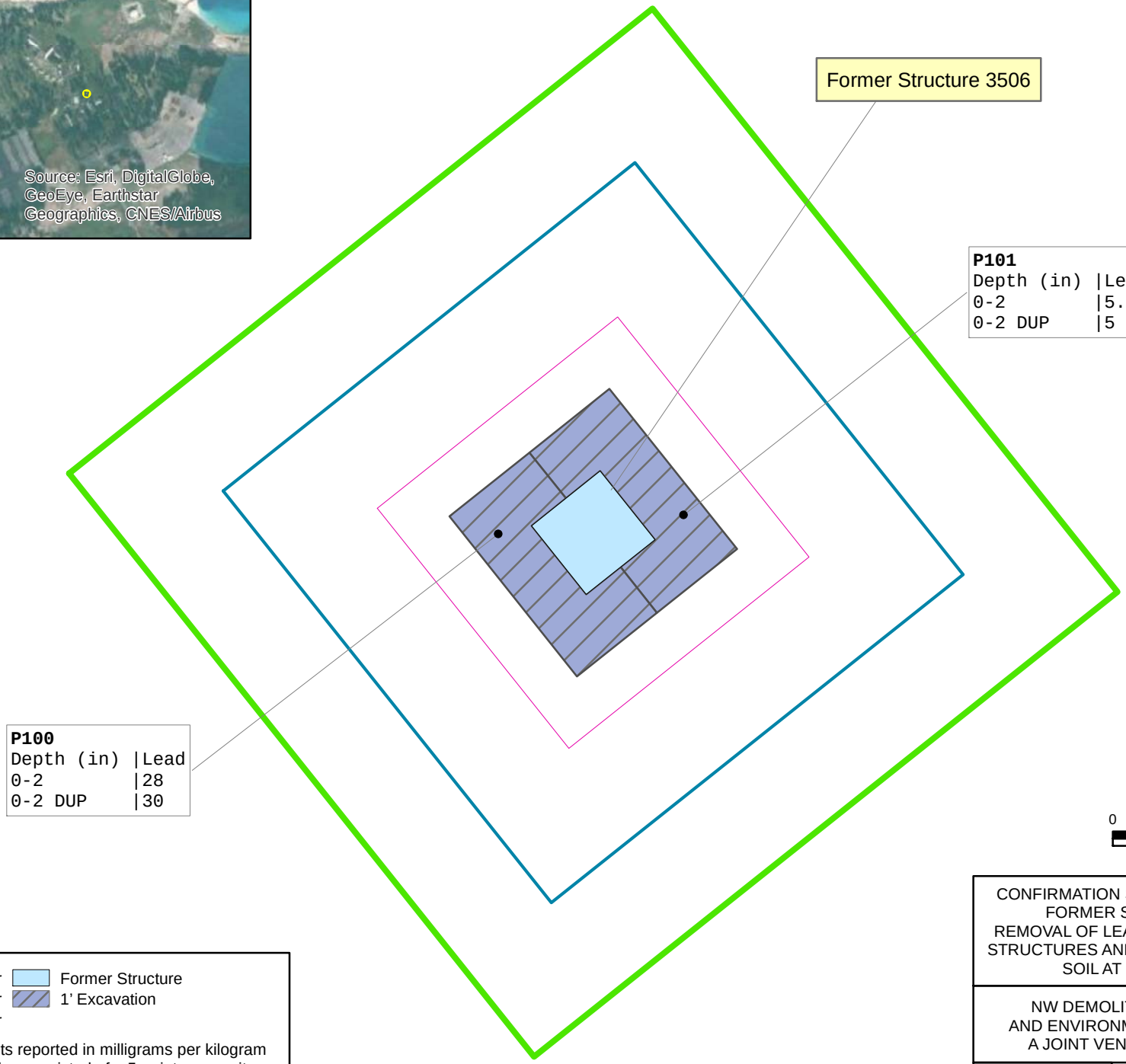
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 2411
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 15



15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

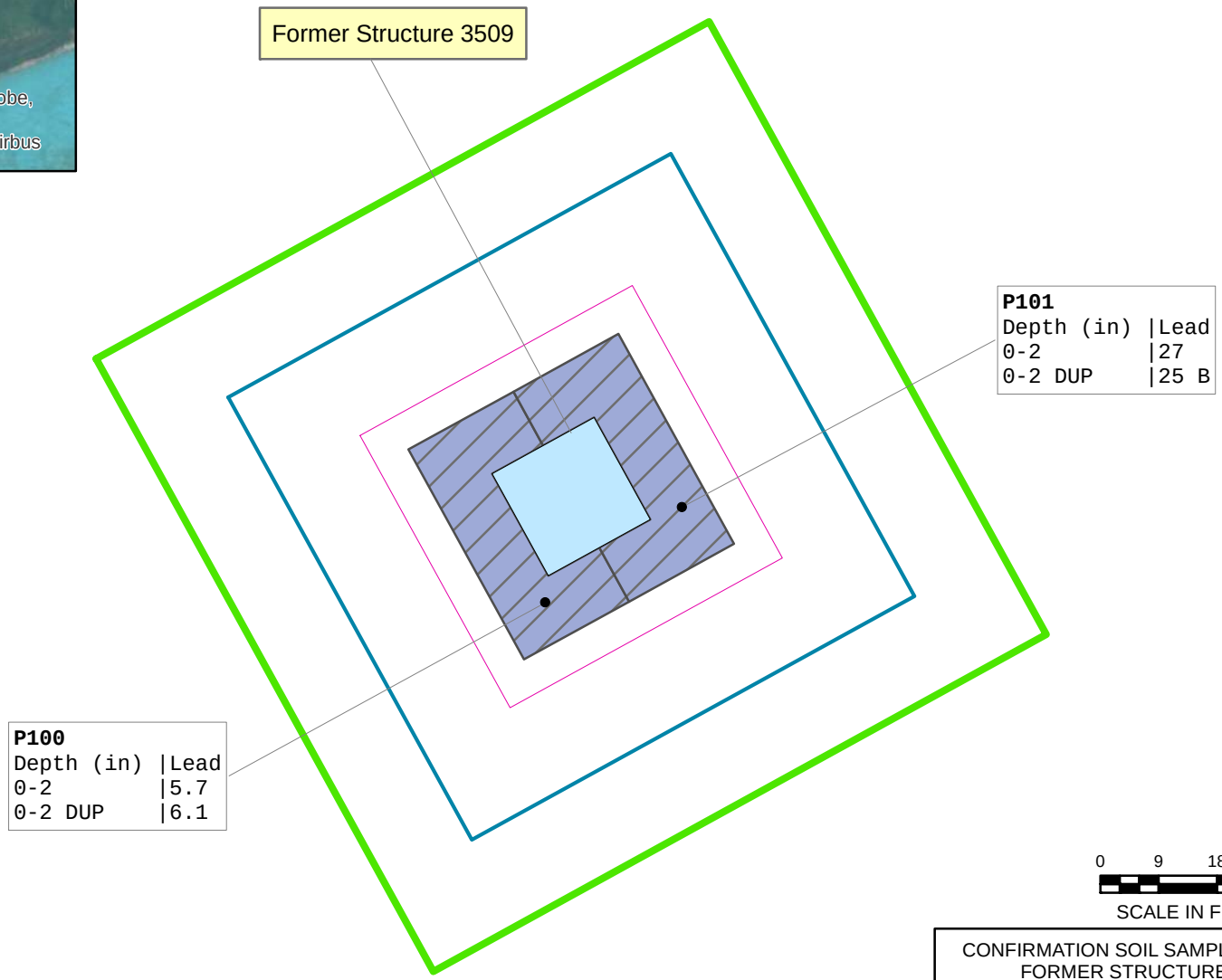
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 3506
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 16



0 9 18 27

SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

B indicates lead was found in blank

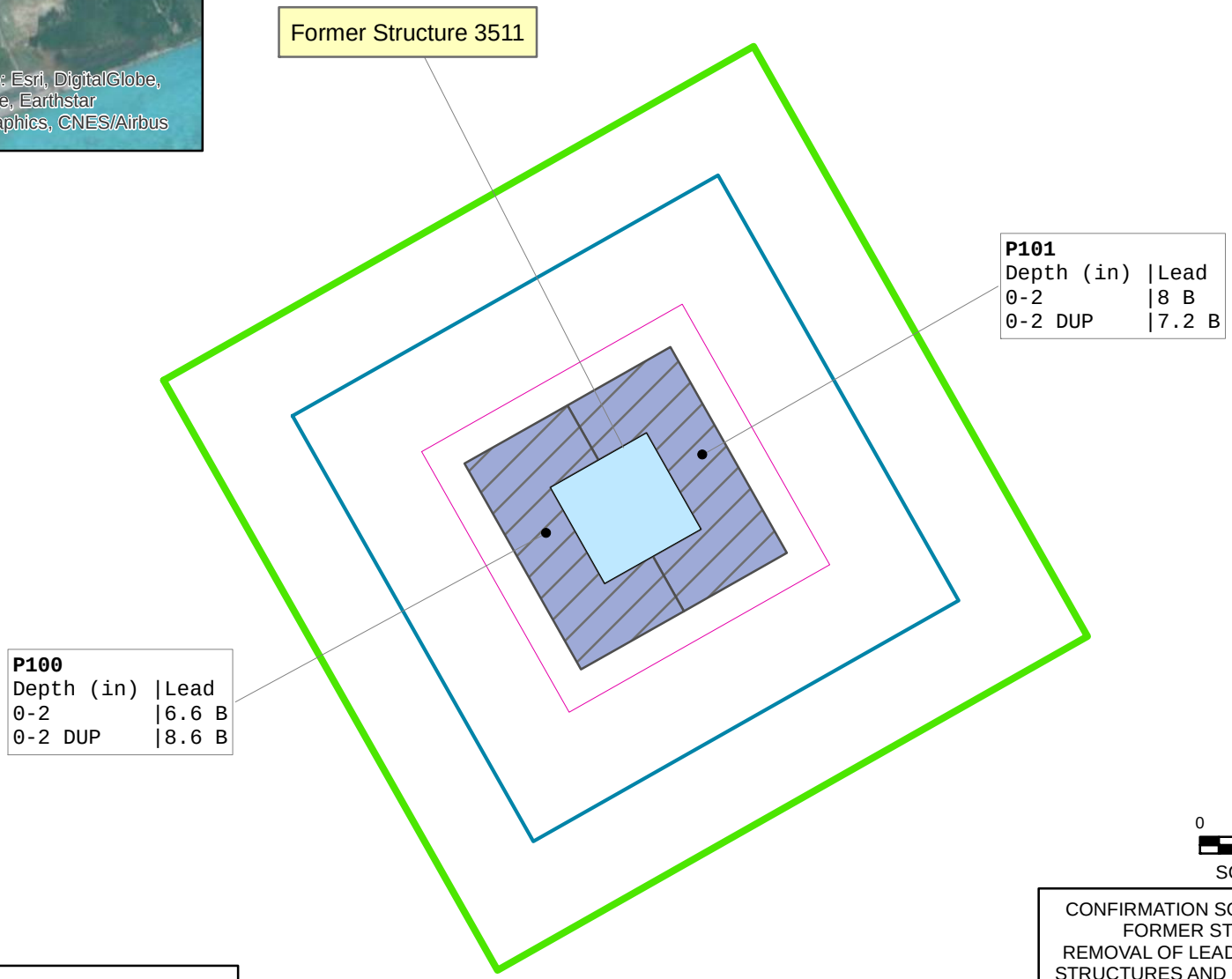
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 3509
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 17



0 9 18 27

SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

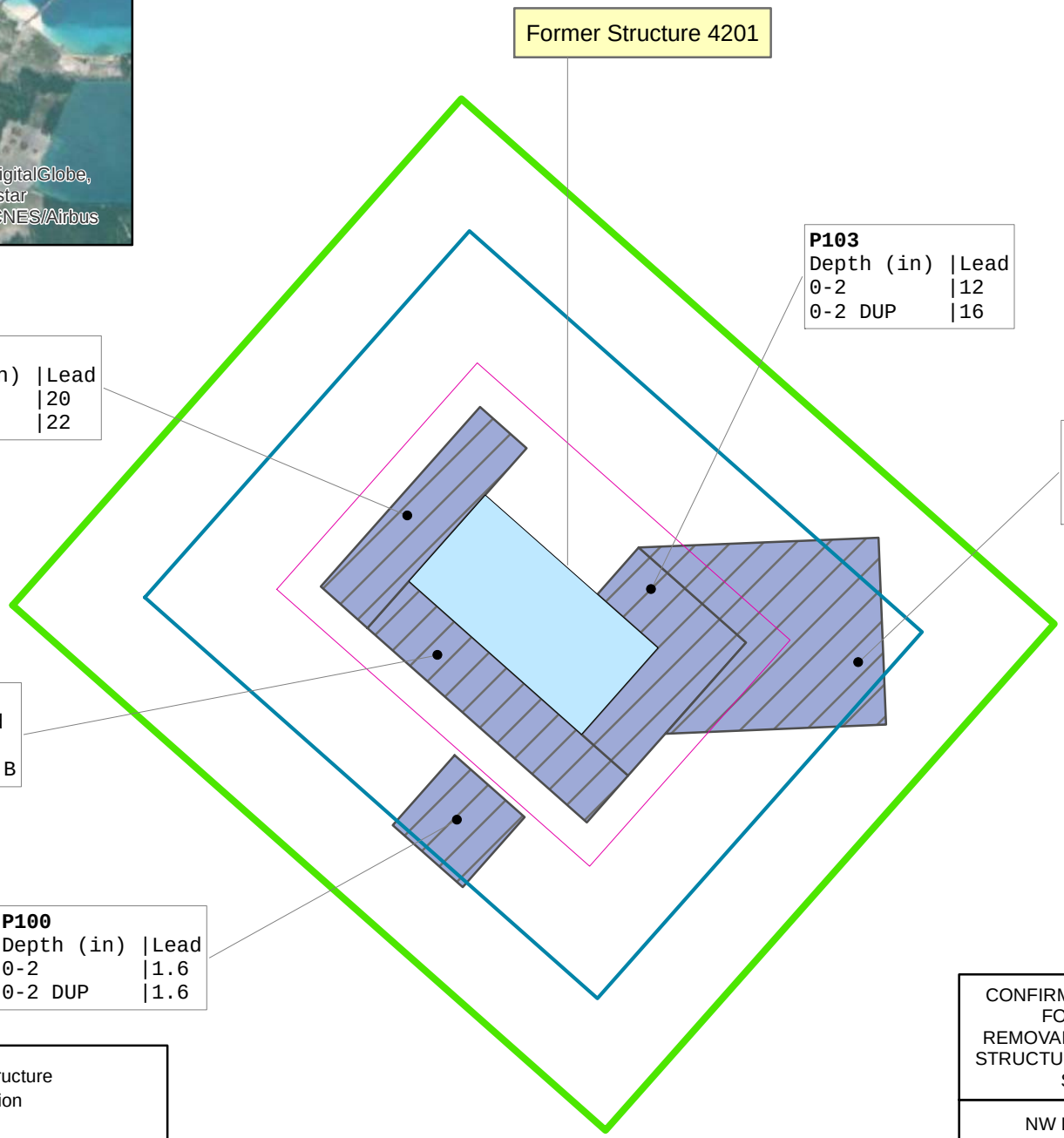
B indicates lead was found in blank
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 3511
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 18



0 9 18 27

SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

B indicates lead was found in blank

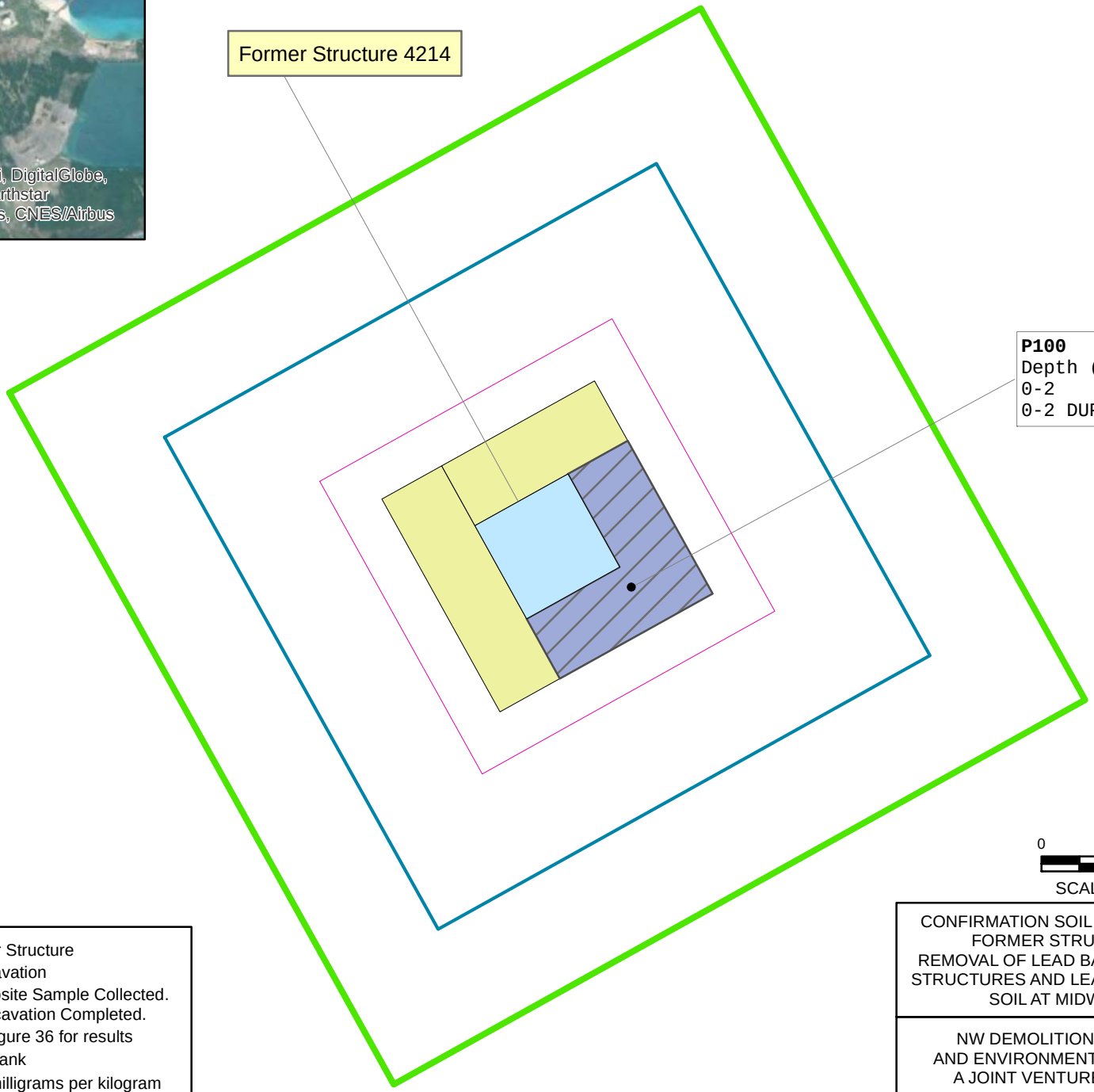
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 4201
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 19



15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation
Composite Sample Collected. No Excavation Completed. See Figure 36 for results

B indicates lead was found in blank

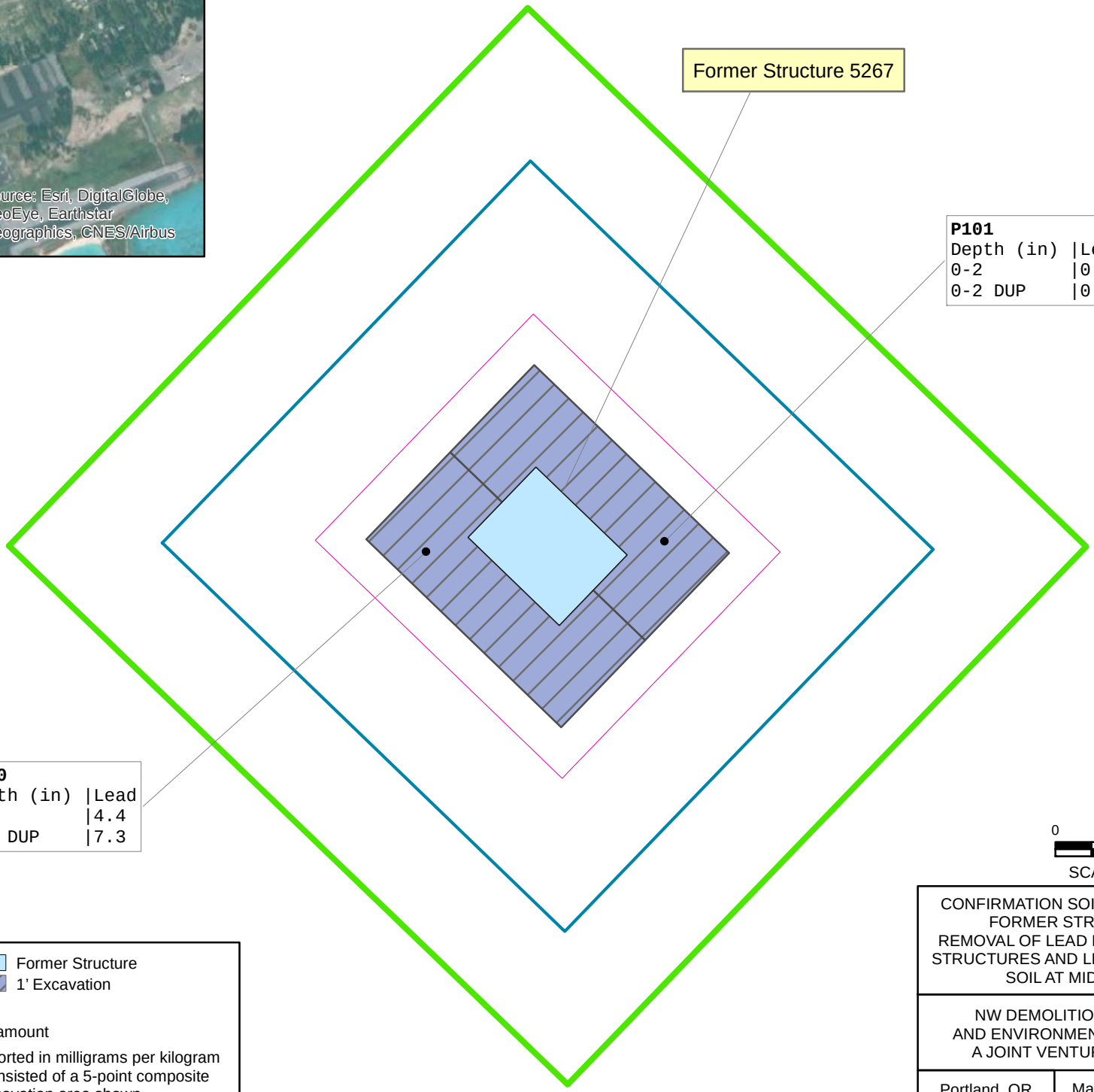
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 4214
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 20



15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

J indicates estimated amount

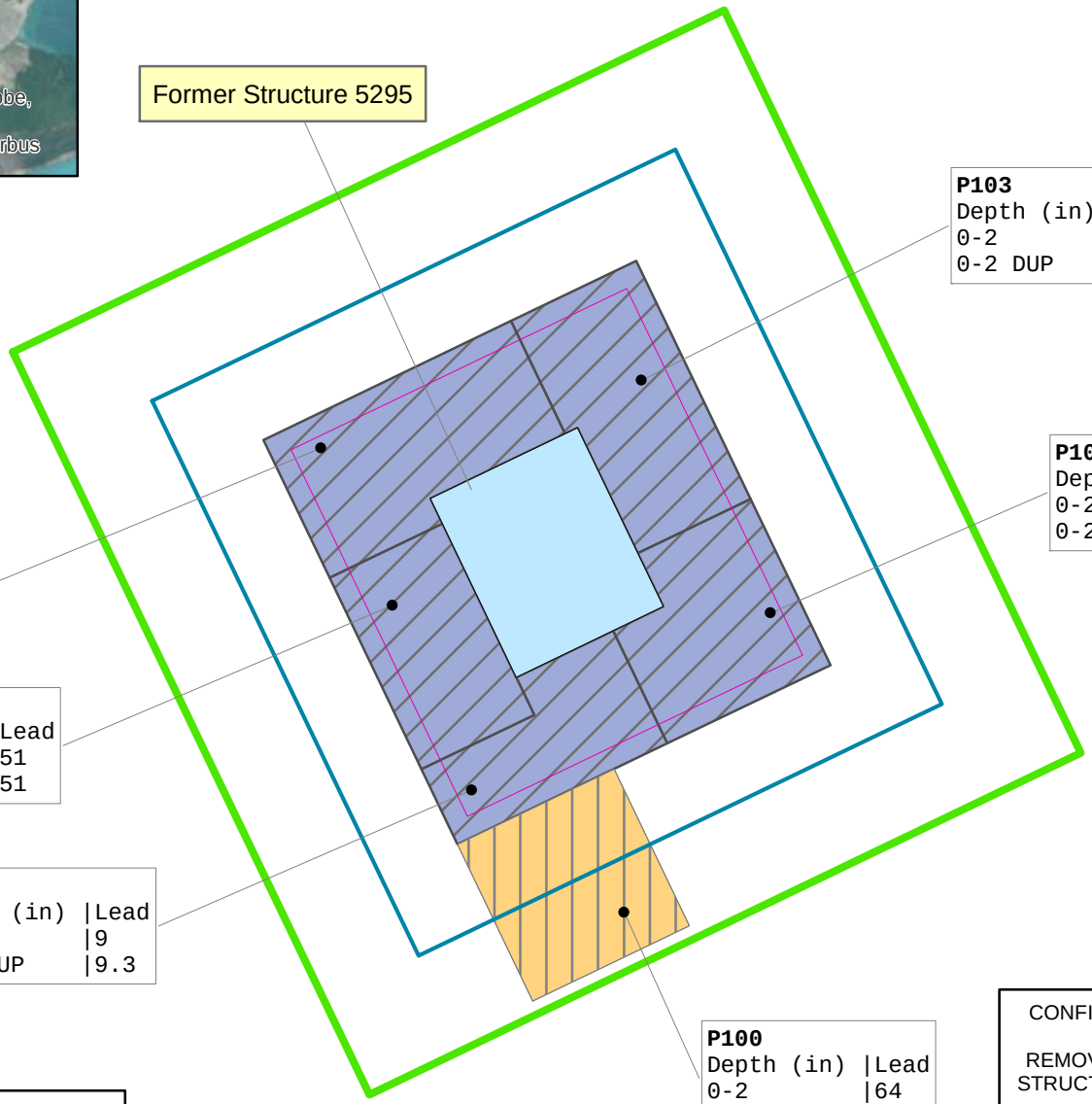
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 5267
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 21



P103

Depth (in)	Lead
0-2	38
0-2 DUP	37

P104

Depth (in)	Lead
0-2	6.2
0-2 DUP	6.5

P102

Depth (in)	Lead
0-2	28
0-2 DUP	37

P101

Depth (in)	Lead
0-2	51
0-2 DUP	51

P105

Depth (in)	Lead
0-2	9
0-2 DUP	9.3

P100

Depth (in)	Lead
0-2	64
0-2 DUP	70

0 9 18 27

SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Former Structure
0.5' Excavation
1' Excavation

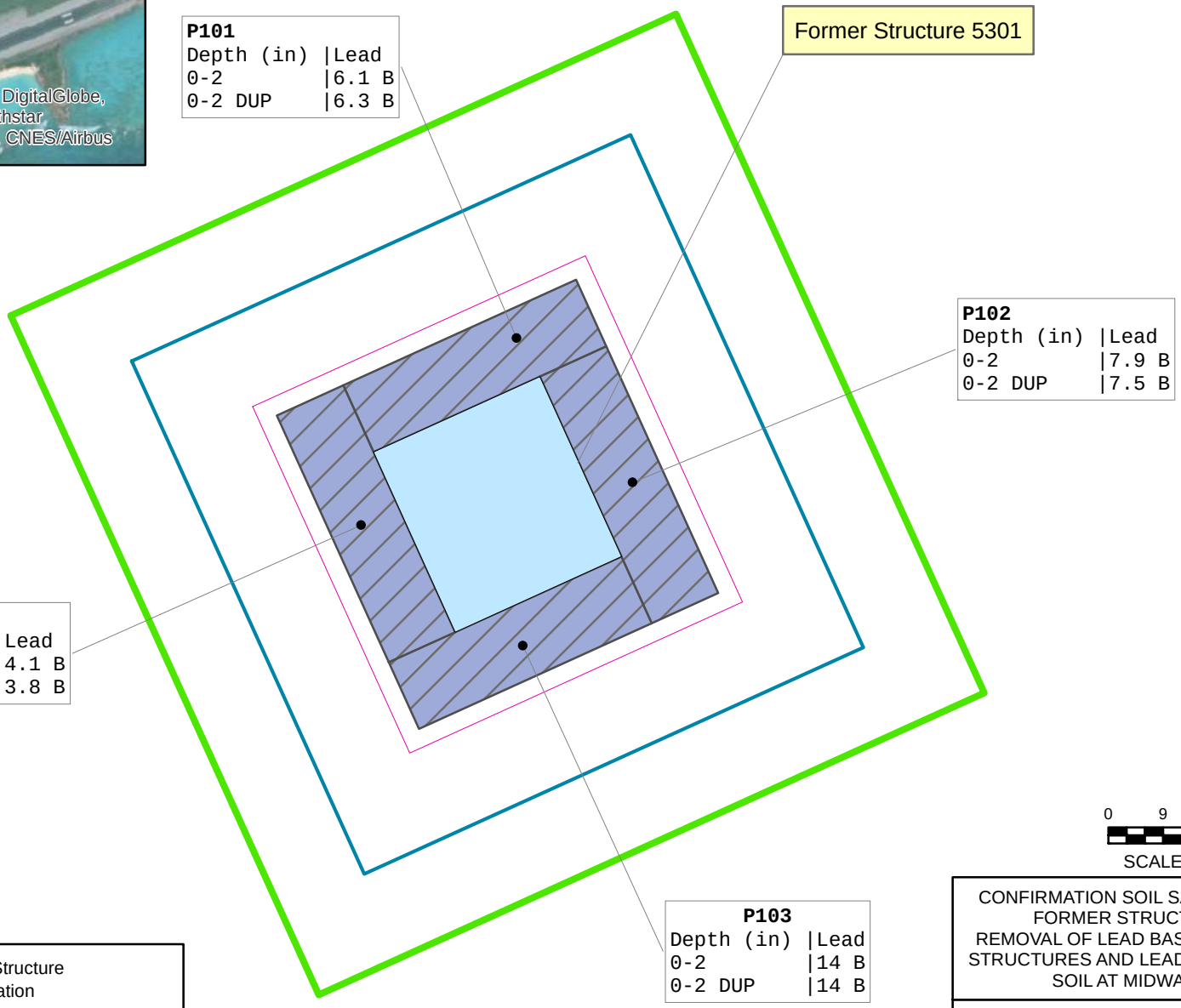
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 5295
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 22



0 9 18 27

SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

B indicates lead was found in blank

Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 5301
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 23

E A	
Depth (in)	Lead
0-2	120
0-2 DUP	7.7

E B	
Depth (in)	Lead
0-2	190
0-2 DUP	87

E C	
Depth (in)	Lead
0-2	14
0-2 DUP	12

E D	
Depth (in)	Lead
0-2	40
0-2 DUP	45

NW A	
Depth (in)	Lead
0-2	110
0-2 DUP	110

NW B	
Depth (in)	Lead
0-2	98
0-2 DUP	87 B

NW C	
Depth (in)	Lead
0-2	13
0-2 DUP	12

NW D	
Depth (in)	Lead
0-2	320
0-2 DUP	270

0 40 80
SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Structure
0.5' Excavation
1' Excavation

B indicates lead was found in blank

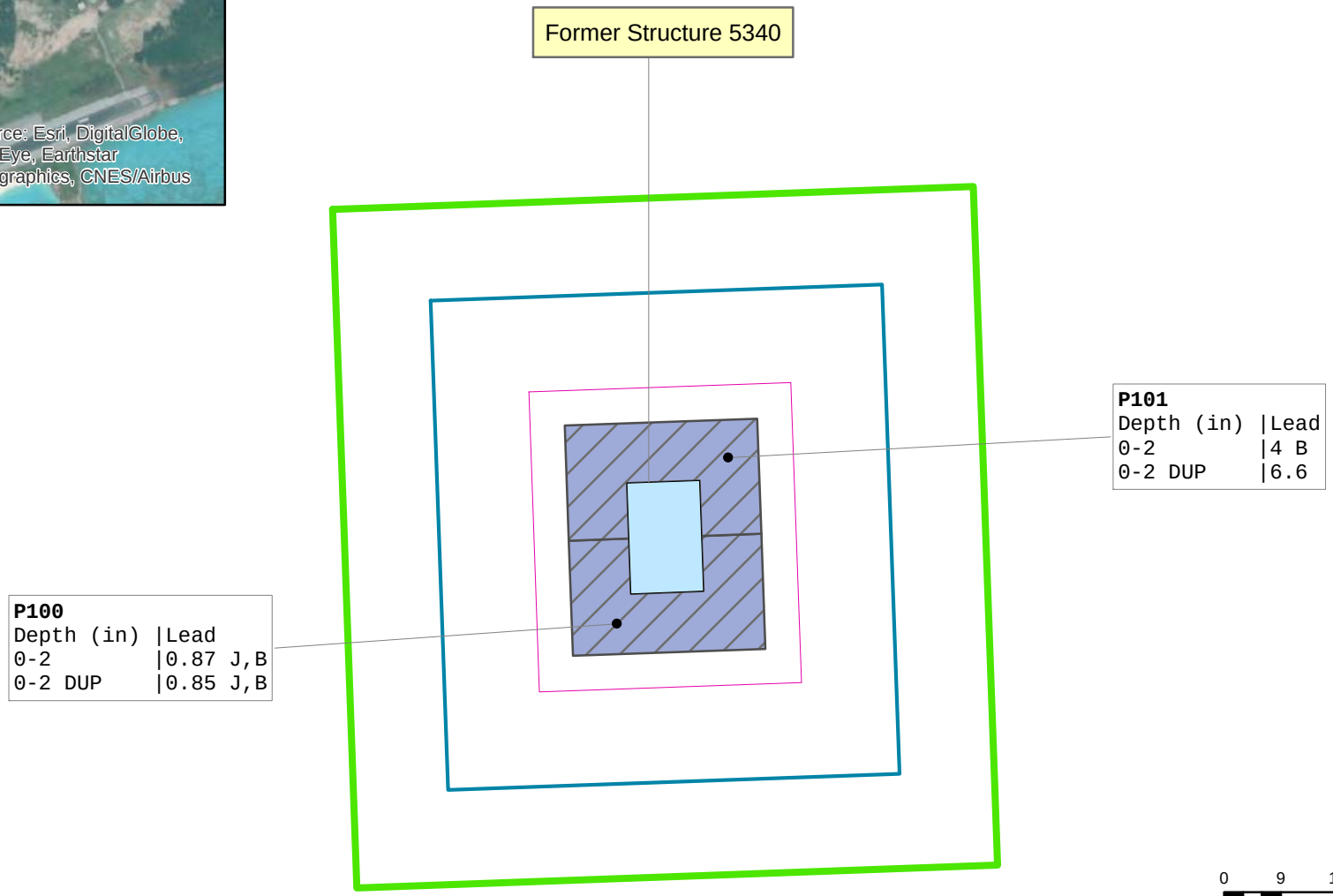
Note: Lead results reported in milligrams per kilogram
Soils within the 0.5 foot excavation area were left in place after treatment.
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
STRUCTURE 5303 (R-2 UNIT)
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 24



0 9 18 27

SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

J indicates estimated amount
B indicates lead was found in blank

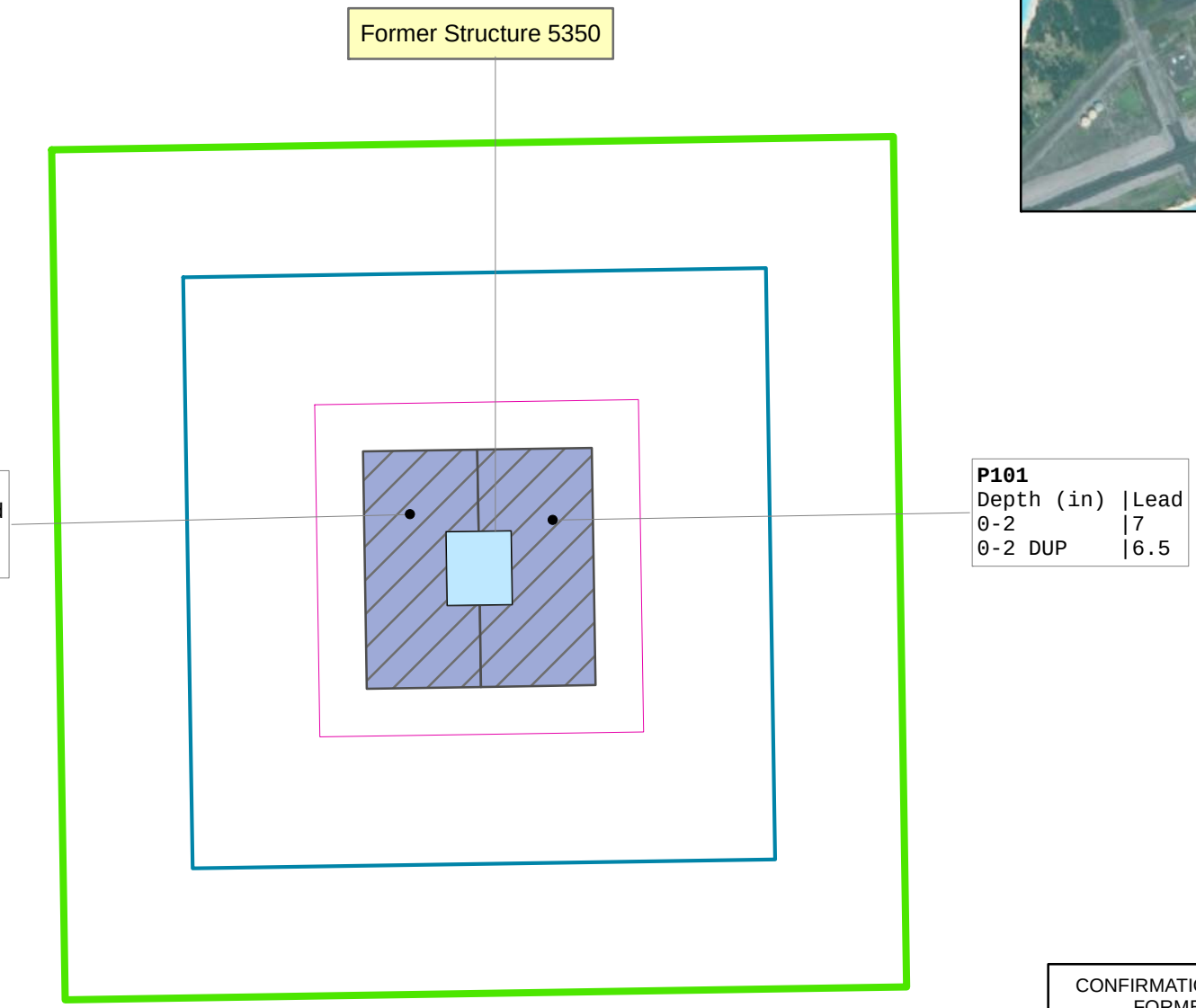
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 5340
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 25



0 10 20

SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

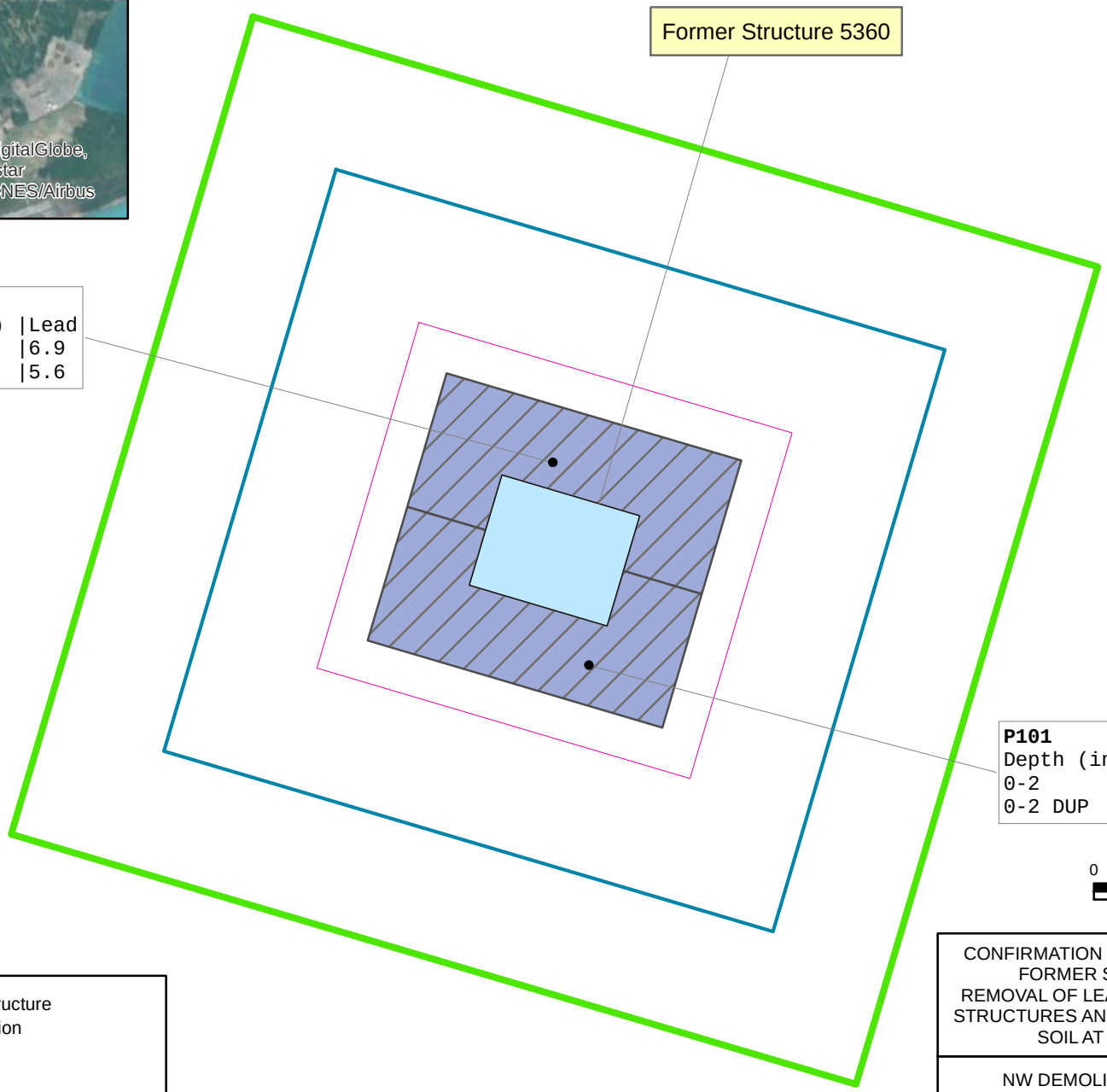
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 5350
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 26



15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

J indicates estimated amount
B indicates lead was found in blank

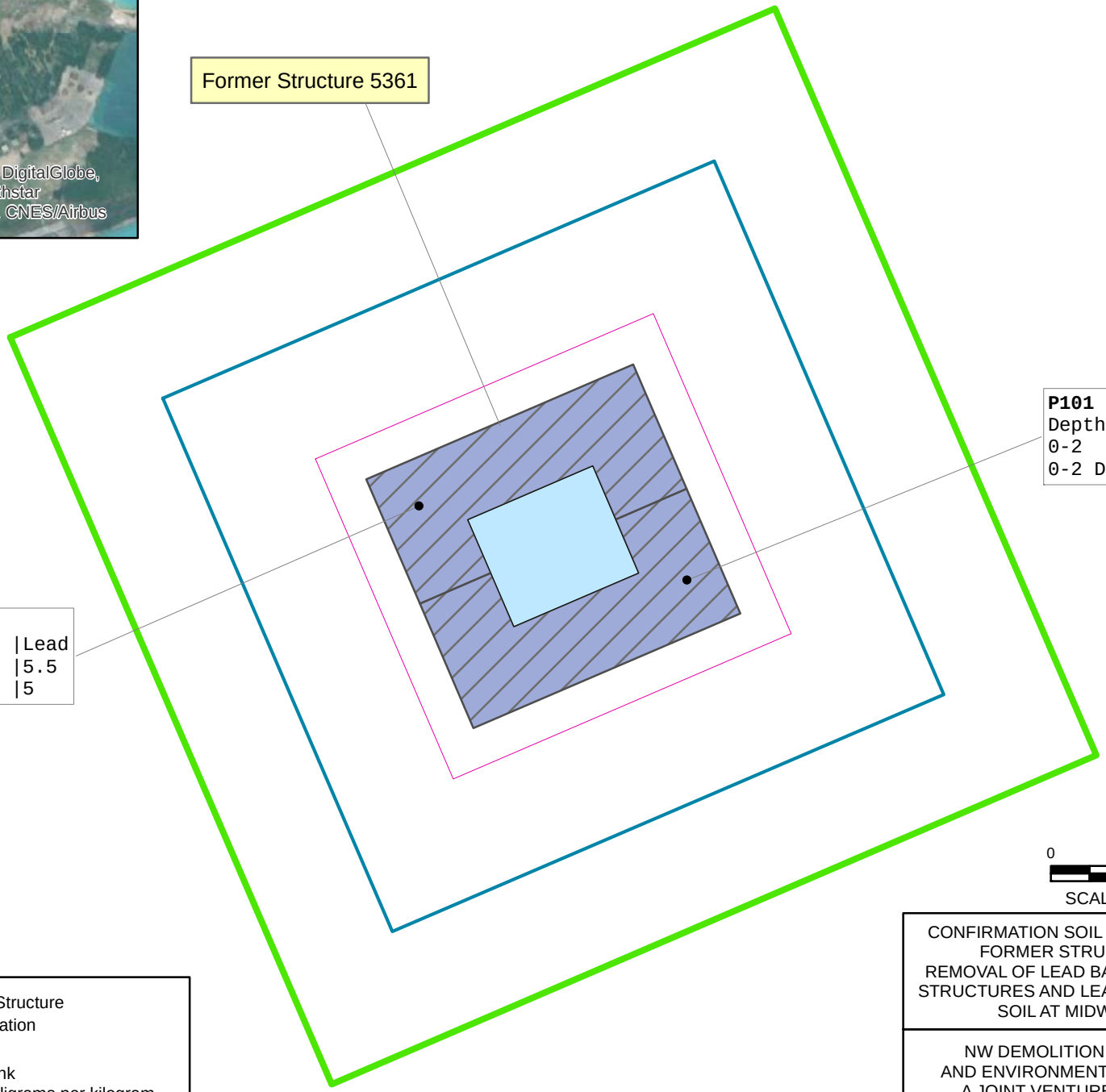
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 5360
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 27



15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

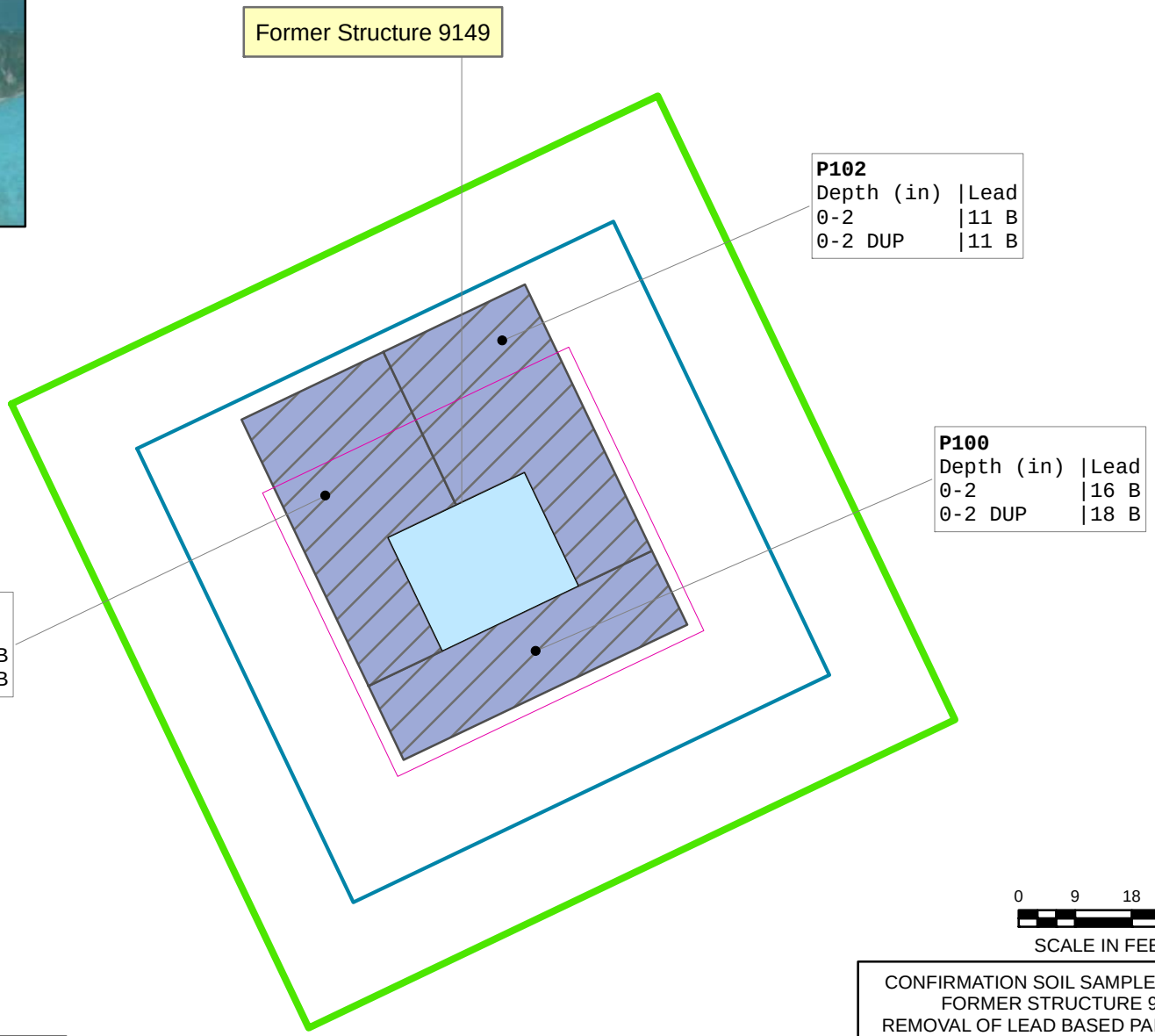
B indicates lead was found in blank
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 5361
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 28



15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

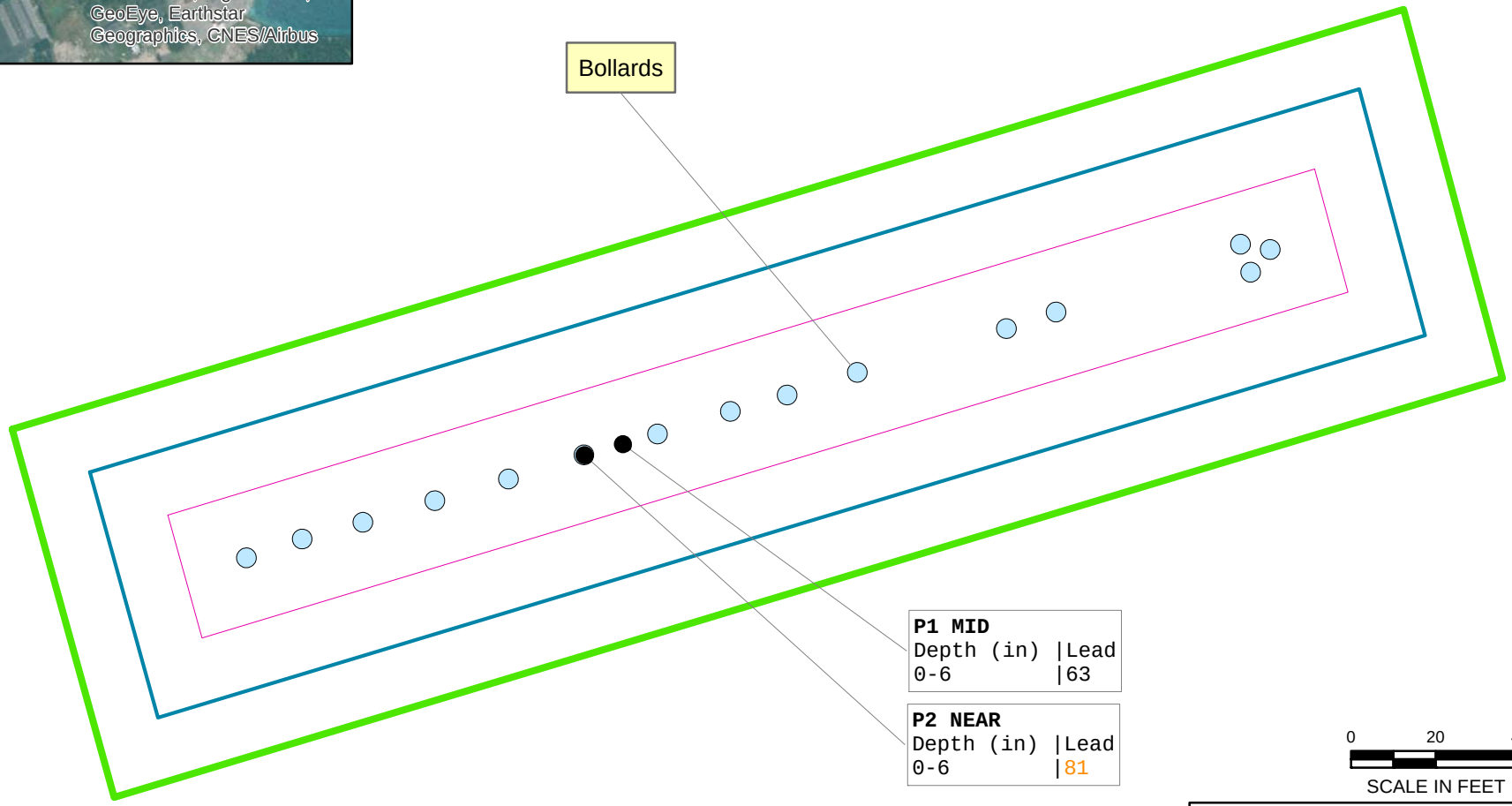
B indicates lead was found in blank
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 9149
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 29



0 20 40
SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Sampling Location
Feature

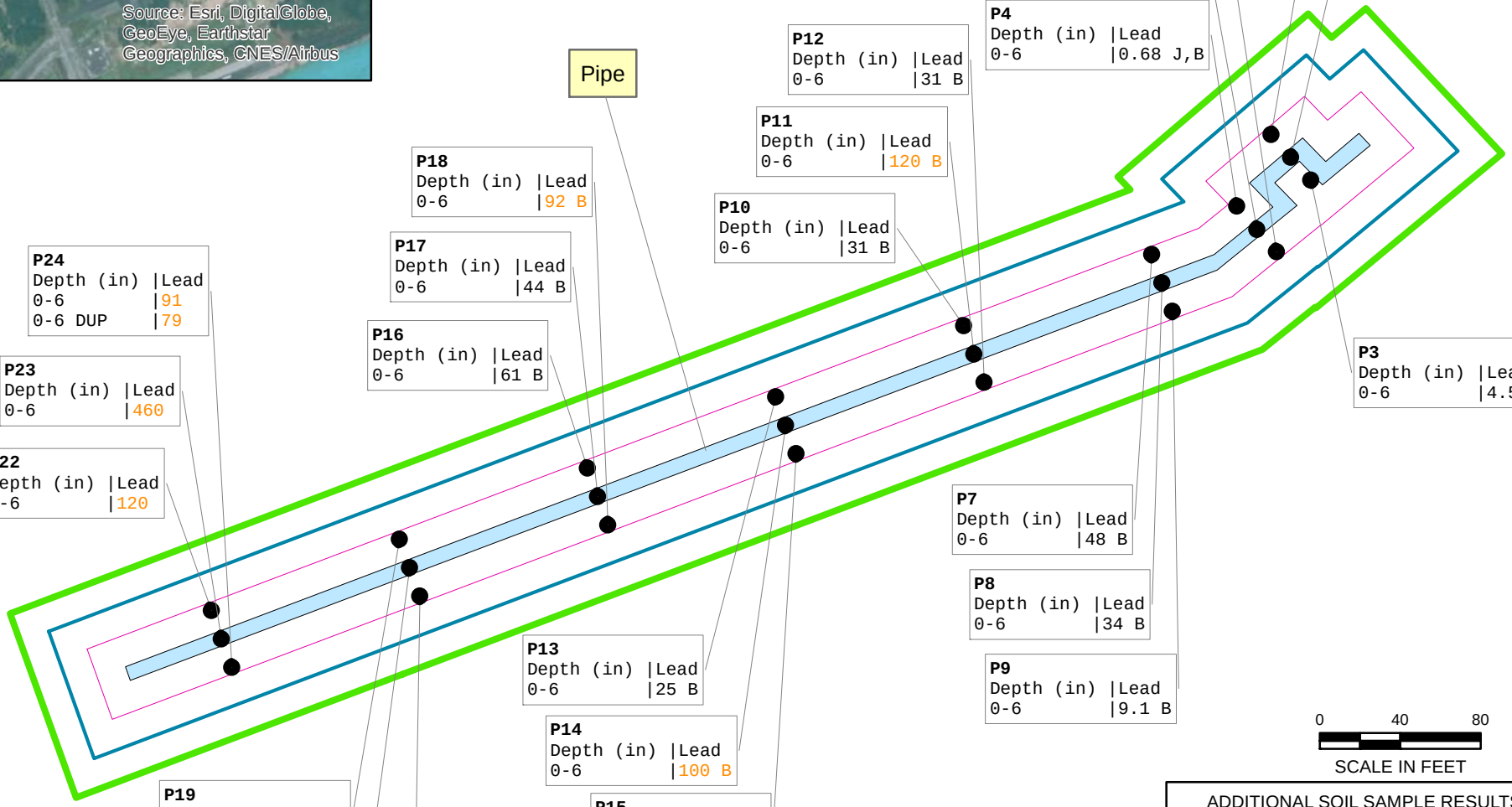
Note: Lead results reported in milligrams per kilogram

ADDITIONAL SOIL SAMPLE RESULTS
BOLLARDS
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 30



15' Buffer
30' Buffer
45' Buffer
Sampling Location
Structure

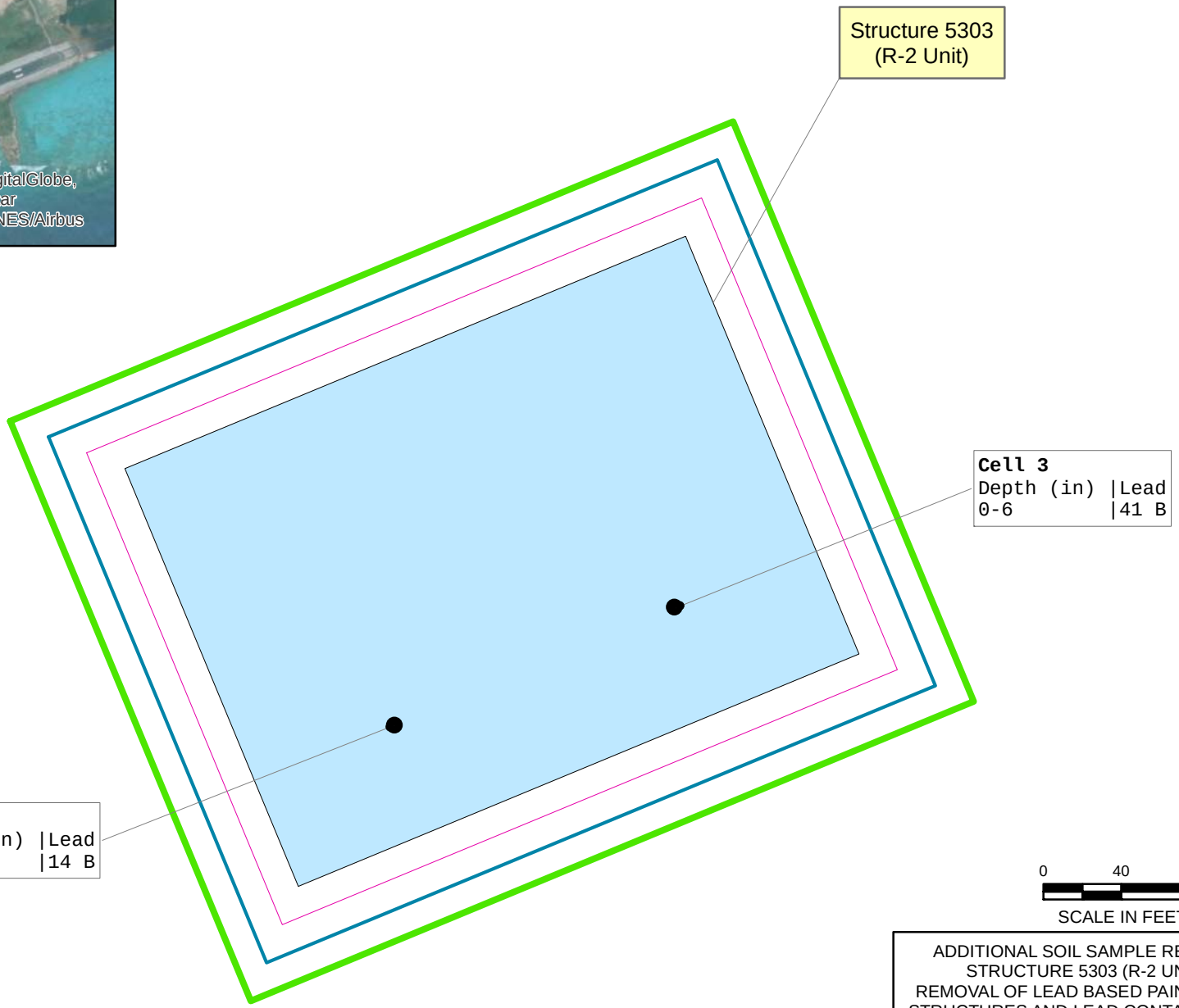
J indicates estimated amount
B indicates lead in blank and sample
Note: Lead results reported in milligrams per kilogram

ADDITIONAL SOIL SAMPLE RESULTS
PIPE
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 31



15' Buffer
30' Buffer
45' Buffer
Sampling Location
Structure

B indicates lead in blank and sample

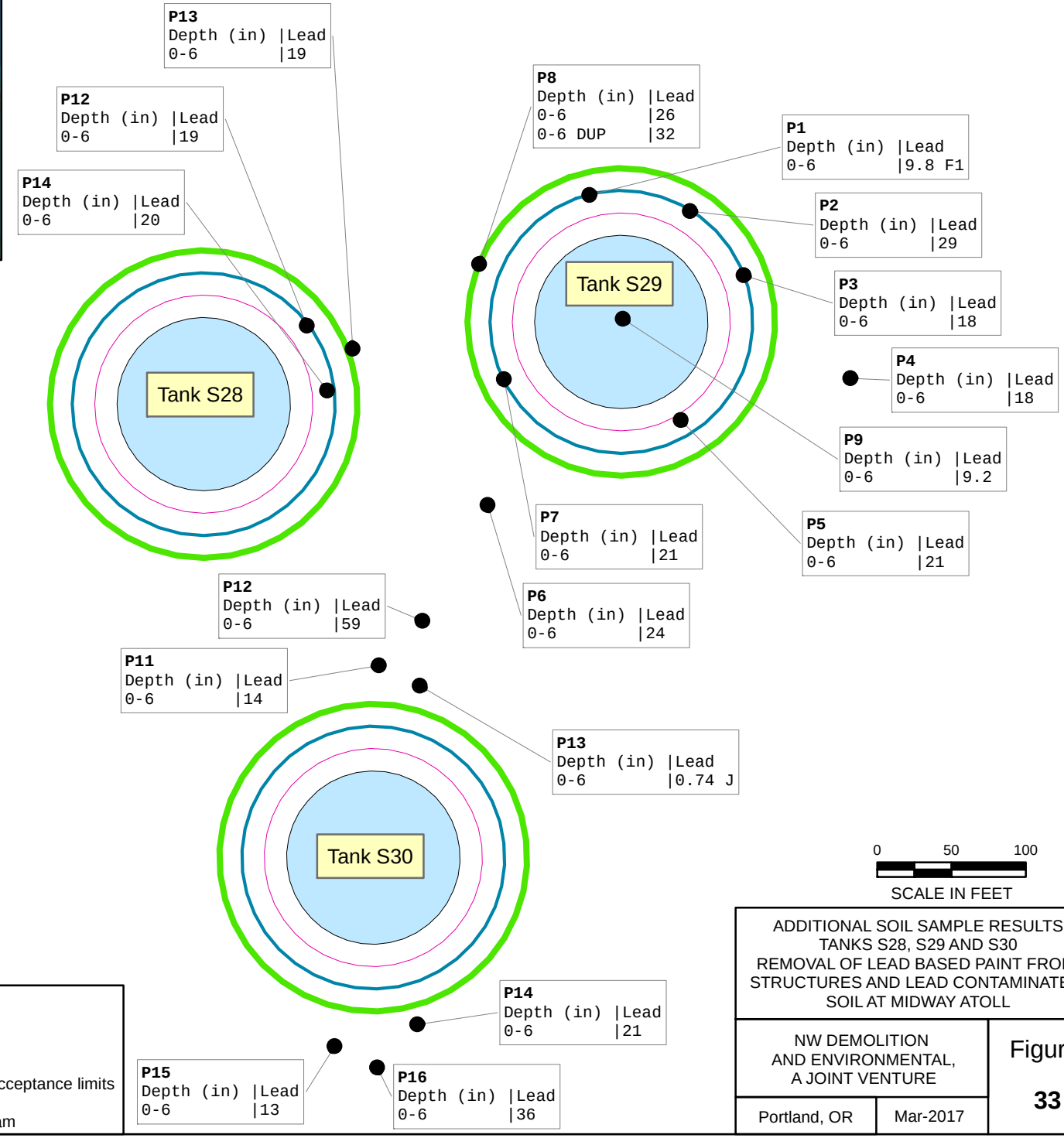
Note: Lead results reported in milligrams per kilogram

ADDITIONAL SOIL SAMPLE RESULTS
STRUCTURE 5303 (R-2 UNIT)
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 32



15' Buffer
30' Buffer
45' Buffer
Sampling Location
Building

J indicates estimated amount
F1 indicates MS and/or MSD Recovery is outside acceptance limits

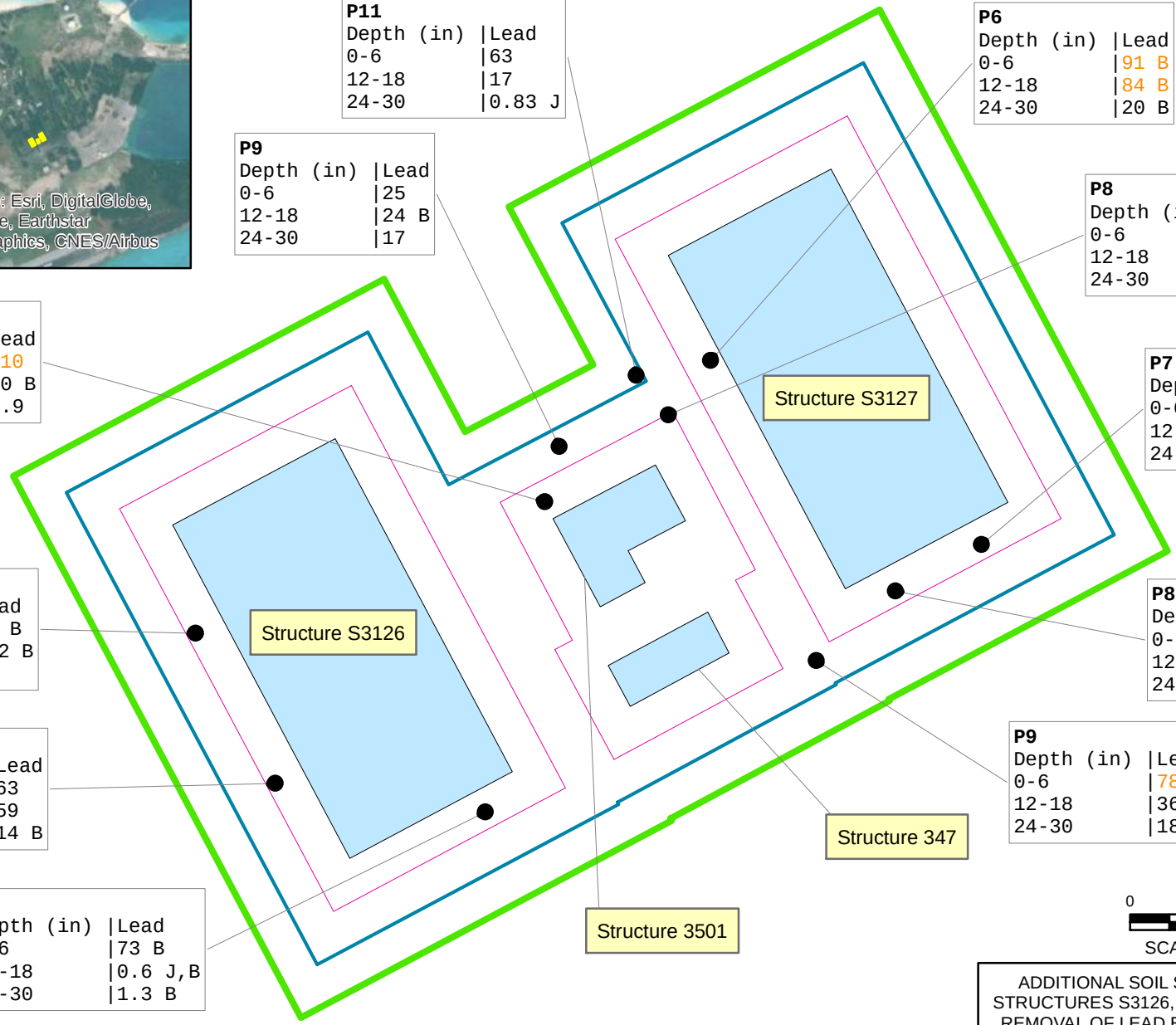
Note: Lead results reported in milligrams per kilogram

ADDITIONAL SOIL SAMPLE RESULTS
TANKS S28, S29 AND S30
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 33



P11

Depth (in)	Lead
0-6	63
12-18	17
24-30	0.83 J

P6

Depth (in)	Lead
0-6	91 B
12-18	84 B
24-30	20 B

P9

Depth (in)	Lead
0-6	25
12-18	24 B
24-30	17

P8

Depth (in)	Lead
0-6	530
12-18	52
24-30	4.9

P10

Depth (in)	Lead
0-6	110
12-18	70 B
24-30	6.9

P7

Depth (in)	Lead
0-6	24
12-18	17 B
24-30	2.2

P6

Depth (in)	Lead
0-6	61 B
12-18	3.2 B
24-30	ND

P8

Depth (in)	Lead
0-6	21
12-18	7.3 B
24-30	4.5 B

P7

Depth (in)	Lead
0-6	63
12-18	59
24-30	14 B

P9

Depth (in)	Lead
0-6	78
12-18	36
24-30	18

P8

Depth (in)	Lead
0-6	73 B
12-18	0.6 J,B
24-30	1.3 B

0 30 60
SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Sampling Location
Building

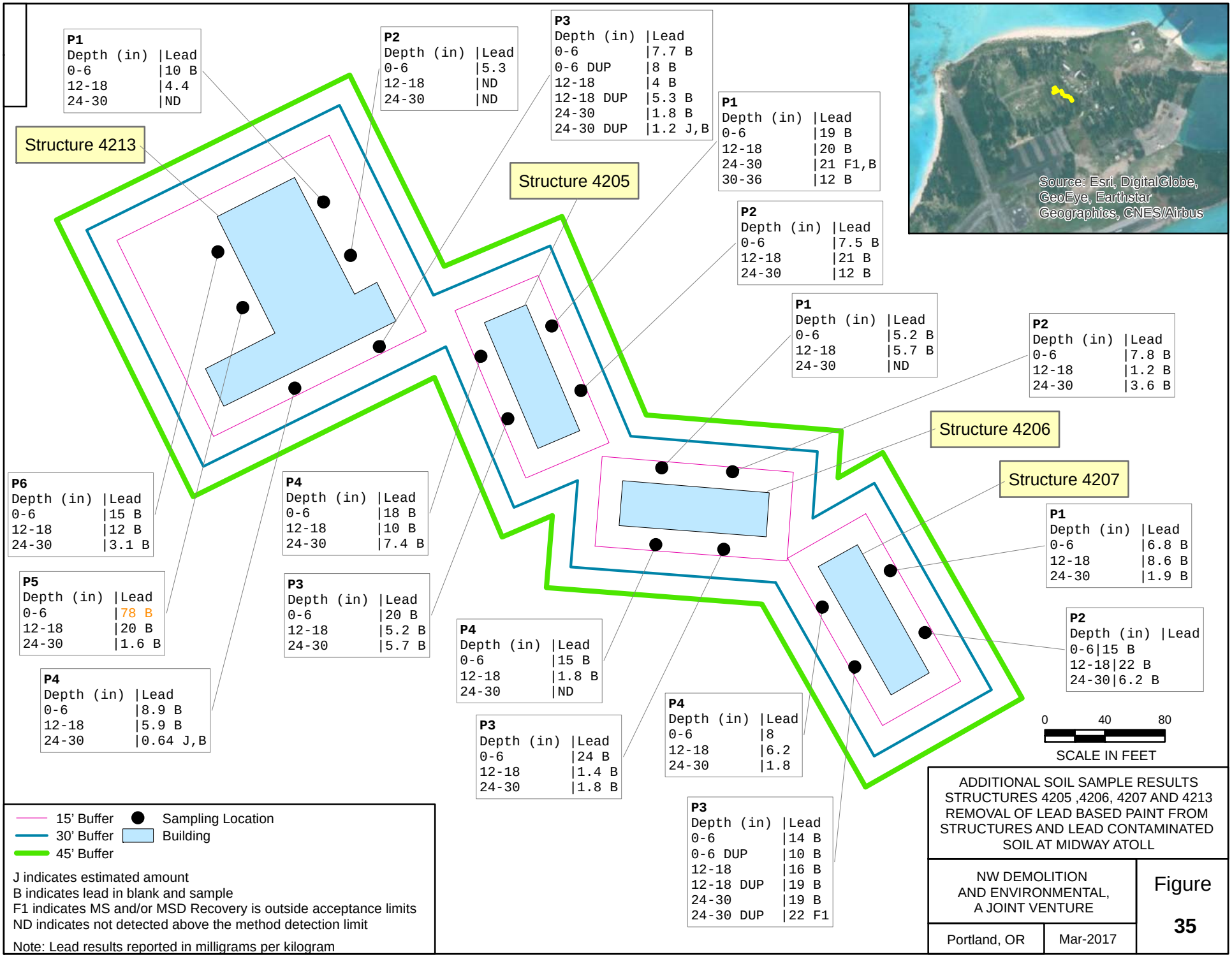
J indicates estimated amount
B indicates lead was found in blank
ND indicates not detected above the method detection limit
Note: Lead results reported in milligrams per kilogram

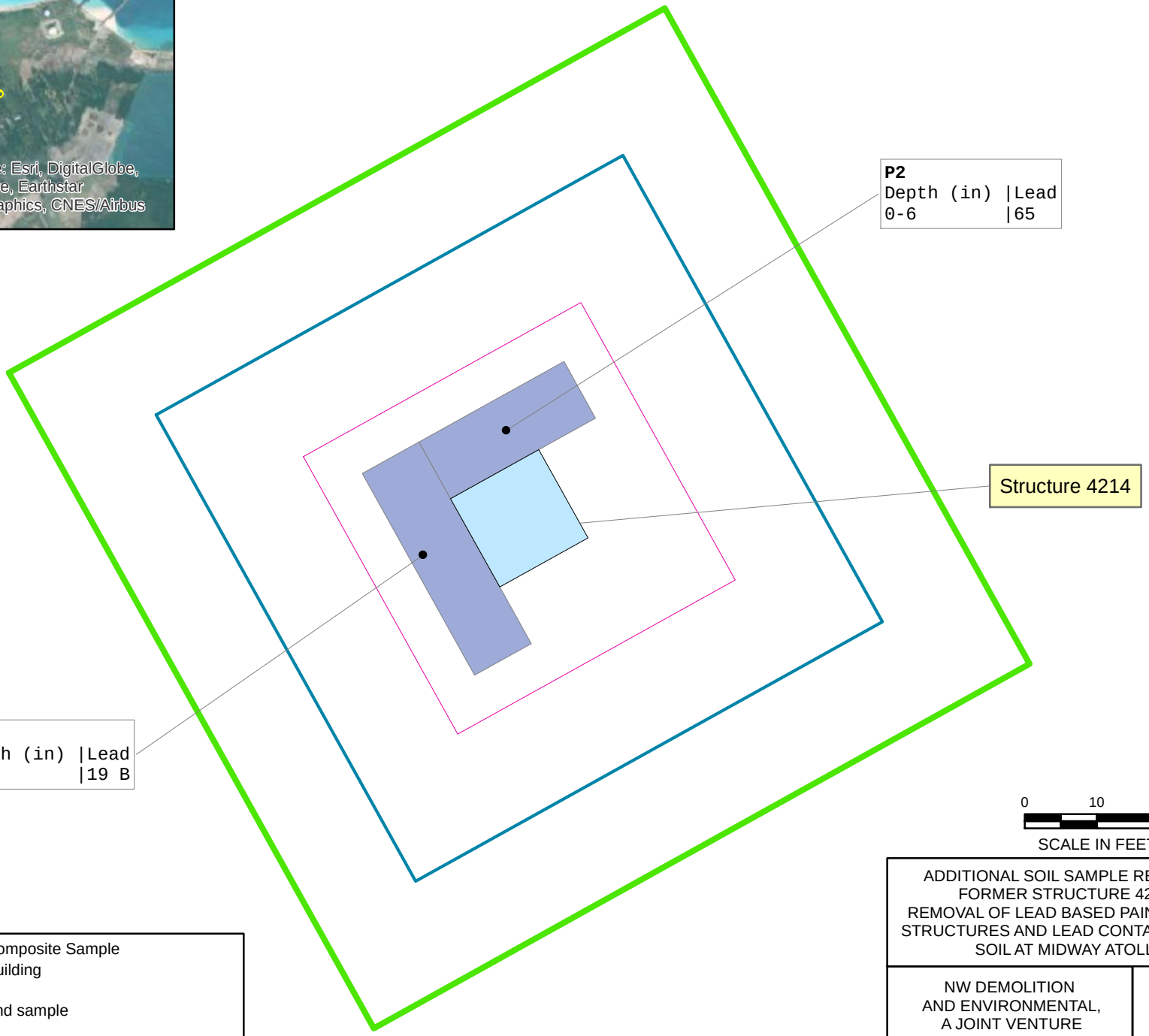
ADDITIONAL SOIL SAMPLE RESULTS
STRUCTURES S3126, S3127, 3501 AND 347
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Portland, OR | Mar-2017

Figure
34


Structure 4213
Structure 4205
Structure 4206
Structure 4207
P1
Depth (in) |Lead
0-6 |10 B
12-18 |4.4
24-30 |ND
P2
Depth (in) |Lead
0-6 |5.3
12-18 |ND
24-30 |ND
P3
Depth (in) |Lead
0-6 |7.7 B
0-6 DUP |8 B
12-18 |4 B
12-18 DUP |5.3 B
24-30 |1.8 B
24-30 DUP |1.2 J,B
P1
Depth (in) |Lead
0-6 |19 B
12-18 |20 B
24-30 |21 F1,B
30-36 |12 B
P2
Depth (in) |Lead
0-6 |7.5 B
12-18 |21 B
24-30 |12 B
P1
Depth (in) |Lead
0-6 |5.2 B
12-18 |5.7 B
24-30 |ND
P2
Depth (in) |Lead
0-6 |7.8 B
12-18 |1.2 B
24-30 |3.6 B
P6
Depth (in) |Lead
0-6 |15 B
12-18 |12 B
24-30 |3.1 B
P5
Depth (in) |Lead
0-6 |78 B
12-18 |20 B
24-30 |1.6 B
P4
Depth (in) |Lead
0-6 |8.9 B
12-18 |5.9 B
24-30 |0.64 J,B
P4
Depth (in) |Lead
0-6 |18 B
12-18 |10 B
24-30 |7.4 B
P3
Depth (in) |Lead
0-6 |20 B
12-18 |5.2 B
24-30 |5.7 B
P4
Depth (in) |Lead
0-6 |15 B
12-18 |1.8 B
24-30 |ND
P3
Depth (in) |Lead
0-6 |24 B
12-18 |1.4 B
24-30 |1.8 B
P4
Depth (in) |Lead
0-6 |8
12-18 |6.2
24-30 |1.8
P3
Depth (in) |Lead
0-6 |14 B
0-6 DUP |10 B
12-18 |16 B
12-18 DUP |19 B
24-30 |19 B
24-30 DUP |22 F1
P1
Depth (in) |Lead
0-6 |6.8 B
12-18 |8.6 B
24-30 |1.9 B
P2
Depth (in) |Lead
0-6|15 B
12-18|22 B
24-30|6.2 B
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
0 40 80
SCALE IN FEET
15' Buffer
30' Buffer
45' Buffer
Sampling Location
Building
J indicates estimated amount
B indicates lead in blank and sample
F1 indicates MS and/or MSD Recovery is outside acceptance limits
ND indicates not detected above the method detection limit
Note: Lead results reported in milligrams per kilogram
ADDITIONAL SOIL SAMPLE RESULTS
STRUCTURES 4205 ,4206, 4207 AND 4213
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL
NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE
Portland, OR
Mar-2017
Figure
35



0 10 20
SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Composite Sample
Building
B indicates lead in blank and sample

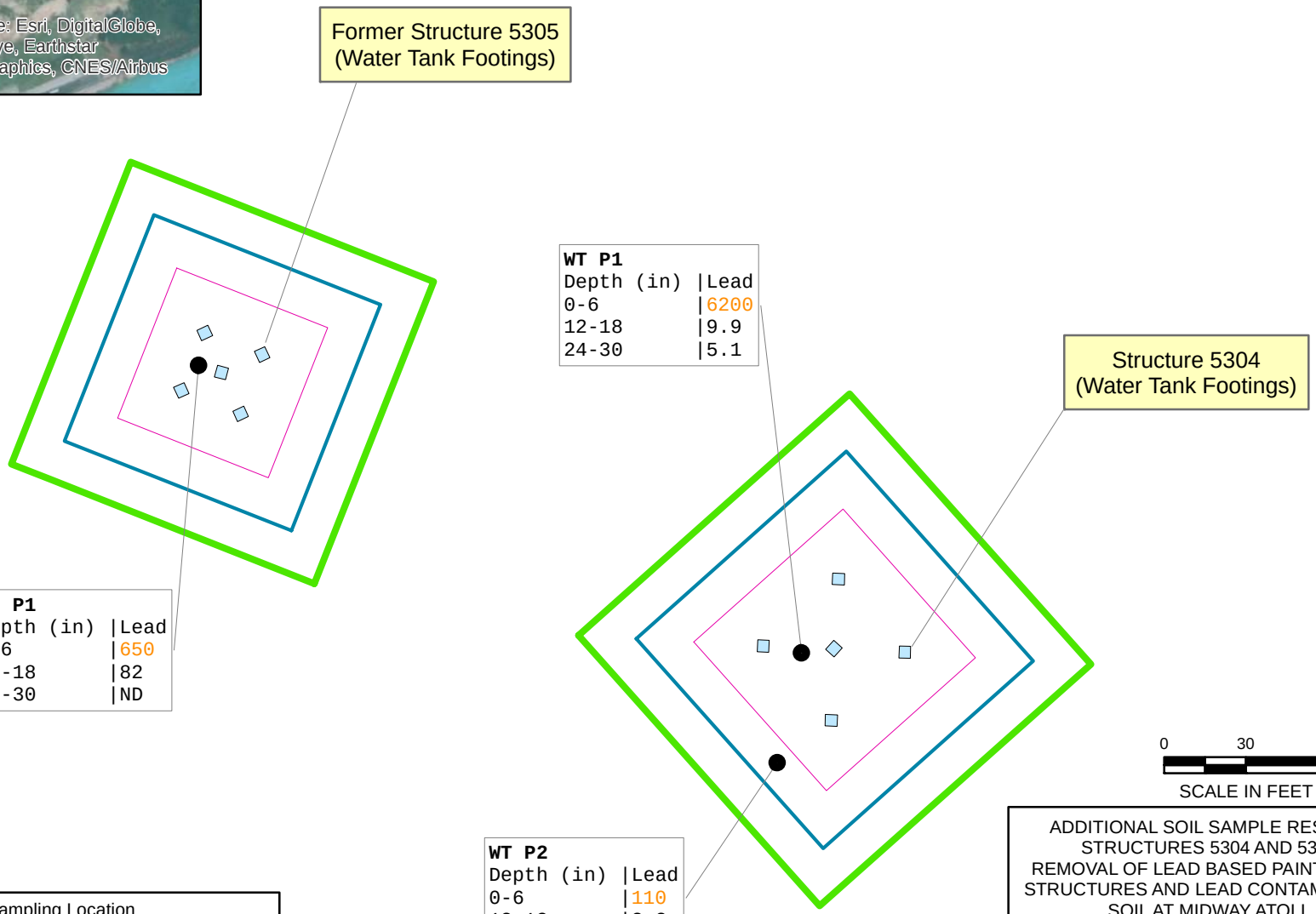
Note: Lead results reported in milligrams per kilogram

ADDITIONAL SOIL SAMPLE RESULTS
FORMER STRUCTURE 4214
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 36



15' Buffer
30' Buffer
45' Buffer
Sampling Location
Structure

ND indicates not detected above the method detection limit

Note: Lead results reported in milligrams per kilogram

ADDITIONAL SOIL SAMPLE RESULTS
STRUCTURES 5304 AND 5305
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Portland, OR | Mar-2017

Figure
37

APPENDIX A

DAILY FIELD REPORTS

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Wednesday, September 7, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Cloudy, light rain, wind 8 mph, Temperature ~78F.

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Dale Christianson	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Luis Martinez	NWDE Laborer	10
Viavia Manuma	NWDE Laborer	10
Gary Lewis	Iniki Supervisor	10
Evan Esposito	Iniki Laborer	10
Lauren Lewis	Iniki Laborer	10
Kawena Kaawa	Iniki Laborer	10
Amber Lewis	Iniki Laborer	10
Philip Kneubuhl	Iniki Laborer	10
Keala Lewis	Iniki Laborer	10
Larry Vaa	Iniki Laborer	10
Ulrich Naki	Iniki Laborer	10
Delson Smith	Iniki Laborer	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Bob Peyton	U.S. FWS Refuge Manager

Equipment:

Description	Model No.	Comments
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford 450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Mini-Excavator	CAT 308	NWDE
2 – Excavator	Volvo EC290BLC	NWDE
2 – Off road Dump Truck	Volvo A30D	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0600 HST – NWDE and Inikki crews are arriving at Air Service Hawaii for mobilizing to Midway Atoll via Cinco Air Charter. The 2016 work season begins.

0800 HST – Wheels up in the Gulfstream jet, departing Honolulu with a 3-hour ETA to PMDY Henderson Air Field.

1000 SST – Arrival at Midway Atoll. Unload and assemble at Charlie barracks to prepare for billeting. Confirm schedule for US FWS island orientation and NWDE HASP.

1145 SST – Lunch.

1230 – Present and review the site specific Health and Safety Program with the crew for the project.

1400 – Bob Peyton, US FWS refuge manager presents the cultural awareness orientation for Midway Atoll National Wildlife Refuge, Battle of Midway National Memorial within the Papahānaumokuākea Marine National Monument.

1530 – Meeting with M Amann, US FWS; E White, NWDE; G Lewis, Iniki; S Wakefield, NWDE. Discussions including but not limited to; scheduling, immediate tasks, logistics of wet weather relative to the R2 vault scope of work, procedures for demolition of pending buildings and pending demolition approval list relative to third party oversight.

1700 – End of work day.

Photographs:

Photo 01: Arrival at Henderson Airfield

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Thursday, September 8, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: High clouds, wind 10 mph, Temperature ~84F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Dale Christianson	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Luis Martinez	NWDE Laborer	10
Viavia Manuma	NWDE Laborer	10
Gary Lewis	Iniki Supervisor	10
Evan Esposito	Iniki Laborer	10
Lauren Lewis	Iniki Laborer	10
Kawena Kaawa	Iniki Laborer	10
Amber Lewis	Iniki Laborer	10
Philip Kneubuhl	Iniki Laborer	10
Keala Lewis	Iniki Laborer	10
Larry Vaa	Iniki Laborer	10
Ulrich Naki	Iniki Laborer	10
Delson Smith	Iniki Laborer	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Ann Humphrey	U.S. FWS
Aisha Rickli-Rahman	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	88222.8 miles #3139
Flatbed Truck	Ford F450	105495.6 miles #0576
Container Truck	Peterbuilt	
Skid Steer	Bobcat S185	689.3 hrs #BC7030
Tracked Skid Steer	Bobcat T750	670.3 hrs #BC2200
Mini-Excavator	CAT 308	1082.3 hrs #EX1928
Excavator	Volvo EC290BLC	3445.9 hrs #EX1006
Excavator	Volvo EC290BLC	4973.5 hrs #EX1108
Off road Dump Truck	Volvo A30D	3343 hrs/ 20,034 miles #4148
Off road Dump Truck	Volvo A30D	3319hrs/ 17,846 miles #4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

0730 – NWDE crew is prepping the excavator UP-40 shear with jaws to size the concrete stockpiles at the Seaplane apron yard. The two Volvo excavators will process the clean irregular concrete debris from large beams, footings and slab shapes into the required size for future R2 cover material. The second Volvo is fitted with the mounted MB crusher BF120.4. This material handler will uniformly reduced concrete rubble into the target spec size. Smaller spec ¾" minus will be crushed in a second pass as required.

0815 – NWDE and Iniki attend the refresher orientation presented by Ann Humphrey, US FWS. This is focused on inspecting, hand digging and removal of the Bonin Petrel birds from ground burrows. Work areas are cleared of subsurface birds prior to beginning abatement setup activities.

0900 – Iniki continues clearing the work area of Petrels on the harbor finger pier near Bldg 1126 Harbor Office and Bldg 1124 HazMat storage.
The excavators to process concrete are on final prep and mobilizing to the Seaplane apron.

1030 – NWDE begins processing clean concrete stockpiles with the UP-40 and BF 120.4 crusher. As the materials are downsized the steel imbeds and rebar are sorted out. This first processing run produces 6" minus concrete.

1110 – Iniki continues to hand dig the petrels at Bldg 1126 and Bldg 1124. The number of occupied burrows is near record high numbers within the small work area. Bldg 1124 having 42 petrels evicted, Bldg 1126 at 23 petrels and 1 shearwater protected in place.

1200 – Lunch

1230 - Iniki is moving the petrel patrol to the next work area, Boathouse #2 (US FWS herbicide bldg) and Boathouse #1 (dive shop.)
NWDE resumes the two Volvo excavator operations to process concrete rubble into first pass stockpiles.

1300 – NWDE is also bringing gear out to begin dewatering the R2 vault for taxiway drainage. The vault that will have the Invisible Structure, Inc Rainstore^3 currently has 4.5' of static rainwater in the bottom. Additionally, the inlet and outlet pipes to the vault are partially submerged and contain a volume of water. Quick estimated measurements indicate 20,000+ gallons of rainwater needing pumped out to begin Rainstore^3 install preparations. The raising stem valves for the inlet and outfall piping are closed to isolate the vault and piping to perform the dewatering test. US FWS and the DBSI airport operations are notified of the work and valve status. In the event of a rain storm, measures to keep the taxiway drainage area dewatered will be implemented as to not impact the airport operations availability to receive aircraft across the taxi way.
A Honda WT20X trash pump is set up using 2.5" discharge hose. The blue pvc lay-flat hose is routed parallel to the below grade pipe run. Discharged rainwater is lifted from the vault, pushed south and then re-enters the drain pipe towards the ocean at the outfall valve grate for the 30" pipe. This grate is also a collection for the north shoulder of the runway near where the grass vegetation meets the runway's wide shoulder asphalt.
Weather prediction through Monday shows no rain forecasted.

1349 – Pumping of the vault begins. As the pump rate is decent, after an hour a second trash pump is added to double the flowrate. By days end the vault static water level drops 1.25' of the 4.5' initial level. Estimating, the pump rate predicts it will take approximately 6-8 more pumping hours to draw the rainwater down to the bottom of the vault tomorrow.

1530 – NWDE continues dewatering. Begin setup of orange field fencing around the work perimeter to define the vault work zone as activities progress on the east exterior wall of the R2.

1600 – Iniki continues petrel patrol at the Boathouse #1 and Boathouse #2 areas. Part of the crew is also mobilized to Bldg 180 to begin clearing an access road to approach the building.

Indication has been made that the third party oversight for the buildings slated for demo is in the works. A person to arrive on island for subsurface excavation observation is being schedule, pending final logistics. Along with this, the third party oversight is indicated by US FWS relative only to the excavation activities. The above ground portion of the applicable structures has verbally been approved for demo by Bob Peyton, US FWS. With this news, NWDE and Iniki will proceed with scheduling and moving forward with demo activities of DU-9 structures.

1730 – End of work day.

Photographs:

Photo 01: NAF Staging Area. Preparing jaws in UP40 for sizing concrete stockpile

Photo 02: Refresher briefing for hand digging Bonin Petrels by Ann Humphrey, US FWS.

Photo 03: Clean concrete rubble at Seaplane apron being processed to a reduced size

Photo 04: Volvo mounted bucket crusher for processing concrete

Photo 05: R2 drainage vault static level at 3.25' near end of the day

Photo 06: View north. R2 vault dewatering via blue hose into the outfall of the raising stem valve grate

Photo 07: Bldg 1126 Harbor Office prepped with ground cover poly

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Friday, September 9, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 7 mph, Temperature ~83F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Dale Christianson	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Luis Martinez	NWDE Laborer	10
Viavia Manuma	NWDE Laborer	10
Gary Lewis	Iniki Supervisor	10
Evan Esposito	Iniki Laborer	10
Lauren Lewis	Iniki Laborer	10
Kawena Kaawa	Iniki Laborer	10
Amber Lewis	Iniki Laborer	10
Philip Kneubuhl	Iniki Laborer	10
Keala Lewis	Iniki Laborer	10
Larry Vaa	Iniki Laborer	10
Ulrich Naki	Iniki Laborer	10
Delson Smith	Iniki Laborer	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Charles Scribner	DBSI facilities
Kriangkrai Sriprasert	DBSI equipment operator

Equipment:

Description	Model No.	Comments / Serial #	
Pickup Truck	F350 Service Truck	- miles	#3139
Flatbed Truck	Ford F450	- miles	#0576
Container Truck	Peterbuilt		
Skid Steer	Bobcat S185	- hrs	#BC7030
Tracked Skid Steer	Bobcat T750	- hrs	#BC2200
Mini-Excavator	CAT 308	- hrs	#EX1928
Excavator	Volvo EC290BLC	- hrs	#EX1006
Excavator	Volvo EC290BLC	- hrs	#EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	187 gallons	
Gasoline	10 gallons	

Description of Work:

0700 – NWDE conducts safety meeting. Include additional Activity Hazard Analysis (AHA) for the upcoming confined space work. No entry will be made today into the R2 taxiway vault, but the prep work includes the hazards and awareness for continuing the Rainstore^3 installation prep.
Iniki safety meeting includes the site specific addition for the building demolition AHA as work moves forward today removing roof ACM.

NWDE splits the crew again today. Two Volvo excavators will continue processing concrete at the Seaplane apron stockpile. The additional team will continue the R2 taxiway vault work to dewater the vault. Iniki team is at the harbor to begin the "list's" first ACM abatement for Bldg 180. The work areas are inspected for petrel activities prior to beginning.

0800 – Meet with M Amann, US FWS to discuss progress and goals. E White, NWDE and E Moore, DBSI will arrange to finalize the pre structure demolition inspection this afternoon.

0900 – Brief phone conference meeting with Honolulu project office. Discuss progress and goals with M Amann and the NWDE team.
Make note that Bldg S361 and Bldg 144 are indicated by US FWS to not be demolished. Only the exterior of the buildings will be abated for LBP.
Weekly phone conference meetings will be Tuesday at 11am SST.

0930 – DBSI is moving a 20' connex from the NAF staging area to the R2 east wall per NWDE's request. The container houses the Rainstore^3 sections, cloth and ancillary installation items. By moving the supplies out in one load the units remain out of direct sunlight when staged per the manufacturer's instructions. The container will also secure items from the wind.
The R2 is being prepped to open up for this season's import of treated soil. Sandbags are being collected in cell 4 (SW corner) and later cell 3 (SE corner.) Due to the significant heavy grass growth, the interim R2 shade cloth cover will remain in place atop last years measured elevation surface. Soils this season will be placed in the south side hydraulic relief trench first, then atop the" leave in place" cloth. At the end of this 2016 season, additional interim cover of shade cloth will be placed atop the treated soil.

1030 – Iniki is progressing on Bldg 180 to safely remove the transite panels. As the sections are removed they are lowered to the ground and poly wrapped, twisted ends and secured using the 2" heavy grade aqua tape. A second poly wrap, twisted ends and tape work complete the double wrapped pack for the sections. These packs are labeled and then staged for upcoming transfer to the NAF Hanger ACM container for storage.
Additional Iniki workers this morning have continued the Maectite application and lead scrape activities on Bldg 1124 HazMat and Bldg 1126 Harbor Office. The blue and white paint that is loose and removed is collected on top of the previously placed 6mil poly ground cover. This LBP debris is then collected and bagged as LBP waste, sealed and staged for moving it to the marked lead based paint storage container at the NAF Hanger.

1100 – NWDE has the R2 taxiway vault (officially Bldg 5303) static rainwater level drawn down to within 0.5' of being empty. The bottom has a settled muck common to the drainage system's low velocity pathway through the large 20' x 24' vault. The sediments and organic growths are not unusually heavy, rather a common accumulation given the significant number of years the drain has been in service.

The sediments and layer on the vertical walls and vault floor are being washed using the nearby garden hose spigot.

1200 – Lunch

1230 – Prep PPE and air monitoring equipment for the confined space work that will begin tomorrow at the earliest for the R2 taxiway drain vault.

1330 – NWDE has moved the Volvo 290 excavator with UP-40 over to the R2 taxiway drain vault (Bldg 5303.) The steel piping that has remained for years on the east wall of the R2 is being removed. The twelve-foot shaft driven open impeller pumps and electric motors in the vault are easily lifted out with the excavator. Steel is placed in the A30 Volvo truck and transported to the Boneyard east of the Seaplane hangar. This pump and plumbing steel is added to the existing scrap steel pile of S28/S30 DU-8 tanks.

1500 - Two truckloads finish off the removal of the last bit of large piping that was part of the former R2 water treatment pumping system. The excavator mobilizes back over to the concrete stockpile at the apron to resume sizing rubble.
At the Seaplane apron the second 290 Volvo has throughout the day continued sizing concrete to 6" minus in a long windrow of material.
Iniki crew has finished with the roof removal for Bldg 180. They are beginning the ACM abatement of roof panels on top of Bldg 170. The other part of the work group continues at Bldg 1124 and Bldg 1126 with scrape and masking of windows as needed.

1600 – E White, NWDE brings attention to Bldg 200 not being ready for structure demolition. To date the abandon internal electrical switchgear and transformers have not been removed as previously scheduled. DBSI is contacted and advises they will remove the disconnected service equipment early next week.

1620 – At the R2's recently staged shipping container. Evaluate the Rainstore^3 supplies and details of the vault for the upcoming placement of materials. The vault has continued to be cleaned and pumped out from up above at ground level today.

1730 – End of work day.

Photographs:

Photo 01: View north- Bldg 1126 Harbor Office. Lead scrap progress.

Photo 02: View northeast - Bldg 180 ACM roof panel removal.

Photo 03: View west - Clean concrete rubble at Seaplane apron being processed to a reduced size.

Photo 04: View north – Bldg 180 double bagged ACM staged for pickup.

Photo 05: View north – Bldg 5303 R2 taxiway vault. Steel shaft driven pumps (left)

Photo 06: View west – Bldg 5303 R2 taxiway vault. Steel pumps, motors and piping removed.

Photo 07: View north – Bldg 5303 R2 taxiway vault. Steel pumps, motors and piping removed.

Photo 08: View south – Bldg 5303 R2 taxiway vault. Steel pumps, motors and piping removed.

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Saturday, September 10, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 3 mph, Temperature ~83F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Dale Christianson	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Luis Martinez	NWDE Laborer	10
Viavia Manuma	NWDE Laborer	10
Gary Lewis	Iniki Supervisor	10
Evan Esposito	Iniki Laborer	10
Lauren Lewis	Iniki Laborer	10
Kawena Kaawa	Iniki Laborer	10
Amber Lewis	Iniki Laborer	10
Philip Kneubuhl	Iniki Laborer	10
Keala Lewis	Iniki Laborer	10
Larry Vaa	Iniki Laborer	10
Ulrich Naki	Iniki Laborer	10
Delson Smith	Iniki Laborer	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	- miles #3139
Flatbed Truck	Ford F450	- miles #0576
Container Truck	Peterbuilt	
Skid Steer	Bobcat S185	- hrs #BC7030
Tracked Skid Steer	Bobcat T750	- hrs #BC2200
Mini-Excavator	CAT 308	- hrs #EX1928
Excavator	Volvo EC290BLC	- hrs #EX1006
Excavator	Volvo EC290BLC	- hrs #EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	87 gallons	
Gasoline	10 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.
At the R2 Taxiway vault begin setting up to resume clearing out the bottom of the vault without entering the vault. This initial cleaning is continuing the removal of standing black organics and silt. Work today will still be performed from up top from outside of the vault. Air monitoring and fan forced ventilation continue to be used to profile the vault air quality. Entry has not occurred but monitoring with the 4-gas meter has to date shown data acceptable for entry; O2 20.9%, CO 0ppm, H2S 0.0ppm, LEL 0%.

Two workers are in the R2, Cell 4 to continue pulling the tented shade cloth from the south wall. This will have the exterior sandbags and steel staked edges removed, then folded cloth palletized. The hydraulic relief trench below the tented fabric will then be available to receive treated materials this season.

0830 – At the Seaplane apron the MB crusher bucket is processing concrete from the UP-40 sized 24"+ nuggets down to 6" minus. This is still the first run of the concrete through the jaws. A second run will be performed this season after tightening up the crusher to produce the spec of 3" minus for the R2 final Erosion Protection Layer. Technical Specifications, Midway Atoll Remediation Project, R2 Unit, May 2015, REV1.F – Earthwork, Section 02200, Part 2- Products, 2.01, D.

Iniki three person crew is at the harbor, Bldg 1126 and Bldg 1124. The windows and door glass are being masked in preparation for LeadStop® elastomeric paint.

0930 – The remaining Iniki team is at Bldg 502 Communications. They are prepping to abate the ACM floor tile on the interior concrete slab. The openings of the building have been sealed with 6mil opaque poly, a double poly flap entry assembled and setup of HEPA filter negative air units. These tandem electrical driven fans will pull air from within the building and interior work area through the filters prior to exiting. This is a standard setup for managing air quality for ACM abatement.

1030 – At the Seaplane apron the MB crusher BF 120.4 is being shimmed to adjust the sizing down to ¾" minus. A short run of the smaller concrete spec will be needed to produce backfill for the R2 Taxiway vault Rainstore^3 stacks. The sized concrete will be blended with clean coral sand to meet the materials spec for the Select R2 Unit Vault Backfill. Technical Specifications, Midway Atoll Remediation Project, R2 Unit, May 2015, REV1.F – Earthwork, Section 02200, Part 2- Products, 2.01, B.
Once the ¾" minus volume of concrete is stockpiled, the operations will return to running the 6" minus as described above.

1140 - Sandbags continue to be picked up at the R2, Cell 3 and Cell 4. The black bags are layered on pallets to be moved using the tracked Bobcat skidsteer.

1200 – Lunch

1230 – The concrete sizing operations at the Seaplane apron continue for processing ¾" minus. Special attention has been in place for removing steel rebar out as it surfaces in both the first and second run. Removal of the steel bars, pipe and imbeds as the concrete is sized maintains QA/QC of the product.
Bldg 502 has the full attention of 5 Iniki workers continuing the floor tile abatement.

1315 – NWDE is positioning equipment at the R2 Taxiway vault to clear out the remaining settled muck in the 20' x 24' area. The mini Cat excavator with 4' flat edged bucket will reach and clear the materials from the vault concrete bottom. The materials are placed into one A30 off road truck and then routed in to the R2 for final placement. The loads of material are small with a total of seven short trips made. In the vault the volume of material is calculated to 15 cuyds wet.

1615 – The R2 Taxiway vault (Bldg 5303) is nearly roughed out with the excavator cleaning and wash down with the garden hose.

An alternate fire hose for wash down has not been implemented due to the island's water utility service having some new technical considerations. With the recent addition of the island's supply pumps to replace the water tower head pressure, the shakedown testing indicates that overpressure peaks when opening and closing hydrants needs addressed. DBSI states that the two stage pump system has potential to stress the older water pipe lines by exceeding the desired line pressure set point. It has been arranged for DBSI to advise the correct operational training of fire hydrants to NWDE on Monday the 12th.

1645 – At the harbor area Bldg 1124 and Bldg 1126 Iniki is again sweeping up for the day atop the poly ground cloth. Debris collected is bagged and labeled in the heavy mil poly bags as LBP waste for staging. The two buildings status is that masking is complete and soon to be ready for applying LeadStop®.

1730 – End of work day.

Photographs:

Photo 01: View southwest- Downsizing concrete slabs and footings with the UP-40 jaws.

Photo 02: Bldg 170 – Interior gable end view of steel purlins after the transite roof panels are removed.

Photo 03: Bldg 502 Communications – Interior prepped for entry (left) and HEPA negative air (right.)

Photo 04: Bldg 502 – Air handlers for maintaining negative pressure and particulate filtering.

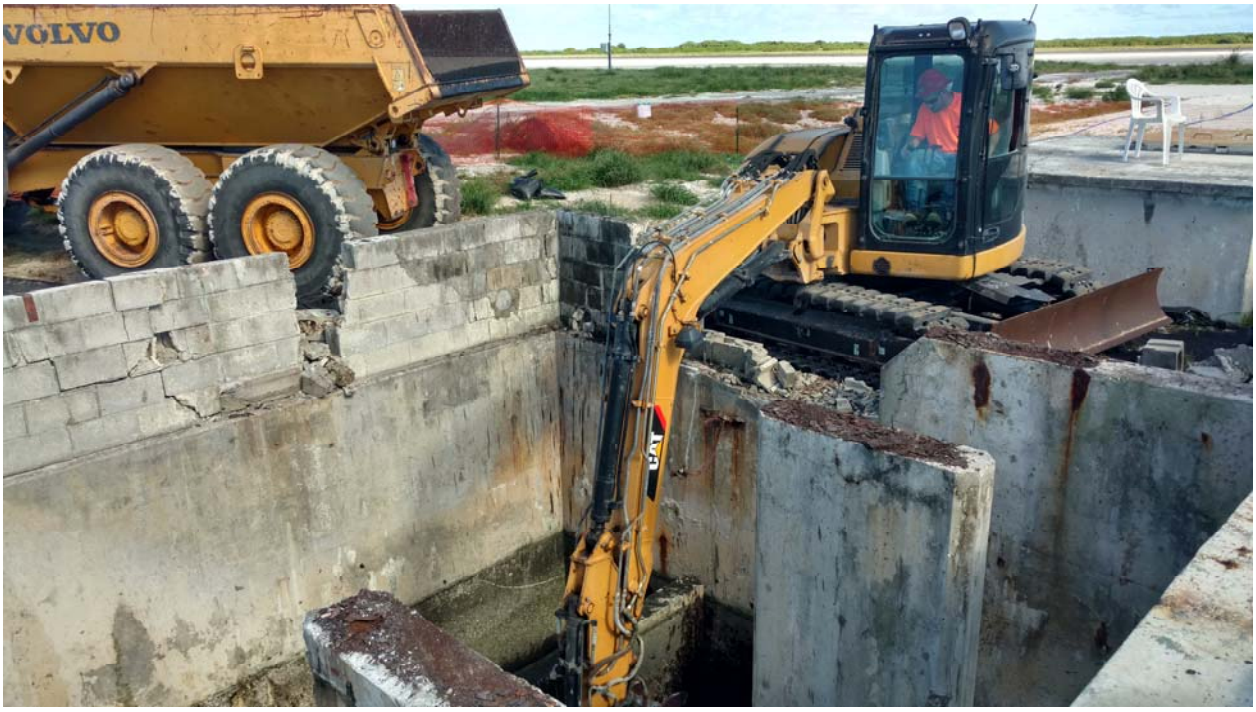


Photo 05: View southeast – Bldg 5303 R2 taxiway vault muck and sediment removal.

Photo 06: View northeast – Seaplane apron operations sizing ¾" minus concrete.

Photo 07: View southeast – Bldg 1126 Harbor Office. Maectite, scrape, mask prep for paint.

Photo 08: View southeast – Bldg 1124 HazMat. Maectite, scrape, mask prep for paint.

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Monday, September 12, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 6 mph, Temperature ~83F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Dale Christianson	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Luis Martinez	NWDE Laborer	10
Viavia Manuma	NWDE Laborer	10
Gary Lewis	Iniki Supervisor	10
Evan Esposito	Iniki Laborer	10
Lauren Lewis	Iniki Laborer	10
Kawena Kaawa	Iniki Laborer	10
Amber Lewis	Iniki Laborer	10
Philip Kneubuhl	Iniki Laborer	10
Keala Lewis	Iniki Laborer	10
Larry Vaa	Iniki Laborer	10
Ulrich Naki	Iniki Laborer	10
Delson Smith	Iniki Laborer	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Eric Moore	DBSI

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	- miles #3139
Flatbed Truck	Ford F450	- miles #0576
Container Truck	Peterbuilt	
Skid Steer	Bobcat S185	- hrs #BC7030
Tracked Skid Steer	Bobcat T750	- hrs #BC2200
Mini-Excavator	CAT 308	- hrs #EX1928
Excavator	Volvo EC290BLC	- hrs #EX1006
Excavator	Volvo EC290BLC	- hrs #EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.
Schedule for orientation of operating fire water hydrants by DBSI at 10am today.

Iniki will be working at the Harbor on Bldg 1124 HazMat and Bldg 1126 Harbor Office and Bldg 502.
NWDE will be split to continue concrete processing at the Seaplane apron and also cleanout tasks for the R2 Taxiway vault Bldg 5303.

0830 – The R2 Taxiway vault work area is being oriented for clearing off the top CMU wall area in preparation for continuing the cleanout effort. The key items are; Clear the ground surface area of sandbags and shade cloth, Lock-Out/Tag-Out of inlet/outlet piping valves, pull the short CMU block wall down, continued positive ventilation and air monitoring, further wash down to dilute and pump, establish clear work area at vault edge, set second perimeter barricade fence at vault, pre confined space entry procedures, final safety briefing, final pre entry procedures, entry, perform work task to hand pick up small steel and CMU chunks out, record pipe and vault measurements, verify flat continual vault bottom, planned exit of vault once task is complete, post air monitoring, close out of confined space entry documentation, secure vault work area and secondary work area barriers.

Air monitoring and fan forced ventilation continue to be used to profile the vault air quality. Monitoring with the 4-gas meter pre, during and post entry; O2 20.7%, CO 0ppm, H2S 0.0ppm, LEL 0%. Level D PPE w rubber boots, harness and vertical lifeline are in use and two extension ladders for entrance and egress. One entrant performs the interior 24' x 20' vault work while two attendants and one supervisor provide full time oversight during the vault work and one worker up top.
The above noted work occurs over the course of the day and ends at 1715hrs. The end status is that by days end the vault is prepared for the base layer backfill for the Rainstore^3 installation to begin.

Iniki partial crew is working the last section of the interior Bldg 502 tile floor abatement. The small former bathroom / mechanical room tile is removed and bagged as ACM waste materials, then the mastic is worked wet to be removed.

NWDE's two Volvo 290 excavators continue to downsize large concrete slabs, beams and block to a manageable size with the UP-40. This is stockpiled low and flat and will be followed with the MB crusher bucket. Currently the crusher bucket is working to finish up the ¾" minus that will be used for the Rainstore^3 Select Vault Backfill stockpile.

0900 – Meet with Eric Moore, DBSI to define operating parameters of the Midway Fire Hydrant water system. The TOC team and DBSI indicate NWDE will be able to run a maximum of two 1.5" fire hoses (120gpm ea) at full open if required and still remain within the margin of the small jockey pump's 500gpm makeup water. In use, NWDE uses 1.5" hoses at a much smaller rate since a spray nozzle is in use. System line pressure is 40-50 psi with the electric VFD driven jockey pump. If the line pressure dips to <=30psi the larger diesel driven pump will fire up and run a higher flow rate to maintain 55psi. The water tower stem is currently open and in use to aid as a reservoir to smooth pressure spikes.
In summary, NWDE and Iniki can continue to use the hydrants for work tasks.

0930 – Iniki is wrapping up Bldg 502 tile floor abatement. The materials have been bagged, twisted and sealed, bagged again, twisted and seal and staged for pickup. They will be moved to the NAF staging area and placed in the designated ACM shipping container for future proper transport and disposal.

1000 – NWDE and Iniki have a total of 8 people attend the DBSI/TOC fire hydrant orientation. The key to operation is opening and closing the hydrant slowly when in use and using no more than two 1.5" hoses at one time.

1030 – Island loop for Pre-Demolition Engineering Survey, aka demo forms. Each structure is inspected inside and out for hazards, materials and utilities relative to the upcoming demolition work. This is the final inspection following up DBSI having removed the interior equipment from some structures and NWDE's prior inspection of same. In attendance is E Moore, DBSI; E White, NWDE & S Wakefield, NWDE.

1200 – Lunch

1230 – At the Seaplane apron crushing and breaking concrete down continues.

Iniki harbor crew has been working to clear the roofs at Bldg 1124 and Bldg 1126 of ironwood needles and accumulated tree fines in the steel roof panels. This roof area will be Maectite treated and left as is. Debris is collected on the poly and bagged for LBP waste.

NWDE is washing the R2 Taxiway vault with the better method fire hydrant hose. Water is pumped with the Honda trash pump to the applicable southern point discharge pipe grate.

Iniki ACM abatement crew has been at Bldg 5342 telephone switch. The pre building preparations for sealing structure opening, installing HEPA filter negative air handlers and double flap poly entry are in place. The 9x9 tile on the large main room has been loosened and bagged. The mastic is next to be worked wet and removed.

1430 – The R2 Taxiway vault is nearing the vault entry event as noted above at 0830 this morning for entry setup. The actual entry time is 1638hrs and exit 1715hrs.

1725 – Iniki at Bldg 5342 telephone switch have approximately ¼ of the mastic area of the large room abated. This will continue tomorrow until complete.
The Iniki LBP crew at the harbor have been applying Maectite® to the Bldg 1124 and Bldg 1126.

1730 – End of work day.

Photographs:

Photo 01: View west- Seaplane apron yard area for concrete rubble processing.

Photo 02: View northeast – MB crusher bucket running ¾" minus.

Photo 03: Bldg 502 Communications – Interior 9x9 floor tile abated and bagged.

Photo 04: View southwest - Bldg 1126 clearing roof panels of tree debris for Maectite®.

Photo 05: View north – Bldg 5303 R2 taxiway vault CMU wall removal.

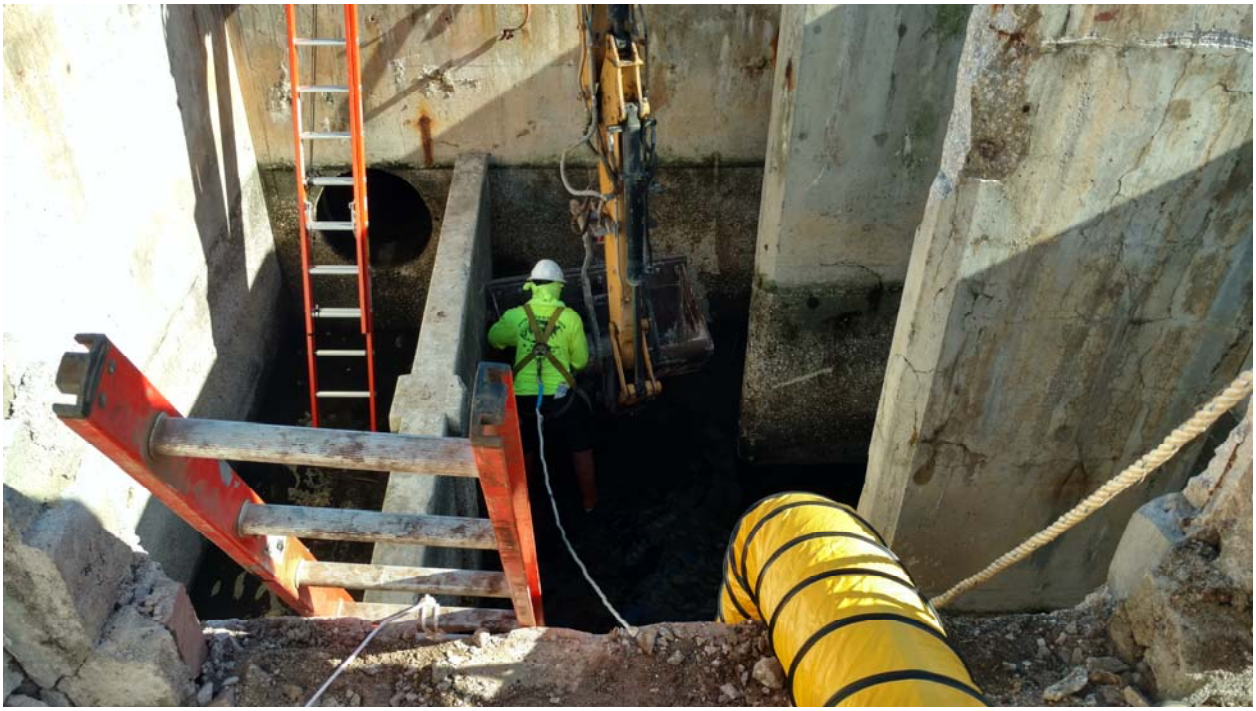


Photo 06: Bldg 5303 R2 Taxiway vault – Clearing out small debris in vault bottom.

Photo 07: View southwest – Bldg 5305 R2 Taxiway vault work area.

Photo 08: Bldg 5342 – 9x9 ACM floor tile up and bagged in the large floor area.

Photo 09: View west - Bldg 5342 entry and bagged ACM floor tile.

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Tuesday, September 13, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 6 mph, Temperature ~84F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Dale Christianson	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Luis Martinez	NWDE Laborer	10
Viavia Manuma	NWDE Laborer	10
Gary Lewis	Iniki Supervisor	10
Evan Esposito	Iniki Laborer	10
Lauren Lewis	Iniki Laborer	10
Kawena Kaawa	Iniki Laborer	10
Amber Lewis	Iniki Laborer	10
Philip Kneubuhl	Iniki Laborer	10
Keala Lewis	Iniki Laborer	10
Larry Vaa	Iniki Laborer	10
Ulrich Naki	Iniki Laborer	10
Delson Smith	Iniki Laborer	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	- miles #3139
Flatbed Truck	Ford F450	- miles #0576
Container Truck	Peterbuilt	
Skid Steer	Bobcat S185	- hrs #BC7030
Tracked Skid Steer	Bobcat T750	- hrs #BC2200
Mini-Excavator	CAT 308	- hrs #EX1928
Excavator	Volvo EC290BLC	- hrs #EX1006
Excavator	Volvo EC290BLC	- hrs #EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	96 gallons	
Gasoline	20 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

Iniki will be working at the Iniki at Bldg 5342 telephone switch and Bldg 1124 HazMat and Bldg 1126 Harbor Office.
NWDE will be split to continue concrete processing at the Seaplane apron and also tasks for the R2 Taxiway vault Bldg 5303.

0730 – The R2 Taxiway vault work area is being worked to prep for placing lifts of General R2 Backfill materials. This base material fill will provide the proper elevation to begin the Rainstore^3 media. The key items are; Continue Lock-Out/Tag-Out of inlet/outlet piping valves, continued positive ventilation and air monitoring, pre confined space entry procedures, final safety briefing, final pre entry procedures, entry, perform work task, planned exit of vault once task is complete, post air monitoring, close out of confined space entry documentation, secure vault work area and secondary work area barriers.

Iniki is working the floor tile mastic in Bldg 5342 telephone switch. The abatement work is being conducted with the standard use of PPE for ACM abatement. Tyvek and half face air purifying respirators are all in use when working and decon tasks are performed. The building work area continues to use the negative air fans with HEPA filters.

At the Seaplane apron NWDE continues to crush concrete with the UP-40 and process the last needed ¾" minus for the stockpile of the aggregate portion of the R2 Select Vault Backfill.

At the Harbor the three person Iniki crew are working to finish the Maectite® application and wash of Bldg 1124 HazMat.

0830 – The Volvo 290 MB crusher bucket is done with the ¾" minus run. The machine is adjusted to open up and run the larger process with a target of 3" minus. This will be smaller than the original run of 6" minus started last week before changing to the ¾" size. Yet to be determined how the feed rate of the UP-40 prepped rap will run through the MB120.4 crusher.

0930 – At the R2 Taxiway vault a load of the stockpiled abutment clean coral sand is loaded in to the A30 Volvo truck. This will be located at the vault and the Cat mini excavator will place coral as needed in the vault for the first lift.
The Honda trash pump is being used to draw up the last bit of sump hydrant water to <1" prior to backfill.

1200 – Lunch

1245 - Using the 4' flat edged bucket the sand is placed as even a possible to reduce hand work of rough grading prior to plate compaction.
Lifts of coral sand are alternatingly placed and plate compacted to increase elevations to be roughed out to near the bottom of the 35" ID outfall pipe. The backfill work pushes through the afternoon. The entire vault is worked across by days' end to have the Rainstore^3 placement area at a rough grade compacted. The larger area west of the Rainstore^3 and short concrete beam has sand placed as well for beginning lifts.

1400 – Iniki is finishing up at Bldg 5342 telephone switch with ACM flooring abatement in both the large room and small rear bathroom floor.
Iniki is setting up at the next small structure, Bldg 3514 storage near TOC. Prep setup for sealing building, install double flap poly entry, HEPA air handlers and material staging.

The Iniki Harbor LBP crew is working on the paint abatement at the Harbor Cross memorial, "Cross." The base is prepped for Maectite® application and lead scrape. The outer perimeter curb surround that was 18" tall has been removed by DBSI today. The 3/8" washed pea gravel material that has been in place prior to 2016 season remains and will be left in place at the base of the cross.

1700 – Iniki has the tile and mastic pulled up, removed and bagged for the Bldg 3514 storage near TOC. Partial equipment is being moved over to the next site, Bldg 2127 POL Office.

NWDE is picking up and securing the worksite at the R2. Tomorrow backfill and compaction will continue and final grade for the Rainstore^3 footprint.

1730 – End of work day.

Photographs:

Photo 01: View southeast- Seaplane apron yard area for 3" minus and ¾" minus concrete processing.

Photo 02: Bldg 5342 - Rear bathroom floor soon to begin ACM tile abatement.

Photo 03: View north - R2 east wall abutment stockpile of clean coral sand for General R2 Vault backfill

Photo 04: View east - Bldg 5303 R2 Taxiway vault. Placement of clean backfill with mini excavator.

Photo 05: View north-ish – Bldg 5303 R2 taxiway vault begin backfill lift.

Photo 06: View north-ish – Bldg 5303 R2 taxiway vault compaction followed by next material lift.

Photo 07: View east – Cross. Prep for Maectite® to the base and plaque stone.

Photo 08: Bldg 3514 – Set up for interior ACM floor tile abatement.

Photo 09: Bldg 3514 interior bagged ACM floor tile.

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Wednesday, September 14, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 6 mph, Temperature ~85F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Dale Christianson	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Luis Martinez	NWDE Laborer	10
Viavia Manuma	NWDE Laborer	10
Gary Lewis	Iniki Supervisor	10
Evan Esposito	Iniki Laborer	10
Lauren Lewis	Iniki Laborer	10
Kawena Kaawa	Iniki Laborer	10
Amber Lewis	Iniki Laborer	10
Philip Kneubuhl	Iniki Laborer	10
Keala Lewis	Iniki Laborer	10
Larry Vaa	Iniki Laborer	10
Ulrich Naki	Iniki Laborer	10
Delson Smith	Iniki Laborer	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	- miles #3139
Flatbed Truck	Ford F450	- miles #0576
Container Truck	Peterbuilt	
Skid Steer	Bobcat S185	- hrs #BC7030
Tracked Skid Steer	Bobcat T750	- hrs #BC2200
Mini-Excavator	CAT 308	- hrs #EX1928
Excavator	Volvo EC290BLC	- hrs #EX1006
Excavator	Volvo EC290BLC	- hrs #EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will split the crew as usual to process concrete at the Seaplane apron stockpile and further work at the R2 Taxiway vault.
Iniki LBP group will be at the Harbor area buildings. The Iniki ACM crew will be out working on Bldg 2127 POL.
NWDE first thing this morning will communicate with the Airport Manager to stage the Honda trash pumps near the taxiway, yet out of critical areas. The preventative measure of pumps and hoses staged are that in the event of rain, the accumulated taxiway runoff to the east would be pumped as approved to the west, across the "not in use" taxiway towards the catchment. Pumping would occur since the Taxiway vault drain valves are closed for vault work. Forecast later in the week is possible rain. Currently the weather is hot and dry.

0800 - The R2 Taxiway vault work area resumes placing lifts of General R2 Backfill materials. This base material clean coral sand fill will provide the proper elevation to begin the Rainstore^3 media. The key items include but not limited to; Continue Lock-Out/Tag-Out of inlet/outlet piping valves, continued positive ventilation and air monitoring, pre confined space entry procedures, final safety briefing, final pre entry procedures, entry, perform work task, planned exit of vault once task is complete, post air monitoring, close out of confined space entry documentation, secure vault work area and secondary work area barriers.
The laser transit it in use for reference of the Rainstore^3 base fill initial rough grade. This will have a fine adjustment prior to building up the grid, cloth and cell stacks. For now, it is within 1 inch of final grade.
The larger west section of the R2 Taxiway vault is slated for another lift of General Backfill.

0930 – The Rainstore^3 cells to vault dimensions are verified and noted that a field adjustment is required for the upcoming placement. The six stacks lengths exceed the vault length by 6". Invisible Structure, Inc is being contacted for an approved method to field fit the sections. By days end the path to fitting the six stacks of Rainstore^3 units is nearly defined pending a final review. Expect to resume installation steps tomorrow after final approval of the manufacturer and R2 design group.
The Rainstore^3 vault work is temporarily halted this morning. NWDE crew shifts to alternate work for about an hour. At that time the decision to continue backfilling the west R2 vault section is choosen.
The R2 Taxiway vault work will continue going forward in the large west side section. This will be receiving spec'd lifts of clean coral sand, leveled out and then treated to a minimum of two passes with the plate compactor.

1100 – Iniki ACM crew is progressing at Bldg 2127 POL office. The multi-layer tile and mastic floor is worked after setting up the exclusion task area. This includes sealing the building openings, adding poly entry and negative air handling HEPA filtered fans.
Also in the mix is Iniki detailing the last of Bldg 3514 interior tile floor removal. This clean up and break down of the work area is wrapping up the small storage shed's ACM abatement.

The Iniki LBP workers with the JLG manlift are getting lined up for the larger concrete structure Bldg 144 power plant. The exterior walls of this building will receive the Maectite® application using the chemical fed low pressure tipped washer. As with all other prepped buildings the liquids are applied to the walls and under eave surfaces.

1200 – Lunch

1230 – Iniki is setting up paint equipment to apply the LeadStop® elastomeric coating to Bldg 1126 Harbor Office. This will receive the multi coats using the airless sprayer. Following this building the work will focus on Bldg 1124 HazMat for the same exterior LeadStop® application.
The harbor Cross site pedestal base and plaque stone will be receiving LeadStop® today as well.

1300 – NWDE concrete processing work at the Seaplane apron has steadily kept going to downsize the staged rubble pile in the 3" minus target size. The crusher bucket and UP-40 repeatedly work to turn the otherwise awkward sized useless clean slabs, footings and beams into a recycled usable product for the future R2 final cover.

The R2 Taxiway vault west section has continued to be backfilled in lifts. The clean coral sand stockpiled at the R2 east abutment is placed and plate compacted within the vault.

1700 – The R2 Taxiway vault is steadily building up the elevation of the General Backfill area on the west side of the short concrete baffle beam. Tomorrow the lifts and compaction will continue.

1730 – End of work day.

Photographs:

Photo 01: View northwest- Seaplane apron yard area concrete processing.

Photo 02: View southwest- Seaplane apron yard area concrete processing.

Photo 03: LeadStop® product and application equipment for encapsulating prepared surfaces.

Photo 04: View north - Bldg 144 power plant. Manlift access for Maectite® application.

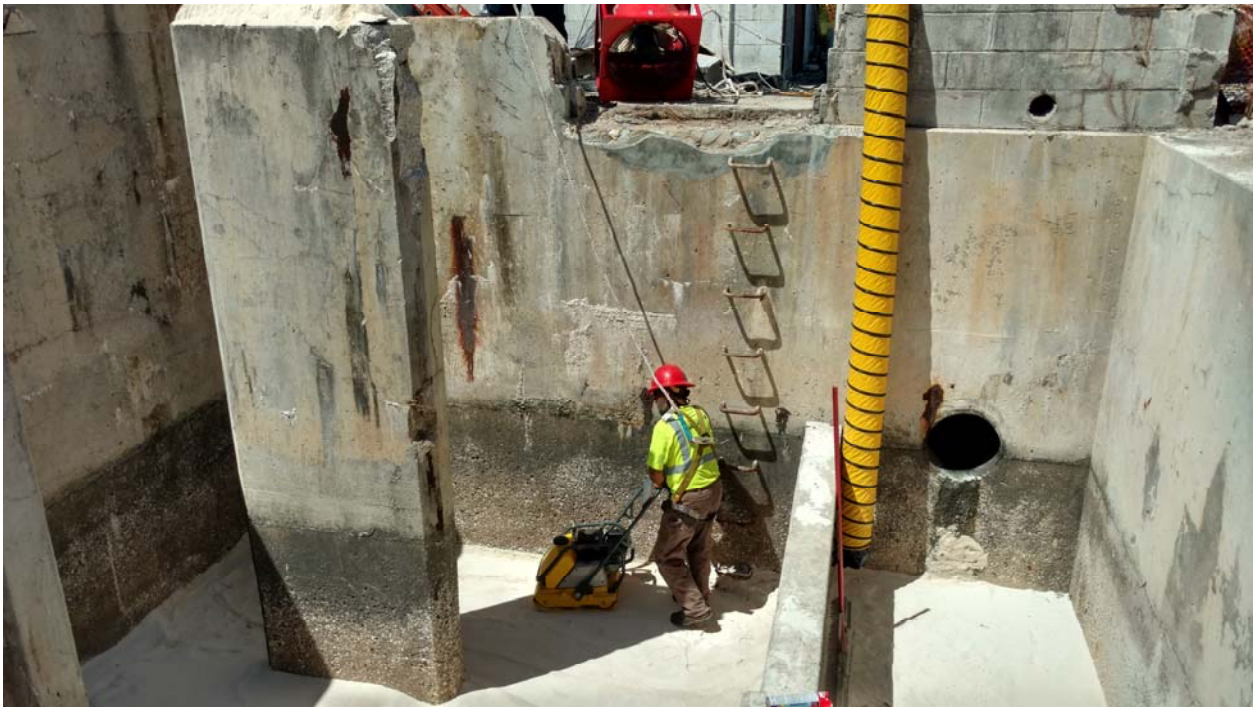


Photo 05: View north-ish – Bldg 5303 R2 taxiway vault backfill lift plate compaction.

Photo 06: View southwest – Bldg 5303 R2 taxiway vault General Backfill lift placement with mini.

Photo 07: View northeast – Bldg 1126 Harbor Office white LeadStop® coating progress.

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Thursday, September 15, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 9 mph, Temperature ~85F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Dale Christianson	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Luis Martinez	NWDE Laborer	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	
Matt Manning	NWDE Laborer	
Gary Lewis	Iniki Supervisor	10
Evan Esposito	Iniki Laborer	10
Lauren Lewis	Iniki Laborer	10
Kawena Kaawa	Iniki Laborer	10
Amber Lewis	Iniki Laborer	10
Philip Kneubuhl	Iniki Laborer	10
Keala Lewis	Iniki Laborer	10
Larry Vaa	Iniki Laborer	10
Ulrich Naki	Iniki Laborer	10
Delson Smith	Iniki Laborer	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	- miles #3139
Flatbed Truck	Ford F450	- miles #0576
Container Truck	Peterbuilt	
Skid Steer	Bobcat S185	- hrs #BC7030
Tracked Skid Steer	Bobcat T750	- hrs #BC2200
Mini-Excavator	CAT 308	- hrs #EX1928
Excavator	Volvo EC290BLC	- hrs #EX1006
Excavator	Volvo EC290BLC	- hrs #EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will split the crew as usual to process concrete at the Seaplane apron stockpile and further work at the R2 Taxiway vault.
Iniki LBP group will be at the Harbor area buildings. The Iniki ACM crew will be out working on Bldg 2127 POL.

0800 - The R2 Taxiway vault work area resumes. The General Vault backfill base material clean coral sand will make final grade prior to beginning Rainstore^3 geotextile and geogrid placement. The key items include but not limited to; Continue Lock-Out/Tag-Out of inlet/outlet piping valves, continued positive ventilation and air monitoring, pre entry procedures, final safety briefing, final pre entry procedures, entry, perform work task, planned exit of vault once task is complete, post air monitoring, close out of entry documentation, secure vault work area and secondary work area barriers.
The laser transit it in use for reference of the Rainstore^3 base grade. The fine adjustment prior to building up the grid, cloth and cell stacks is worked in this morning prior to orange geotextile cloth placement.
The larger west section of the R2 Taxiway vault is slated for another lift of General Backfill.
The Rainstore^3 stacks have been approved by Invisible Structure, Inc. engineer Kate Wright, to be adjusted in length. The leading inlet stack will have one vertical row of cups and T bars removed, shortening the 40" square stack by 8-3/8". This field adjustment will allow all six stacks to fit within the cast in place concrete walled vault including the install gap between cell stacks #3 and #4.

0900 – Begin unloading the material rolls, manway and associated items from the shipping container.
At the Seaplane Apron processing concrete continues for the 3" minus. The Volvo 290 mounted MB crusher bucket and UP-40 have progressed on the north face of the pile from west to east, now stepping back in and headed west again. This pattern will continue as the concrete stockpile is downsized.

0930 – Iniki is setting up for transite roof panel abatement at Bldg 300.
At the harbor, Bldg 1124 and Bldg 1126 are in the cleanup mode for touch up edges and pulling up ground cover poly. Masking and prepped areas are being pulled down as the work continues this morning.

1000 – The Cinco Air Gulfstream flight arrives, bringing in two scheduled NWDE workers; Joel Smith and Matt Manning. They will be attending the US FWS cultural awareness orientation and site specific HASP review and presentation.

At the R2 Taxiway vault, the 18" inlet north wall and 36" outlet south wall are pulled back ~1.5' at the short end walls. This allows the tail ends of the first 2 layer placement of cloth into the vault. Once the ends are backfilled the base grade final at the walls is re-established prior to laying the cloth down. Layers are alternated with 7' of orange geotextile overlap in the bottom.

1200 – Lunch

1230 – Iniki has completed the harbor Cross LBP abatement and multi coating of Leadstop® elastomeric paint on the concrete pedestal top and sides. The wood cross and steel channel support are known to have been replaced by US FWS in 2015 and these wood and steel surfaces are not in Iniki's scope of work.

NWDE is cutting the list of orange geotextile panels needed from the 15' wide roll to continue pre placement of textile in the vault recess. The black geogrid roll is also spun out to cut sections from the 13.5' wide grid that will encircle the center gap per the design drawings. The two-layer geogrid pieces that are placed directly on top of the first two-layer orange geotextile are cut and set first.

1420 – The short end walls of the R2 vault have two-layer orange geotextile pre-positioned and temporary spray adhesive and ropes to hold the felt in place. The inlet and outlet pipe openings in the orange textile are cut. The layering of the textile will be wrapped onto the Rainstore^3 stacks once in place, like a reverse peeling of an onion.

1500 – The two layers of alternating overlap orange geotextile are being set into the open vault. These 15' wide x 25' long panels will encircle the Rainstore^3 stacks in groups of four from the north inlet wall face. The next 15' wide layer will encircle four stacks from the outlet south wall face. Effectively the overlap of the orange textile places four layers in the center cells #3 and #4. At the wall faces a minimum of 4" of material will wrap the Rainstore^3 ends before the end cap double layer is folded back to secure and overlap the adjacent textile.
One stack of cells is precut to remove the approved cup and T bar row. As noted this cut face is placed tight to the north concrete vault wall, with a 12" gap on the east wall and 8" gap on the west R2 short concrete beam side. This is centered on the 18" inlet pipe and expected to be centered on the 36" outlet pipe given the layout marks. The stack is verified level in both planes, on a firm footing and tight to the north inlet concrete wall.
Since cell stack # 1 was field adjusted in length by removing one row of cups, the clean out port position is moved into cell #2 which reduces the amount of cutting on any one cell stack.
Cut stack #2 relief area cups and T bars out for upcoming 8" sch40 PVC pipe placement for inspection port.

1630 – Stack # 2 is being set in place slung under the mini Cat excavator pick point. Rainstore^3 stacks are temporarily locked in place using the drop cups cut from the noted stack #1. These 4" cups stacked make the needed 8" and 12" spacers. Spacers shown today in photos are temporary and final placement of spacers will be outside of the orange geotextile once wrapping tasks are completed.

1715 - Picking up for the day. The in vault cell stacks are covered for the night with plywood as a preventative measure to protect curious bird inspections.

1730 – End of work day.

Photographs:

Photo 01: View north- Final grade work that is the base for the Rainstore^3 cell stacks.

Photo 02: View north – The two layers of orange geotextile are buried 1.5' deep against wall.

Photo 03: View north – Layers of geotextile long wall edges are being flanged up. Adhesive to concrete.

Photo 04: View north – Base layer of black geogrid placed atop textile to form foundation.

Photo 05: View south – End cap panels of textile are aligned and temporarily affixed.

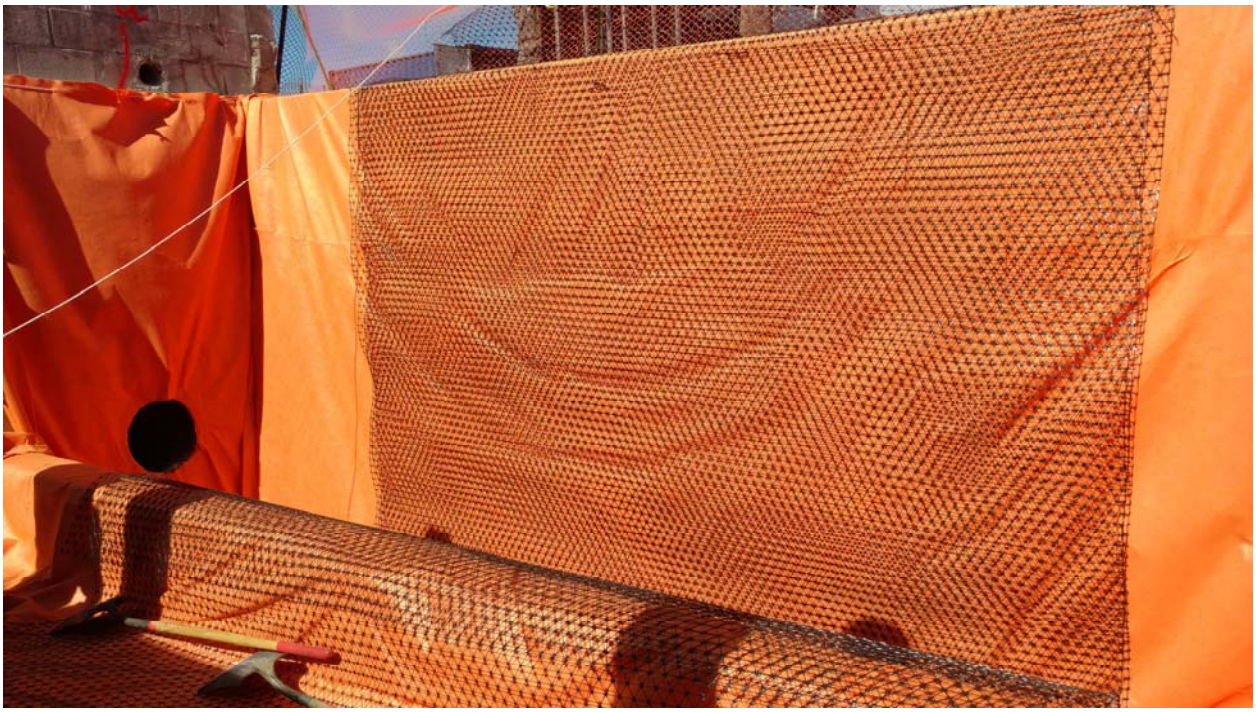


Photo 06: View northeast – Double layer textile is oriented then 2 layers of black geogrid staged.

Photo 07: View east – Rainstore^3 stacks #1 and #2 are positioned within the prepared area.

Photo 08: View north – Rainstore^3 stacks #1 and #2 are positioned within the prepared area.

Photo 09: View north – Bldg 1124 HazMat with Leadstop® elastomeric encapsulating paint applied.

Photo 10: View north – Bldg 5361. Iniki is setting up for transite roof abatement.

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Friday, September 16, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 10 mph, Temperature ~86F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Dale Christianson	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Luis Martinez	NWDE Laborer	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10
Gary Lewis	Iniki Supervisor	10
Evan Esposito	Iniki Laborer	10
Lauren Lewis	Iniki Laborer	10
Kawena Kaawa	Iniki Laborer	10
Amber Lewis	Iniki Laborer	10
Philip Kneubuhl	Iniki Laborer	10
Keala Lewis	Iniki Laborer	10
Larry Vaa	Iniki Laborer	10
Ulrich Naki	Iniki Laborer	10
Delson Smith	Iniki Laborer	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Bob Peyton	U.S. FWS Refuge Manager

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	- miles #3139
Flatbed Truck	Ford F450	- miles #0576
Container Truck	Peterbuilt	
Skid Steer	Bobcat S185	- hrs #BC7030
Tracked Skid Steer	Bobcat T750	- hrs #BC2200
Mini-Excavator	CAT 308	- hrs #EX1928
Excavator	Volvo EC290BLC	- hrs #EX1006
Excavator	Volvo EC290BLC	- hrs #EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	190 gallons / 93 gallons	9-15-16 / 9-16-16
Gasoline	14 gallons	9-16-16

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will split the crew as usual to process concrete at the Seaplane apron stockpile and further work at the R2 Taxiway vault.
Iniki LBP group will be at the Harbor area buildings. The Iniki ACM crew will be resuming small structure abatement work.

0730 - The R2 Taxiway vault work area resumes. The remaining four Rainstore^3 stacks will be set and positioned within the flow path. Pre oriented orange TenCate Mirafi and black Tensar TriAx TX160 will be wrapped and folded at the six stack of cells. Select Vault backfill material will be situated to lock the wrapped cells in position. Key items today include but are not limited to; Continue Lock-Out/Tag-Out of inlet/outlet piping valves, continued positive ventilation and air monitoring, pre entry procedures, final safety briefing, final pre entry procedures, entry, perform work task, planned exit of vault once task is complete, post air monitoring, close out of entry documentation, secure vault work area and secondary work area barriers.

Cell stack # 3 is placed mid path of the row, then begin setting cell stack #6 at the effluent south wall and working north towards the center. Cell # 6 is centered on the 36” effluent pipe with the cell being 2” wider on the two sides and 2” below the bottom of pipe as planned. The third required inspection port relieve is included in this cell. Cell stack # 5 and the last # 4 cell stack is lowered into position slung under the mini excavator. Once all six cells are final the “mid gap” anticipated at 1-7/16” has dwindled to a contact fit of all cell bumpers. Cell stacks are level in both planes and have been anchored to each other using black ¼” heavy zip ties.

0900 – Iniki has resumed the touch up and cleanup of painting materials at Bldg 1124 HazMat. Prep work at Bldg 140 radionuclide is coordinated with DBSI prior to LBP abatement using Maectite®, scrape and future LeadStop® applications.
Bldg 228 substation this morning is also receiving exterior LBP abatement with Maectite®.

0945 – The R2 Taxiway vault progress continues with the black geogrid being tightly wrapped by hand and secured using the heavy duty zip ties. This double wrap geogrid has ends overlapped for each layer, and the two layer seams are offset by 5’.
Next the crew begins bringing the orange geotextile layer wraps into position. The 15’ wide textile is kept uniform and evenly tensioned as it is wrapped. Ends are overlapped and where applicable the use of the 3M Super 77 contact spray glue anchors the textile back to itself sufficiently. This will keep the textile in position during backfill tasks. End fitment of the cells to the vertical concrete walls is verified to be tight. The described first double layer edges are tucked tight into the cell to wall fitment.
The first layer of orange geotextile encircles the Rainstore^3 cells from the north wall to the south wall. Then the second alternating layer is wrapped and secured to duplicate the first. The end cap orange textile flanges are then folded to produce a double flange that will contact both the vertical concrete walls and the 40” wide x 80” tall top and sides. The use of the spray adhesive is very effective to keep the textile in position on the cleaned concrete and back to itself.

1200 – Lunch

1230 – At the R2 Taxiway vault the final full horizontal runs of orange geotextile are planned for cutting and placement. The 15' wide x 26' long panel is folded in the long axis to produce 7.5' x 26'. This is then positioned with reference layout marks to anchor on the wrapped cell run 1' in from the west edge of the cells. The textile is adjusted to drape over and down the west side to the base and then flange out horizontal on the grade between the cells and the concrete beam. Spray adhesive secures the top edge and at the north and south walls the ends are flanged outward and glued.
The next double layer of 7.5' x 26' begins on the west wall of the cell rows 1' below the top. The material is draped to the east across the top and down along the side though not to the bottom. The north and south ends are flanged out 2' to 3' and secured with spray adhesive.
Lastly, 2' flanges are added to the north and south wall / cell fitment at the west sides. This redundant orange textile spans vertically along the cell row and concrete walls. Upcoming backfill work will lock the textile flanges tight against the walls.
The drop material cups from the Rainstore^3 are configured in 8" lengths and 12" lengths to be used as spacers. The west side gets 8" spacers and the east side the longer 12" units. These fit firmly into place and provide rigidity while backfilling with Select material.
The known vertical reliefs in the cells are marked and cut through textile to allow installing the 8" pvc inspection ports. The white pipes are firmly slide into place and verified to be resting at the plan indicated elevation up from the base grade. Expanding locking caps are installed in the three ports. The final pipe elevations will be cut later after backfill and manway placement begins. The 8" port locations are 29.5" in from the west concrete vault wall, 37", 124.5" & 198" from the south concrete wall to centerline of ports. Additional textile will wrap and flange the ports prior to final backfill of the cell top.

1400 – Iniki is picking up this week's staged ACM and LBP bagged materials. These are transported from the respective building sites and placed into the appropriate waste storage shipping container for appropriate future disposal offsite.
Concrete downsizing at the Seaplane apron has progressed throughout the day to stockpile 3" minus.

1430 – At the R2 taxiway vault the previously processed ¾" minus concrete is prepped to use for beginning backfill around the Rainstore^3 cells. The Select backfill produced from downsizing at the Seaplane apron has the broken aggregate along with fines and sand that meet the blend specification. The stockpile was amended with hydrant water when loaded and again today as the material is moved, placed in lifts and tamped on the narrow west and east sides of the base of the cell stack row. Moisture content is visually suited to achieve satisfactory compaction. Lifts are placed by hand with shovel to control backfill stress rather than dumping excess with the excavator at this initial fill.

1530 -The large west section of R2 Taxiway vault is being filled in lifts with General backfill. This material is placed, plate compacted and repeats to gain height. As the General fill is brought up the Select backfill can continue against the orange textile and cells. Currently the General and Select are nearing the top of the concrete beam 67" up from the vault concrete floor.

1715 - Picking up for the day. The fully wrapped cells and base backfill provide sufficient measures to protect curious bird inspections.

1730 – End of work day.

Photographs:

Photo 01: View south- Rainstore^3 cell stack #6 (with port relief) aligned at the 36" effluent pipe.

Photo 02: View east – Six stacks of 40” x 40” x 80” Rainstore^3 units in place.

Photo 03: View northeast – Black geogrid two-layer wrap and orange geotextile layer #1 begin.

Photo 04: View northeast – Geotextile wrap layers # 1 and #2. End cap double flange to wall and cell.

Photo 05: View east – Geotextile wrap layers # 1 and #2. End cap double flange to wall and cell.

Photo 06: View south – Geotextile layer #3 & #4 (panel 1) are being positioned to the west cell wall.

Photo 07: View south – Geotextile layer #3 & #4 (panel 2) are positioned to the top and flanged to wall

Photo 08: View east – Lift placement of Select backfill within the 12” and 8” vault / cell space.

Photo 09: View northeast – Overview of Select backfill progress and 8” inspection port locations.

Photo 10: View north – Bldg 5361. Transite roof panels have been removed, bagged and staged.

Photo 11: View southwest – Bldg 5342. Shed roof transite panels double bagged.

Photo 12: View southwest – Overview of Seaplane apron work area for concrete downsizing.

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Saturday, September 17, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 11 mph, Temperature ~86F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	9
Everett White	NWDE Supervisor	9
Jevon Stone	NWDE Operator	9
Dale Christianson	NWDE Operator	9
Ruth Inmon	NWDE Operator	9
Luis Martinez	NWDE Laborer	9
Viavia Manuma	NWDE Laborer	9
Joel Smith	NWDE Laborer	9
Matt Manning	NWDE Operator	9
Gary Lewis	Iniki Supervisor	5
Evan Esposito	Iniki Laborer	5
Lauren Lewis	Iniki Laborer	5
Kawena Kaawa	Iniki Laborer	5
Amber Lewis	Iniki Laborer	5
Philip Kneubuhl	Iniki Laborer	5
Keala Lewis	Iniki Laborer	5
Larry Vaa	Iniki Laborer	5
Ulrich Naki	Iniki Laborer	5
Delson Smith	Iniki Laborer	5

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	- miles #3139
Flatbed Truck	Ford F450	- miles #0576
Container Truck	Peterbuilt	
Skid Steer	Bobcat S185	- hrs #BC7030
Tracked Skid Steer	Bobcat T750	- hrs #BC2200
Mini-Excavator	CAT 308	- hrs #EX1928
Excavator	Volvo EC290BLC	- hrs #EX1006
Excavator	Volvo EC290BLC	- hrs #EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

The NWDE team will resume yesterday's tasks to include concrete processing at the Seaplane apron and R2 Taxiway vault backfill.

Iniki will be focusing on picking up staged materials at work site buildings to close out individual DU-9 building abated so far.

0740 - The R2 Taxiway vault work area resumes. Select Vault backfill material will be situated to lock the wrapped cells in position. Key items today include but are not limited to; Continue Lock-Out/Tag-Out of inlet/outlet piping valves, continued positive ventilation and air monitoring, pre entry procedures, final safety briefing, final pre entry procedures, entry, perform work task, planned exit of vault once task is complete, post air monitoring, close out of entry documentation, secure vault work area and secondary work area barriers.

Iniki is closing out work on the harbor area buildings towards Bldg 180, 170, 1124, 1126 and 502, 5342. The last staged abatement materials are loaded and moved to the NAF work area for placement into the appropriate LBP and ACM shipping containers.

1030 – The R2 Taxiway vault is steadily being filled in with Select and General backfill as specified in the 8" lifts. The moisture conditioned ¾" minus placement is at the textile wrapped Rainstore^3 cells, with the west area of the vault using General clean coral sand from the R2 stockpile abutment. Compaction continues to be the use of the plate compacter in both materials and narrow areas are tamped with the heavy steel plate hand tools.

1200 – Lunch

1230 – The afternoon will be more of the same for NWDE. Backfill continues being placed with the mini excavator, roughed out by hand and then compacted. Working around the two concrete piers, three pvc inspection ports and 19.5' Rainstore^3 cells carefully while setting and compacting is providing good results.

1400 – The 8" PVC inspection ports are being wrapped and flanged to the top of the orange geotextile. Using a reinforced impermeable sheeting this 1.5' flange is taped to the pvc pipe and weighted down with small sand to create additional assurance of sealing for the inspection port entering the cell stack. Port elevations (bottom of 8" pvc pipe) are verified to be set 8" up from the bottom of the cell stack base.

1530 – NWDE is setting the A-36 steel plate atop the Rainstore^3 and backfill. The plate meets minimum size required and is ¼" x 5.0' x 10.0'. The east edge of the plate is parallel to the east concrete vault wall. The steel is carefully set with the cutout relief to accept the center vertical pvc inspection port.
Two additional layers of black geogrid will be placed as the backfill elevations continue towards the target grade.

1615 - Picking up for the day. The fully wrapped cells and backfill provide sufficient measures to protect curious bird inspections.

1630 – End of work day.

Photographs:

Photo 01: View southeast- Rainstore^3 cell stacks being backfilled with Select material.

Photo 02: View south – Continued lifts of Select (l) and General (r) backfill prior to level and compaction.

Photo 03: View east – Setting the ¼" steel plate on top of the Rainstore[3] assembly.

Photo 04: View east – Flanged impermeable sheeting at inspection port to horizontal surfaces

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Monday, September 19, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 14 mph, Temperature ~85F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Dale Christianson	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Luis Martinez	NWDE Laborer	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10
Gary Lewis	Iniki Supervisor	10
Evan Esposito	Iniki Laborer	10
Lauren Lewis	Iniki Laborer	10
Kawena Kaawa	Iniki Laborer	10
Amber Lewis	Iniki Laborer	10
Philip Kneubuhl	Iniki Laborer	10
Keala Lewis	Iniki Laborer	10
Larry Vaa	Iniki Laborer	10
Ulrich Naki	Iniki Laborer	10
Delson Smith	Iniki Laborer	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	- miles #3139
Flatbed Truck	Ford F450	- miles #0576
Container Truck	Peterbuilt	
Skid Steer	Bobcat S185	- hrs #BC7030
Tracked Skid Steer	Bobcat T750	- hrs #BC2200
Mini-Excavator	CAT 308	- hrs #EX1928
Excavator	Volvo EC290BLC	- hrs #EX1006
Excavator	Volvo EC290BLC	- hrs #EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

The NWDE team will resume yesterday's tasks to include concrete processing at the Seaplane apron, R2 Taxiway vault backfill / port and prep equipment for interior Maectite® of demo building list.

Iniki will be working buildings for LBP and ACM at the south region of the industrial area.

0740 - The R2 Taxiway vault work area resumes. Select Vault backfill and General backfill materials will be placed in lifts and compacted. Key items today include but are not limited to; Continue Lock-Out/Tag-Out of inlet/outlet piping valves, positive ventilation for weather heat as needed, non-confined space work due to reduced depth & hazards being removed, secure vault work area and secondary work area barriers. Orange geotextile is added and flanged out at the inspection port to cell intersect for additional layering. Black geogrid mat is cut and positioned on top of the cells, textile and steel plate. Reliefs are made to allow the 8" pvc inspection ports to protrude though.

Iniki LBP crew is beginning work tasks at Midway's large two story power plant Bldg 309. Petrel patrol identifies the paths and work spaces for accessing the northwest wall. The JLG man lift will be in use to ascend to the higher wall sections for applying the Maectite®. The metal sided exterior walls of the power plant begin the process for LBP abatement.

The Iniki ACM group are preparing to remove the transite roof panels from Blgd 340 north of the power plant. As panels are removed they are placed and wrapped with poly, taped and then a second wrap and tape are made. This contains the ACM material in a burrito wrap that is staged for pickup.

At Bldg S228 substation the exterior painting work continues followed up with Bldg 140 radionuclide painting. Previously both buildings received Maectite® spray and today two applications of LeadStop® elastomeric paint to encapsulate the exterior walls of the small buildings.

The Volvo 290 excavators are downsizing the clean concrete slabs, beams and foundation blocks to 3" minus with the MB crusher bucket and UP-40.

0930 – The NWDE flatbed is being set up with totes for water and Maectite® to provide mobile service to treat the interior painted surfaces of the listed upcoming demolition buildings in DU-9.

The R2 Taxiway vault material lift directly above the cell stacks on top of the geogrid is in place and plate compacted. Of note is that the top of the Rainstore^3 stack to the top of the east vault wall is 3.0' as required. The moisture conditioned ¾" minus placement is at the textile wrapped Rainstore^3 cells, with the west area of the vault using General clean coral sand from the R2 stockpile abutment.

1045 - 6" foil tracer utility warning ribbon is placed at 1.5' below top of concrete vault wall, 1.5' above the top of the Rainstore^3 cells in the 40" wide x 19.5' cell area to indicate the footprint of the cells below.
The final layer of black geogrid material is placed to cover the cell area 13' towards the west from the east wall.

1200 – Lunch

1235 – Begin setting the sonotube style forms that will provide the protection and vault lid encasement to enclose the three 8” pvc inspection ports. The 24” diameter x 24” tall cylinders are centered over the ports, elevations marked and pvc pipe cut. The 8” pvc inspection ports top of casing are 3” below top of adjacent east concrete vault wall top. Forms are then set, secured and prepped for being partially filled with sack mix concrete.

80lb bags of Sakcrete are being hand mixed and then placed into the concrete forms. The partial fill of material will stiffen up and provide a base to place the cast steel vault ring into position. Concrete finishes at 1” below top of casing for the pvc pipe. A 1.5” x 15” long sch80 pvc pipe is positioned within the vault base vertically as a rainwater drain to below the bottom of the new vault concrete. The annular space of concrete surrounding the 8” pvc vertical inspection port pipe is 7.5”.
The cast steel MON USA mfg top of lids are set to 6” above the adjacent east vault top of wall. The freshly placed concrete at the ring is 1/8” lower than the steel lid lip to minimize rainwater collection in the non gasketed lid.

The fourty two painted concrete vaults in DU-9 are being marked with flagging by M. Amann, US FWS and G Lewis, Iniki. The current tall grasses at the vaults will soon be cut by Iniki to access for LBP abatement.

1500 – The final lift of concrete is in place for 3 of 3 steel vault lid ring frames. Continue placing Select and General backfill into the vault area. The cell capping of ¾” minus Select is being used from the remaining stockpile at the vault work area to use it up and not haul it back out. The Select backfill fits within the General backfill specifications to be used and is suitable for taking the cell area elevation to grade while reducing the potential of Bonin Petrel burrows directly above the Rainstore^3. Material of Select that will have been used is 3 loads, 45cuyd.

1600 – Iniki progress includes Bldg 340 ACM roof having been removed and bagged. Currently Bldg 3511 is 50% removed and bagged, stockpiled west of the small structure.
At Bldg 339 Power Plant the JLG has traversed the northern, east and beginning the southern wall. Maectite® is continuing to be applied using the low pressure set fan pattern washer.

1630 – At Bldg 228 and Bldg 140 trim and touch up work for the paint application is being worked on.

NWDE has continued through the day downsizing concrete rubble stockpile to the target 3” minus. The multi rowed piles will be estimated this week as operations continue for current volume of sized concrete.

1730 – End of work day.

Photographs:

Photo 01: View northeast- Orange geotextile flanges at inspection port pipes intersecting top of cell.

Photo 02: View east – Black geogrid layer at 3.0' below top of east concrete vault wall.

Photo 03: View east – Foil utility tape above the Rainstore[3] assembly.

Photo 04: Setting the MON brand steel ring base for one of three 8” pvc vertical inspection ports.

Photo 05: View east – Second lift of concrete. Second geogrid layer at 1.5' below vault wall reference.

Photo 06: View southeast – Bldg 340 transite roof panels removed and staged.

Photo 07: View northeast – Bldg 309 Power Plant. Iniki Maectite® work on the south wall.

Photo 08: View south – Bldg 140 radionuclide LeadStop® application progress.

Photo 09: View southeast (top) west (bottom) – Concrete processing progress at the Seaplane apron.

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Tuesday, September 20, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 16 mph, Temperature ~84F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Dale Christianson	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Luis Martinez	NWDE Laborer	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10
Gary Lewis	Iniki Supervisor	10
Evan Esposito	Iniki Laborer	10
Lauren Lewis	Iniki Laborer	10
Kawena Kaawa	Iniki Laborer	10
Amber Lewis	Iniki Laborer	10
Philip Kneubuhl	Iniki Laborer	10
Keala Lewis	Iniki Laborer	10
Larry Vaa	Iniki Laborer	10
Ulrich Naki	Iniki Laborer	10
Delson Smith	Iniki Laborer	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	- miles #3139
Flatbed Truck	Ford F450	- miles #0576
Container Truck	Peterbuilt	
Skid Steer	Bobcat S185	- hrs #BC7030
Tracked Skid Steer	Bobcat T750	- hrs #BC2200
Mini-Excavator	CAT 308	- hrs #EX1928
Excavator	Volvo EC290BLC	- hrs #EX1006
Excavator	Volvo EC290BLC	- hrs #EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	188 gallons / 101 gallons	09.18.16 / 09.20.16
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will be wrapping up the R2 Taxiway vault Bldg 5303 grade work today.
Concrete processing at the Seaplane apron will continue through the day.
Iniki will be working at Bldg 309 power plant, ACM sites and continuing paint work.

0740 – Iniki is applying Maectite® to the painted concrete posts under the east wall second floor fenced in area. Following this, they move to using the JLG manlift at the southeast corner of Bldg 309 power plant to apply Maectite® to the exterior vertical wall surfaces.

0900 - The R2 Taxiway vault work area is soon to be completed for backfill work. Select Vault backfill and General backfill materials will be placed in lifts and compacted. Continue Lock-Out/Tag-Out of inlet/outlet piping valves. The initial rough grade is completed for the time being until demo work occurs north of the former vault. Picking up the work task items, materials and supplies and move these back to the NAF. DBSI will be arranged to move the 20' shipping container back to the NAF as well. The taxiway inlet valve screen has yet to be modified with the new hot dipped galvanized expanded metal. This alteration will be fabricated soon.

0930 – Iniki ACM crew is stacking up double wrapped and sealed roof tile sections from Bldg 5360 near the existing water tower.

NWDE is using the F450 flatbed to mobilize to the listed demolition buildings to apply Maectite® to the interior painted surfaces of each building. The powered sprayer is fed from the mixed reagent tote and applied to the vertical walls, overhead ceiling and painted floor surfaces specific to details for each building.

1100 – Weekly conference call with Mainland and Hawaii project offices. See NWDE Midway Meeting Agenda for specific detail.

1200 – Lunch

1350 – Interior of Bldg 502 AT&T is being Maectite® treated.

1415 – NWDE is still processing concrete at the Seaplane apron with the MB crusher bucket. The second 290 Volvo with UP-40 has been changed over to a bucket and is traveling to the harbor pier. The first buildings to demo will be S1123 and S1119. The Maectite® treated and ACM abated structure will be removed and hauled to the R2, Cell 4. The foundation, slab and soil work tasks are on hold pending the arrival of the scheduled third party observation person tentatively September 27th. By days end the first buildings knocked down and hauled to the R2 Cell 4 are Bldg S1123, Bldg S1119 and Bldg 180. Hydrant water is in use for dust management as the CMU walls are loaded into the Volvo A-30 trucks. Steel roof channels are sorted out to be moved to the known recycling steel pile at the Boneyard lay down area.

1500 – Iniki is beginning the tasks work on concrete manhole covers and short stick up vault lids. The 42 work areas have been identified. The crew is cutting the tall green grass immediately next to the concrete, applying Maectite® and prep for LeadStop® paint. By days end they have cut and Maectite® applied at thirteen sites with task designation numbers; 13,15,16,20,21,22,23,24,29,30,31,32,42.

Iniki abatement today for ACM roofing tile panels included Bldg 5267 and Bldg 5360. The materials have been bagged and are being moved to the NAF staging area and into the ACM shipping container for future appropriate disposal off island.

1700 – The NWDE spraying work inside of demo listed buildings today; 170, 180, 269, 300, 340, S464, 502, S1119, S1123, 2127, 2411, 3509, 3511, 3514, 4201, 4214, 5267, 5342, 5360, 5361. Tomorrow will continue to complete the interior spray that compliments the exterior Maectite® application completed September 30, 2014 to October 3, 2014, table 4.

Bldg S228 substation and Bldg 140 radionuclide are nearly complete for painting tasks. The area is being picked up, the poly ground cover collected and final pick up of the painting supplies and materials.

1730 – End of work day.

Photographs:

Photo 01: View southwest- Bldg 309 Power Plant overview of Maectite® treated areas.

Photo 02: Bldg 502 – Maectite® being applied to the interior of the building surfaces.

Photo 03: View east – Demolition of Bldg S1119.

Photo 04: View east – R2 Taxiway vault Rainstore[3] installation initial rough grade.

Photo 05: View west – R2 Taxiway vault Rainstore^3 installation initial rough grade.

Photo 06: View north – R2 Taxiway vault Rainstore^3 installation initial rough grade.

Photo 07: View northwest – Bldg 180 demo overview with dust abatement.

Photo 08: View southeast – Bldg 309 Power Plant Maectite® application progress with JLG manlift.

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Wednesday, September 21, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 9 mph, Temperature ~86F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Dale Christianson	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Luis Martinez	NWDE Laborer	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10
Gary Lewis	Iniki Supervisor	10
Evan Esposito	Iniki Laborer	10
Lauren Lewis	Iniki Laborer	10
Kawena Kaawa	Iniki Laborer	10
Amber Lewis	Iniki Laborer	10
Philip Kneubuhl	Iniki Laborer	10
Keala Lewis	Iniki Laborer	10
Larry Vaa	Iniki Laborer	10
Ulrich Naki	Iniki Laborer	10
Delson Smith	Iniki Laborer	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	- miles #3139
Flatbed Truck	Ford F450	- miles #0576
Container Truck	Peterbuilt	
Skid Steer	Bobcat S185	- hrs #BC7030
Tracked Skid Steer	Bobcat T750	- hrs #BC2200
Mini-Excavator	CAT 308	- hrs #EX1928
Excavator	Volvo EC290BLC	- hrs #EX1006
Excavator	Volvo EC290BLC	- hrs #EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	153 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will be downsizing concrete to 3" minus at the Seaplane apron throughout the day.
Iniki will be working at Bldg 309 power plant and continuing paint preparation work.
Demolition work will continue at the northeast harbor area.
Interior application of Maectite® will resume for buildings listed for demo.

0730 – Iniki is masking Bldg 309 power plant windows facing east. The multi pane glass is located in a restrictive area due a fixed steel awning at each window section. Though the space is limited, each window is papered and taped in preparation for paint work.

The Iniki LBP crew is continuing to prep the concrete manhole covers and pedestals. This includes trimming the tall green grass at each work site and Maectite® application.

0745 – NWDE is at Bldg 180 to bring down the roof and walls. The Maectite® treated concrete and CMU painted debris is destined for the R2, Cell 4.

0820 – Notice of intent to change operations. US FWS historian Lou Ann Speulda-Drews email memo instructing that all but approximately four buildings slated for demo must not proceed without the archeological observer being on island. Up until this morning the understanding has been that all buildings could be removed as long as the slabs and foundations are temporarily left in place and no soil work performed until the cultural observer arrived on September 27th. Additionally, the observation period is advised to be September 27th to October 11th. The details are being addressed with NWDE and US FWS M.Amann regarding the significant unexpected halting of planned work this week and beginning of next week.
The harbor area buildings S1123, S1119, 180 and 170 are allowed to continue demolition tasks that are currently being worked on this morning. Odd enough is that these buildings are allowed to fully proceed with demo and soil work without the observer present.

0940 – NWDE is at Bldg 503 substation treating the interior with Maectite® as they progress through the list of demo selected small structures.

1130 – The concrete slabs and foundations have been removed at former Bldg 170, Bldg 180. The next work is removing concrete foundations at Bldg S1119 and Bldg S1123. The footprint is staked and the prescribed excavation area marked for the 0.5' treatment relative to the individual building height.
The flatbed truck is set up with a tote of provided 52% Maectite® reagent. The calculated volume of soil in each plot is determined for an application rate of .75 gallons per cubic yard per Sevenson the manufacturer.

1200 – Lunch

1400 – At Bldg S1123 the application of Maectite® has progressed and the mini Cat excavator is mixing. The 4' flat edged bucket is used to mix the materials while hydrant water is added by fire hose to evenly distribute the reagent. Plot size is 0.5' depth for the footing footprint and includes an 8' buffer on all four sides for a 25' x 29' x 0.5' treatment area.

Iniki is continuing the prep work on Bldg 309 power plant. The south side red oil tanks and piping are being lead scraped to prep for the upcoming encapsulating paint.
Continue marking out the footprint and treatment plots at Bldg 180 and Bldg 170.

1500 – Bldg S1119 soil plot is being treated and mixed to a uniform consistency with Maectite®. Plot size is 0.5' depth for the footing footprint and includes an 8' buffer on all four sides for a 29' x 31' x 0.5' treatment area.

Bldg 180 plot size is 0.5' depth for the footing footprint and includes a 10' buffer on all four sides for a 42' x 37' x 0.5' treatment area. This will be treated tomorrow.

Bldg 170 plot size is 0.5' depth for the footing footprint and includes a 10' buffer on all four sides for a 34' x 37' x 0.5' treatment area. This will be treated tomorrow.

1500 – Iniki has begun applying LeadStop® elastomeric paint to the east wall of Bldg 309 power plant. The airless sprayer with extensive long length hoses is complimented with the JLG manlift to access the elevated areas. The white encapsulating paint is uniformly applied to the exterior of the walls.

At Bldg S361 pesticide Iniki is working the building to apply Maectite to the exterior walls and underside of the painted concrete soffits. This treatment will be followed by the routine wash and scrape in preparation for LeadStop® paint application.

The NWDE spraying work inside of demo listed buildings today; 9141, 5340, 5301, 5126, 503, 5339, 5341, 5350, 3524.

1730 – End of work day.

Photographs:

Photo 01: View west- Bldg 309 Power Plant overview of paint preparations.

Photo 02: View northwest- Bldg 309 masking of windows under steel fixed awning.

Photo 03: View southeast – Bldg 309 Leadstop® painting begins on the north wall.

Photo 04: View southwest – Former Bldg S1123 Maectite® dosage being mixed and amended with water.

Photo 05: View northeast – Former Bldg S1119 (left) and Bldg S1123 (back right) treated and hauled out.

Photo 06: View north – Former Bldg 180 prior to treatment and excavation.

Photo 07: View north – Former Bldg 170 prior to treatment and excavation.

Photo 08: View northwest – Bldg S361 pesticide Maectite application to exterior surfaces.

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Thursday, September 22, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 9 mph, Temperature ~85F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Dale Christianson	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Luis Martinez	NWDE Laborer	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10
Gary Lewis	Iniki Supervisor	10
Evan Esposito	Iniki Laborer	10
Lauren Lewis	Iniki Laborer	10
Kawena Kaawa	Iniki Laborer	10
Amber Lewis	Iniki Laborer	10
Philip Kneubuhl	Iniki Laborer	10
Keala Lewis	Iniki Laborer	10
Larry Vaa	Iniki Laborer	10
Ulrich Naki	Iniki Laborer	10
Delson Smith	Iniki Laborer	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	- miles #3139
Flatbed Truck	Ford F450	- miles #0576
Container Truck	Peterbuilt	
Skid Steer	Bobcat S185	- hrs #BC7030
Tracked Skid Steer	Bobcat T750	- hrs #BC2200
Mini-Excavator	CAT 308	- hrs #EX1928
Excavator	Volvo EC290BLC	- hrs #EX1006
Excavator	Volvo EC290BLC	- hrs #EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	98 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will be downsizing concrete to 3" minus at the Seaplane apron throughout the day.
Iniki will be working at Bldg 309 power plant and continuing paint preparation work.
Soil treatment work will continue at the northeast harbor area.

0730 – The Iniki LBP crew is continuing to prep the concrete manhole covers and pedestals. This includes trimming the tall green grass at each work site and Maectite® application.

Bldg 309 power plant is still going forward with paint prep and painting work. The upper windows are being masked while in lower areas the lead scrape is ongoing atop the 6mil poly ground cover.

At the Seaplane apron NWDE continues using the Volvo 290 with MB 120.4 crusher bucket to downsize the concrete rubble to a 3" minus size. The stockpile being process is still the UP-40 processed material that is 12" to 30" in size.

For the recent demo and soil work tasks at Bldg S1123, Bldg S1119, Bldg 180 and Bldg 170 the excavation target depth is discussed relative to field conditions and plot sizes. After reviewing M.Amann US FWS has chosen to select a 1.0' treatment depth and excavate to 1.0' for the four buildings. This is in addition to the previous target scrape of 0.5' after the demolition work. A one-foot depth for the small buildings is expected to achieve satisfactory results for soil treatment, followed up with confirmation sampling. Maectite® processed soils will be hauled to the R2 for placement.

0800 – NWDE is at Bldg 180 for plot treatment at the new target depth of 1.0' bgs. Maectite® will be applied from a new tote at the factory delivered 52% at a rate of .75 gallons per cubic yard of calculated soil volume. The materials will be amended with hydrant water applied with a fire hose spray nozzle. A 4' flat edged bucket in the loose sandy soils folds and mixes the liquids into a uniform consistency.

0930 –R2 Cell 4, the harbor area treated soil and treated building debris is being placed at the southern area of the cell in the prior hydraulic relief trench. Loads are dumped so that the Bobcat tracked skid steer can push rough graded lifts in when necessary. The trench area shade cloth has been previously removed earlier this month. The cell still retains shade cloth on the flat grade that will remain in place. Due to the aging of the shade cloth and significant heavy growth of grasses pulling up the black cloth was tearing more than being salvaged. US FWS M. Amann agreed to abandoning the cloth in place as long as bridging and voids were not produced by leaving it in position. Since the grade is flat and treated wheel rolled sandy soils, voids will not be an issue.

1000 – At Bldg 309 power plant Iniki is applying LeadStop® white elastomeric paint on the east upper wall section. The windows have been masked. An airless sprayer and even spray fan pattern are in use to provide uniform heavy coverage on both the first and second coat of paint throughout the day.

At Bldg S1123 and Bldg S1119 the tattered abandon electrical services are left standing at the former buildings. NWDE uses a gas powered Stihl hot saw and fiber wheel to cut the conduits and wires at ground surface bottom of excavation. These materials have been instructed by US FWS to be placed at the Boneyard recycling areas for the copper, steel and pvc items.

1150 – Bldg 170 is wrapping up for the Maectite® application being excavated out. Bldg 180 is also complete for the treat and export haul tasks.

1200 – Lunch

1230 – Iniki LBP crew will be beginning the grass trim and prep of the Midway Water Plant area. The R3 S-3126E 500,000-gallon water USTs top 1.7' tall short walls will be cleared back of vegetation to access the painted vertical surfaces for abatement work. R3 S-3127W will also be trimmed back of vegetation this week in preparation for LBP task work.

NWDE is moving back over to Bldg S1123 and Bldg S1119 to amend the excavation treatment depth as discussed this morning. The current 0.5' bgs plot depth is calculated to treat and excavate the additional half foot making a total excavated depth in both S1123 and S1119 to 1.0' bgs.

1500 – NWDE has moved towards the Tank Farm area northeast of Bldg 2127 POL office, (219). Here a concrete slab is slated by US FWS to be available for removal. This clean concrete slab will be removed and hauled with the two Volvo A-30 off road trucks to the Seaplane apron concrete pile. The two section concrete slab sizes are: 52' x 201' x 7" estimated average thickness, 27' x 117' x 7" estimated average thickness. This rebar reinforced concrete will provide ~292 cuyds of concrete for the crusher bucket to process into 3" minus.
The day finishes out with the thumb toothed bucket 290 excavator loading trucks with 15% of the slab.

1650 – Iniki has two paint applications on the north and higher east walls. Touch up work is beginning for creating a sufficient edge coverage and removal of mask over glass windows. Also today Bldg 309 west heat exchanger motor pedestals have been worked over for Maectite and lead scrape within the cyclone fenced section below the abandon cooling fans.

1730 – End of work day.

Photographs:

Photo 01: View west- Bldg 309 Power Plant overview of LeadStop® application progress.

Photo 02: View southwest- Bldg 309 de-masking of windows and touch up work.

Photo 03: View southeast – Bldg 309 fan base pedestals being lead scraped for paint prep.

Photo 04: View south – Former Bldg 180 soil treatment and excavation plot completed.

Photo 05: View southwest – Former Bldg 170 soil treatment and excavation plot completed.

Photo 06: View west – R2 Cell 4 placement of harbor area demolition and treated soil.

Photo 07: View northeast – Trim prep of foliage at R3 S-3126E tank upper wall section.

Photo 08: View southeast – Loading up clean concrete slab for processing at the Seaplane apron.

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Monday, September 26, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 13 mph, Temperature ~85F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Dale Christianson	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Luis Martinez	NWDE Laborer	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10
Gary Lewis	Iniki Supervisor	10
Evan Esposito	Iniki Laborer	10
Lauren Lewis	Iniki Laborer	10
Kawena Kaawa	Iniki Laborer	10
Amber Lewis	Iniki Laborer	10
Philip Kneubuhl	Iniki Laborer	10
Keala Lewis	Iniki Laborer	10
Larry Vaa	Iniki Laborer	10
Ulrich Naki	Iniki Laborer	10
Delson Smith	Iniki Laborer	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	- miles #3139
Flatbed Truck	Ford F450	- miles #0576
Container Truck	Peterbuilt	
Skid Steer	Bobcat S185	- hrs #BC7030
Tracked Skid Steer	Bobcat T750	- hrs #BC2200
Mini-Excavator	CAT 308	- hrs #EX1928
Excavator	Volvo EC290BLC	- hrs #EX1006
Excavator	Volvo EC290BLC	- hrs #EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	55 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will be downsizing concrete to 3" minus at the Seaplane apron throughout the day.
Resume hauling clean coral sand from the cargo pier for backfill work and stockpiling.
Iniki will be working at Bldg 309 power plant and continuing painting and touch up.
ACM abatement will be conducted west of the NAF Hanger.

0730 – NWDE is setting up to have the two Volvo A30 haul trucks transport clean coral sand from the borrow sources to both the harbor plot backfill areas and stockpile the R2 abutment.
A biological monitor is onsite to visually spot for sea life during equipment operation. Birds, Green Sea Turtles and Hawaiian Monk Seals are the primary animals of concern. The monitor will advise if animals are present and halt work as required.
Initially at the R2 one truck is dropping sand at the NE and then SE external wall areas of the R2 cells. The alternate off road truck is solely moving clean backfill into Bldg S1123 and S1119. As the sand is brought in the tracked Bobcat and Mini are used accordingly to fill and level off the grade higher than the surrounding surface to account for settling.

Iniki is applying paint within the Bldg 309 power plant property onto the abandon former transformer CMU enclosure directly east of the plant. The prepped wall interior and exterior are coated with two layers of LeadStop® white paint for sealing the surfaces.

The Iniki ACM crew is at Bldg 5295 for pressing on to finish the burrito rolls of the steel galvanized siding that has the interior tar coating that included an ACM component. The use of 6mil poly is layered twice, each individually sealed before the second layer to enclose the debris. Packages are staged then later removed to be placed in the ACM disposal shipping container at the NAF staging yard. Materials are slated for ultimate disposal off island.

0915 – At the Seaplane apron crushing continues for the slabs, beams and piers stockpiled. Work for stockpiling is conducted on top of the Seaplane apron's concrete slab. The slab is blocked out in 20' x 20' sections to make up the large area. Measure out and mark a rectangular path around the current stockpile relative to the final R2 cover square footage. A 310' x 380' footprint is marked with white buckets and pink ribbon flagging to mimic the final R2 including the toe abutment.

1130 – At the Harbor area the four demolished buildings have been receiving clean coral sand backfill. The last to the four are getting close to being to above grade as required. To date the sites demoed, treated and backfilled are Bldg S1123, S1119, 180 and 170. Re-stake building corners after backfill is complete.

1200 – Lunch

1300 – Iniki is at Bldg 5126 former sewage pump station near the northeast region of the fire department building. The three interior gaskets noted for ACM in the steel plumbing is being removed to be bagged. Preparations are being made to access the flat roof to remove the gravel tar roof noted to have an ACM material included in past laboratory testing. Materials will be double bagged and sealed in poly bags, labeled and staged for waste disposal.

NWDE continues moving loads of sand from the cargo pier to the R2 for loose stockpile placement in the east and west abutment areas.

1430 – At Bldg 309 power plant the painting activities are in touch up and clean up mode for the entire building. Small areas are being picked up including the south side that the secondary containment captured the former red "OIL" tanks. DBSI generator operations advises that the previously marked red "OIL" tanks are no longer in use. These tanks will remain white with the LeadStop® two coat application having been applied.
The power plant building man doors are being hand painted in an accent color typical of the green/white color scheme on Midway. The doors receive multiple coats to adequately top the white elastomeric plaint.

1500 – Preparations for staking out the excavation areas at the fuel farm area continue. The buildings to demolish are marked at the prescribed excavation limits to include a distance equal to the ridge height of the structure outward from all four walls. Target depth will be 1.0ft bgs.
Expected tomorrow is the third party observer to provide archeological guidance on excavation and demolition work at select DU-9 structures. With the inbound charter flight expected mid-morning, followed by the Midway Atoll cultural awareness orientation and site specific HASP the demo activities are not set to resume likely until after noon.

Iniki has the Bldg 5295 ACM burritos moved and staged at the NAF shipping container. Remaining at the site is simply the steel post and beam construction encircling the CAT power generator in the former abandon metal sided shed. This building is ready for Maectite spray and demo.

Import of clean coral sand today into DU-9 totaled 16 loads. Abutment sand moved to the R2 east and west toe areas tally is 32 loads for the day.

1730 – End of work day.

Photographs:

Photo 01: View north- Bldg S1123 plot backfilled with clean coral sand.

Photo 02: View north- Bldg S1119 plot backfilled with clean coral sand.

Photo 03: View north- Bldg 180 plot backfilled with clean coral sand.

Photo 04: View northeast – Bldg 170 plot backfilled progress with clean coral sand.

Photo 05: View west – Bldg 309 power plant former transformer CMU wall with LeadStop® applied.

Photo 06: View southwest – Bldg S361 pesticide lead scrape work progress.

Photo 07: View northeast – Clean concrete stockpile progress at the Seaplane apron.

Photo 08: View northeast – Center 3” minus clean concrete stockpile progress at the Seaplane apron.

Photo 09: View east – Slab 219 (foreground) clean concrete stockpile progress at the Seaplane apron.

Photo 10: View southwest – Clean concrete left to process of original stockpile, excluding slab 219.

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Tuesday, September 27, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 8 mph, Temperature ~83F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Dale Christianson	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Luis Martinez	NWDE Laborer	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10
Gary Lewis	Iniki Supervisor	10
Evan Esposito	Iniki Laborer	10
Lauren Lewis	Iniki Laborer	10
Kawena Kaawa	Iniki Laborer	10
Amber Lewis	Iniki Laborer	10
Philip Kneubuhl	Iniki Laborer	10
Keala Lewis	Iniki Laborer	10
Larry Vaa	Iniki Laborer	10
Ulrich Naki	Iniki Laborer	10
Delson Smith	Iniki Laborer	10
Darin Leibelt	NWDE Project Manager	10
Lonnie Ford	Iniki Project Manager	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Roger Baker	U.S. FWS Historical Archeologist oversight

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	- miles #3139
Flatbed Truck	Ford F450	- miles #0576
Container Truck	Peterbuilt	
Skid Steer	Bobcat S185	- hrs #BC7030
Tracked Skid Steer	Bobcat T750	- hrs #BC2200
Mini-Excavator	CAT 308	- hrs #EX1928
Excavator	Volvo EC290BLC	- hrs #EX1006
Excavator	Volvo EC290BLC	- hrs #EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will be downsizing concrete to 3" minus at the Seaplane apron throughout the day.
Resume hauling clean coral sand from the cargo pier for R2 abutment stockpiling.
Iniki will be working at Bldg S361 pesticide for LBP abatement.
ACM abatement will be conducted west of the NAF Hanger.

0730 – NWDE gears up to continue hauling sand from the Cargo pier borrow source area to the stockpile at the R2 abutment. Full loads of sand are backed and dumped near the exterior concrete R2 walls, to be rough graded later in the season. Currently the sand is simply stockpiled and not being placed in compacted lifts that will occur in later R2 closure tasks.
A biological monitor is onsite to visually spot for sea life during equipment operation. Birds, Green Sea Turtles and Hawaiian Monk Seals are the primary animals of concern. The monitor will advise if animals are present and halt work as required.

0800 – Iniki ACM workers are beginning the tar roofing abatement for Bldg 5126 former sewage pump station. As the material is removed and bagged up for staging the planking for the roof is noted to be wood decking. Further inspection of the wood once fully abated of ACM will determine if the wood is preserved with common use of arsenic as seen in Wolmanized wood decking of the era. Materials encountered will be handled and disposed of appropriately.

0940 – The scheduled inbound charter flight arrives at PMDY. New arrivals include; Lonnie Ford- Iniki, Darin Liebelt - NWDE, Roger Baker - US FWS historical archeological oversight.

0950 - Iniki has been prepping Bldg S361 pesticide for paint. This includes additional drop cloths and mask for exterior windows, sinks and work stations. A portion of this building is still in use for the island's spray program in the successful control of invasive plants. The prepped exterior walls are being coated with two layers of LeadStop® white paint for encapsulating the surfaces.

Iniki is beginning the ACM abatement for the tar roof at Bldg 5339 water treatment at the east R2 wall. This flat roof is concrete with the additional tar paper and tar edging that was previously tested for ACM. As materials are removed and collected in the poly bags, they will be again double bagged, sealed and tagged.

At the Midway Water Plant Bldg 347 and Bldg 3501 are being lead scraped post Maectite® spray of the exterior walls. The routine use of poly drop cloths that have been taped to the foundation serve to collect the scraped loose and flakey materials that will then be collected and bagged as LBP disposal waste.

1100 – Weekly conference call with Mainland and Hawaii project offices. See NWDE Midway Meeting Agenda for specific detail.

1200 - Lunch

1300 – At Bldg S361 the LeadStop® white encapsulating paint is continuing for the second coat on the exterior walls and underside of the concrete eves. The wood shoring that is at the southern eve of the main structure will not be painted since it is bare unpainted wood for the plywood and posts. One item of note is

that the south sided sidewalks below the eves that are painted have been Maectite® treated and will receive LeadStop® paint.

Stake out the prescribed excavation limits for Bldg 2411 Fuel Farm Lab in relation to the building's roof height with a target depth of 1.0' bgs.

Midway Atoll cultural orientation is presented to the new arrivals by US FWS refuge manager Bob Peyton.

1400 – Present the site specific HASP to new arrivals for site work, hazards and actions to mitigate.

1440 – Begin the fifth structure demolition of the 2016 season. This puts back into action the structure demo and soil work that has been delayed since September 21, 2016 by the email memo from US FWS historian Lou Ann Speulda-Drews instructing that all but approximately four buildings slated for demo must not proceed without the archeological observer being on island. With Roger Baker arriving today for the historical oversight, Bldg 2127 POL Office is brought down using the 290 and thumbed bucket. The concrete roof, CMU walls and partially painted slab are loaded and deposited into the R2 Cell 4.

1640 – Bldg 2127 POL Office is down and loaded out. The prescribed scrape / excavation limits have been calculated for applying Maectite® at the rate of .75 gallons per cubic yard. The chemical and soil is amended using hydrant water and with the aid of the 4' straight edged bucket mechanical mixing of the materials are performed.

Clean coral sand today hauled into the abutment at R2 west total 28 loads for the day. Demolition debris removed from Bldg 2127 POL Office is 4 loads that are hauled to the R2 Cell 4. The soil plot treated this afternoon will be hauled out tomorrow when work resumes.

1730 – End of work day.

Photographs:

Photo 01: View northeast- Bldg 347 lead scrape of exterior surfaces.

Photo 02: View southwest- Bldg 5126 sewage pump station ACM roof abatement.

Photo 03: View northeast- Bldg 2127 POL Office structure demo begins.

Photo 04: View west – Bldg 2127 POL Office structure demo progress.

Photo 05: View north – Bldg 2127 POL Office Maectite® application for 1.0' target depth.

Photo 06: View northeast – Bldg S361 pesticide LeadStop® spray progress.

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Wednesday, September 28, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 8 mph, Temperature ~82F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Dale Christianson	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Luis Martinez	NWDE Laborer	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10
Gary Lewis	Iniki Supervisor	10
Evan Esposito	Iniki Laborer	10
Lauren Lewis	Iniki Laborer	10
Kawena Kaawa	Iniki Laborer	10
Amber Lewis	Iniki Laborer	10
Philip Kneubuhl	Iniki Laborer	10
Keala Lewis	Iniki Laborer	10
Larry Vaa	Iniki Laborer	10
Ulrich Naki	Iniki Laborer	10
Delson Smith	Iniki Laborer	10
Darin Leibelt	NWDE Project Manager	10
Lonnie Ford	Iniki Project Manager	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Roger Baker	U.S. FWS Historical Archeologist oversight

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	- miles #3139
Flatbed Truck	Ford F450	- miles #0576
Container Truck	Peterbuilt	
Skid Steer	Bobcat S185	- hrs #BC7030
Tracked Skid Steer	Bobcat T750	- hrs #BC2200
Mini-Excavator	CAT 308	- hrs #EX1928
Excavator	Volvo EC290BLC	- hrs #EX1006
Excavator	Volvo EC290BLC	- hrs #EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	374 gallons / 100 gallons	9-27-16 / 9-28-16
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will be downsizing concrete to 3" minus at the Seaplane apron throughout the day.
DU-9 building demo and soil work will resume.
Iniki will be working at the Midway Water Plant for LBP abatement.
ACM abatement will be conducted south of the NAF taxi way parking.

0730 – NWDE is headed back out to Bldg 2127 POL Office to haul out the treated soil in the plot area for the removed structure. The slab has been removed with the building and the entire plot is being excavated. This treated soil to 1' bgs is hauled in the off road Volvo trucks to the R2, Cell 4. Roger Baker for US FWS archeological oversight is actively observing todays' activities.

0800 – Iniki ACM workers have completed the tar roofing abatement for Bldg 5126 former sewage pump station and Bldg 5339 R2 water treatment. This morning they are moving to Bldg 5340 Substation located south of the NAF overflow aircraft parking area. The roofing material will be pulled, bagged and staged for disposal the same as the last two small buildings completed yesterday.

Discussions with US FWS M.Amann and the NWDE group have determined that the prescribed excavation limits (modified earlier this season from 0.5' to now 1.0'bgs) based on the building height will be complimented with also including excavation limits based on historical sampling data. Specifically this is relative to 1.0'+ depths of sampling that need treatment. Since this year's excavations are required by the Refuge Manager to be backfilled by the end of the work season, deeper plots at demo sites will be included, treated and hauled to the R2. Confirmation sampling will occur prior to backfilling with clean coral sand for the entire removed plot material.

0900 – At the Midway Water Plant, the R3 500,000 gallon storage cisterns are being final prepped for applying paint to the short ~1.7' vertical exterior walls. The standard use of LeadStop® will be applied to the Maectite® treated and scraped and rinsed surface.
The Water Plant Bldg 347 and Bldg 3501 are being masked for upcoming LeadStop® application. Noteworthy is that Bldg 5004 that is actually a modern shipping container and houses the VFD pump system for potable water is not to be included with prep and paint work since it is in satisfactory condition. This Bldg 5004 container is suspected to have replaced a prior older building that would have been located at the same foundation. Regardless of it's history, the VFD pump system shipping container exterior is in good condition.

1030 – NWDE has moved to Bldg 300 Fuel Farm Xfmr Bank. Currently the roof and walls are down and slab removed. The non-painted slab is substantial in thickness and the sections are lifted, washed and hauled to the Seaplane apron to be processed into 3" minus.
The soil plot has been calculated and Maectite is applied evenly, amended with water while mixing with the mini excavator bucket to a depth of 1.0'.
Begin layout of the sampling excavation limits addition to Bldg 2127.

The CAT mini excavator is being worked on for a small hydraulic leak.

1200 – Lunch

1300 – Iniki has been pushing forward to prep the Water Plant items for paint. The airless sprayer is running and paint coating 1 of 2 is about to begin.

1300 – On island meeting with M.Amann, Iniki G.Lewis & L.Ford, NWDE D.Leibelt and S.Wakefield. Discuss progress, field conditions and goals for DU-9 in the 2016 season.

1400 – NWDE goes to the Midway industrial area for inspection of prior years' LBP abatement and the integrity of the LeadStop® condition applied in 2012. The white paint is adequately adhered and in satisfactory condition. 100% of the area was not inspected for all the sites buildings, but the point being that the LeadStop® is currently holding up well.

1500 – To Bldg S469 Fuel Oil Pumphouse in the Tank Farm to lay out both the prescribed 1.0' depth x height of structure excavation limits. Added in as well is the historical sampling data excavation limits that expand the plot size to be treated and hauled once the structure is taken down. Corners are staked with T posts along with mid pin flagging and wood for keeping alignment of the plots and foundation once removed.

Iniki is completing the second coat on the Water Plant for LeadStop®. Some areas are beginning to be de-masked as windows are uncovered for the currently in use water plant.
The Iniki ACM crew is mobilizing to Bldg 200 for the upcoming transite roof panels removal and Bldg 3506 Liquid Oxygen storage. Tomorrow they will continue abatement for the small structures.

At the Seaplane apron crushing concrete rubble and clearing rebar has been ongoing with the MB crusher bucket and Bobcat skidsteer. This afternoon the crusher was stopped and changed out for a bucket to assist with DU-9 demolition work. For the time being downsizing concrete work is on hold.

1715 – Picking up for the day to mobilize to the NAF staging area and end the day with the typical safety meeting wind up.
Treated soils from DU-9 today total 14 loads to R2 Cell 4 and one load of clean concrete for downsizing to the Seaplane apron.

1730 – End of work day.

Photographs:

Photo 01: View northeast- Bldg 347 LeadStop® application progress.

Photo 02: View north- Bldg S-3127 E R3 vertical walls prepped for LeadStop®.

Photo 03: View north- Bldg 3501 Fresh Water pump station exterior pre paint preparations.

Photo 04: View southwest – Bldg 300 Fuel Farm Xfmr Station structure demo progress.

Photo 05: View south – Bldg 2411 Fuel Farm Lab structure and slab removal.

Photo 06: View southeast – Bldg S464 Fuel Oil Pump house slated for demo with excavation layouts.

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Thursday, September 29, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 9 mph, Temperature ~82F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Dale Christianson	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Luis Martinez	NWDE Laborer	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10
Gary Lewis	Iniki Supervisor	10
Evan Esposito	Iniki Laborer	10
Lauren Lewis	Iniki Laborer	10
Kawena Kaawa	Iniki Laborer	10
Amber Lewis	Iniki Laborer	10
Philip Kneubuhl	Iniki Laborer	10
Keala Lewis	Iniki Laborer	10
Larry Vaa	Iniki Laborer	10
Ulrich Naki	Iniki Laborer	10
Delson Smith	Iniki Laborer	10
Darin Leibelt	NWDE Project Manager	10
Lonnie Ford	Iniki Project Manager	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Roger Baker	U.S. FWS Historical Archeologist oversight

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	- miles #3139
Flatbed Truck	Ford F450	- miles #0576
Container Truck	Peterbuilt	
Skid Steer	Bobcat S185	- hrs #BC7030
Tracked Skid Steer	Bobcat T750	- hrs #BC2200
Mini-Excavator	CAT 308	- hrs #EX1928
Excavator	Volvo EC290BLC	- hrs #EX1006
Excavator	Volvo EC290BLC	- hrs #EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will be at the Tank Farm area DU-9 building demo and soil work.
Iniki will be working at the Midway Water Plant for LBP abatement.
ACM abatement tasks are continuing on the last few smaller Iniki listed buildings.

0730 – NWDE sets up to begin the actual demolition of Bldg S464. After the last rounds of verification and checks the Volvo 290 with thumb starts up high at the southeast side to remove a wall portion and then safety bring down the upper steel I-beam roof structure and galvanized steel roofing panels. As steel is processed the short stockpile is loaded and hauled to the Boneyard recycling area. Concrete and CMU walls are worked inwards to rest in a pile on the painted slab. This demo material will be loaded up and hauled to the R2 Cell 4 today.
Roger Baker for US FWS archeological oversight is actively observing todays' activities.

0800 – Bldg 4201 steel piping for former abandon JP-5 conveyance needs a final disconnection at the building's exterior wall. NWDE is unbolting the flange of the piping to be able to pull the walls down and leave the silver steel piping in place. Pipes stubbed up out of the ground will be left as is.

Iniki is working to finish out Bldg 200 transite panel roofing removal of the small substation. Additionally, today Bldg 3506 Liquid Oxygen storage roof will be removed since it too is on the ACM abate list. Materials for disposal continue to be prepped on 6mil poly, double wrapped and sealed and tagged for disposal. Items are destined for the NAF staging yard and placed into the ACM waste shipping containers.

1130 – Bldg S464 has been sorted, loaded out and hauled to the R2. Steel and aluminum materials have been separated and placed at the Boneyard recycle pile. The painted slab remains for the time being as soil treatment will begin on the southeast side working towards the northeast. Slab will be pulled up as soil work progresses across the areas footprint.

Bldg 4201 demo begins with the southern wall and roof broke into with the Volvo 290. The concrete structure is breaking up readily and looks to have #6 rebar in the cast walls. The four walls are worked inward to be contained onto the painted concrete slab foundation for processing and load out.

Apply Maectite® to the small 2' depth excavation area south of Bldg 2127 POL Office. This is outside of the prescribed excavation limits but targeted from the sampling plan data.

1200 - Lunch

1300 – Maectite® has been applied and being amended with hydrant water into the first Plot A for Bldg S464. The Volvo 290 with straight edged bucket is in use to mechanically mix the soil and reagent into a uniform consistency. Plots are calculated and divided up to work around the southwest slab area.

An 18" PVC pipe intact and abandon is located running east/west though the sampling extents southwest corner. Top of pipe is approximately 8" bgs. South of this pipe a small piece of Marston Matting is identified by Roger Baker. The item is photo documented and tagged along with a smaller piece of chain located in the excavation area.

In the R2 Cell 3, NWDE is pulling sandbags and removing the tented shade cloth at the southern wall hydraulic relief trench. Treated soil and demo debris will be placed into the cell this season.

1535 – Bldg 4201 processing continues and the steel material of the structure is loaded and hauled to the Boneyard recycle pile. One truck hauls the roof and wall demo debris to R2 Cell 4 while the second truck is moving the treated soil at Bldg S464 to R2 Cell 4.

1600 – A short steel JP-5 piping section above ground is checked for fluids and unbolted to allow continued excavation near Bldg S464. This pipe run was to the former fueling islands to the south. The steel is sent to the recycle pile.

1710 – Bldg S464 soil excavation is approaching 45% completed but excludes that the painted concrete building slab needing removed too. Tomorrow the soil work and slab removal will continue. The afternoon wraps up with the soil being loaded out into the haul trucks. Today's loads have reached 6 steel, 1 aluminum, 9 treated soil and 6 demo concrete from DU-9.
Bldg 4201 has approximately 20% demo debris left to load out, then begin the soil prescriptive excavation treatment along with painted slab removal. This will resume tomorrow.

Iniki painting crew at the Midway Water Treatment Plant are pulling mask off for the Bldg 347 and Bldg 3501. At the R3 S3126W and S3127E water cisterns the short vertical walls are receiving paint work to apply the LeadStop® two coat minimum coverage.

Bldg 3506 Liquid Oxygen Storage is near completion for Iniki removing and bagging up the transite ACM roofing tiles on the small CMU building.

1730 – End of work day.

Photographs:

Photo 01: View northwest- Bldg S464 demolition begins.

Photo 02: View southwest- Bldg S464 progress.

Photo 03: View southwest- Bldg 4201 demo begins.

Photo 04: View north – Bldg 4201 demo progress.

Photo 05: View southeast – Bldg 3501 Water Plant paint application progress.

Photo 06: View north – Bldg S3126W LeadStop® applied to the R3 short vertical wall.

Photo 07: View south – Bldg S464 soil application for Maectite® and excavation.

Photo 08: View north – Bldg S464 18” pvc line near piece of Marston Matting documented by US FWS.

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Friday, September 30, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 7 mph, Temperature ~84F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Dale Christianson	NWDE Operator	0
Ruth Inmon	NWDE Operator	10
Luis Martinez	NWDE Laborer	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10
Gary Lewis	Iniki Supervisor	10
Evan Esposito	Iniki Laborer	10
Lauren Lewis	Iniki Laborer	10
Kawena Kaawa	Iniki Laborer	10
Amber Lewis	Iniki Laborer	10
Philip Kneubuhl	Iniki Laborer	10
Keala Lewis	Iniki Laborer	10
Larry Vaa	Iniki Laborer	10
Ulrich Naki	Iniki Laborer	10
Delson Smith	Iniki Laborer	10
Darin Leibelt	NWDE Project Manager	0
Lonnie Ford	Iniki Project Manager	0

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Roger Baker	U.S. FWS Historical Archeologist oversight

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	- miles #3139
Flatbed Truck	Ford F450	- miles #0576
Container Truck	Peterbuilt	
Skid Steer	Bobcat S185	- hrs #BC7030
Tracked Skid Steer	Bobcat T750	- hrs #BC2200
Mini-Excavator	CAT 308	- hrs #EX1928
Excavator	Volvo EC290BLC	- hrs #EX1006
Excavator	Volvo EC290BLC	- hrs #EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will be at the Tank Farm area DU-9 building demo and soil work.
Iniki will be working at the Midway Water Plant for LBP abatement.
LBP abatement tasks are underway for the various manway vaults across the isand.
D.Leibelt, D.Christianson NWDE and L.Ford Iniki depart this morning by charter flight back to Honolulu.

0800 – NWDE soil excavation is continuing at Bldg S464 east corner to load out, hauling to the R2. Bldg 4201 demo of the remaining concrete walls is also being loaded and hauled to the R2. The 3.4' deep pipe surround containment at the northeast side of Bldg 4201 is being pick out for a small amount of concrete that fell in when the walls were being brought down. This containment was a grated basin below the steel fuel pipes and filter basket and will be left in place. Backfilled of the shallow basin with clean sand will be done when adjacent areas are filled in.

Maectite® is being applied to the north corner plot of Bldg S464.

Iniki is doing touch up work at the Midway Water Plant buildings. This includes Bldg 347, 3501, S3126W and S3127E.

0930 – Bldg 9149 Power Plant Shed layout for prescribed excavation limits on the four sides of the CMU base and steel paneled building. Once the tank farm areas are finished this building will be next.
R.Baker, US FWS identifies a small buried oil measuring pitcher and logs it accordingly.

1050 – Bldg S464 soil excavation is approximately 70% complete. The next upcoming tasks is pulling the slab as work moves from east to west. The Maectite® treated painted floor slab is determined to be rebar reinforced, appx 8" thick and significantly stronger cement mix than previously encountered slabs. The load bearing perimeter footing is in excess 4.5' deep from the sill. Shortly after lunch with M.Amann, US FWS it is determined that the unpainted footing can remain and the inner painted slab removed.
NWDE uses a smaller wrecking ball to begin a working edge of the substantial concrete slab removal and allow the toothed bucket and thumb to get under the floor slab.

Bldg 4201 JP-5 Pumping Station bulk concrete material has been loaded up and moved to the R2 Cell 4.

1200 - Lunch

1240 – Soil treatment application is beginning at Bldg 4201 for the prescriptive area on all four sides of the building. The target application rate of .75 gallons per cubic yard of Maectite® is pumped on using the pneumatic double diaphragm pump into the measured area plot. Hydrant water is added while mechanically mixing to a uniform consistency with the 290 excavator and straight edged bucket. Plots are worked from north to south, leaving access for taking out the treated painted slab. This building will also have the unpainted perimeter footing left in place with only the floor slab removed.

1345 – Bldg 200 Switch Station layout for prescribed excavation limits on the four sides of the CMU shed building. This building has had the interior electrical equipment removed recently by DBSI.

Iniki is abating the LBP from the building stenciled 360. This is south of Water Plant Bldg 347 and west of Bldg 349 Cold Storage. Based on the May 1969 Navy map ES-A553 (Rev 1) this currently marked building 360 is actually Naval referenced Bldg 350. Regardless of the ID numbering issue, the exterior paint has not been abated in past years. This building is the electrical service transformer switches to the Cold Storage refrigeration and electrically powered up indicated by the transformer buzz. The Cold Storage Bldg 349 has since been logistically replaced by the US FWS modular solar powered refrigeration units.

Iniki is prepping the small Ava Maria structure for LeadStop® paint.

1600 – Soil treatment and excavation are ongoing at Bldg S464. With the slab removed the area is progressed across to begin the exit from the work area and continue cleaning up. Tomorrow both Bldg S464 and Bldg 4201 will continue being worked across and out of. Today's load count includes 5 demo debris, 10 treated soil and 2 steel loads.

1730 – End of work day.

Photographs:

Photo 01: View southwest- Bldg S464 slab opening up with wrecking ball drop.

Photo 02: View southwest- Bldg S464 Maectite® application within calculated plot.

Photo 03: View south- Bldg 4201 soil treatment and excavation progress.

Photo 04: View north – Bldg S464 (front) Bldg 4201 (back) demo progress overview.

Photo 05: View southeast – Bldg 360 substation (stencil on wall) shown as Bldg 350 on Naval map.

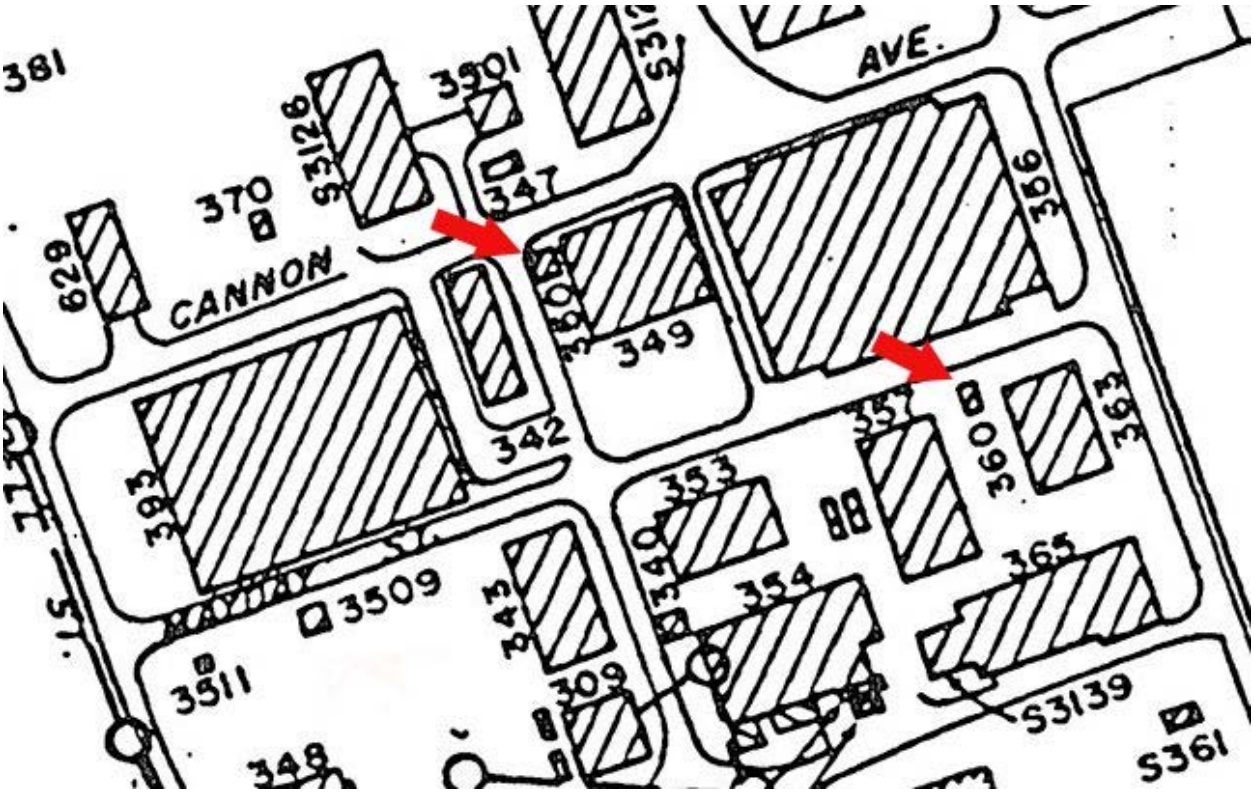


Photo 06: Red arrows at Bldg 360 and Bldg 350 on Naval map.

Photo 07: View south- Bldg 4201 demo progression and floor slab removal.

Photo 08: View southeast – Bldg 9149 Power Plant Shed prescriptive excavation limits flagging layout.

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Saturday, October 1, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 8 mph, Temperature ~84F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Luis Martinez	NWDE Laborer	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10
Gary Lewis	Iniki Supervisor	10
Evan Esposito	Iniki Laborer	10
Lauren Lewis	Iniki Laborer	10
Kawena Kaawa	Iniki Laborer	10
Amber Lewis	Iniki Laborer	10
Philip Kneubuhl	Iniki Laborer	10
Keala Lewis	Iniki Laborer	10
Larry Vaa	Iniki Laborer	10
Ulrich Naki	Iniki Laborer	10
Delson Smith	Iniki Laborer	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Roger Baker	U.S. FWS Historical Archeologist oversight

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	- miles #3139
Flatbed Truck	Ford F450	- miles #0576
Container Truck	Peterbuilt	
Skid Steer	Bobcat S185	- hrs #BC7030
Tracked Skid Steer	Bobcat T750	- hrs #BC2200
Mini-Excavator	CAT 308	- hrs #EX1928
Excavator	Volvo EC290BLC	- hrs #EX1006
Excavator	Volvo EC290BLC	- hrs #EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	296 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will be finishing excavation at the Tank Farm DU-9 area and continuing to the next demo buildings. Iniki will be working to paint small structures and manway vaults.

0730 – Bldg S464 Fuel Oil Pump House and Bldg 4201 JP-5 Pumping Station are nearing completion for the soil treatment and excavation. The last cleaning up of foundation and plots occurs at the two sites while NWDE begins moving out from the Tank Farm area later this morning.

Iniki is at Ave Maria for today's painting task. LeadStop® elastomeric white paint will be applied to the prepared surfaces. Areas have been masked as needed for protection of the sculpture prior to paint.
Painting work for the multiple manways on island continues today. The previously abated surfaces are being rolled with two coats of white LeadStop®.

1000 – At the Tank Farm the last shallow plot scrape has Maectite applied and mixed with supplemental hydrant water. The treated soil is hauled to the R3 Cell 3 for placement. The R2 is staged with soil and demo debris that later will be rough graded to uniform lifts free of voids. By noon the Tank Farm area is wrapped up, decon'd and moving equipment out towards the next sites.

Layout prescribed excavation limits of Bldg 9149 Power Plant Shed. NWDE is bringing down the steel upper roofing and CMU wall base. The interior self-supporting overhead rolling chain hoist will be set aside intact. The Volvo 290 with bucket and thumb are still being used for pulling the structures and slabs out.

Inspect Bldg 340 Carpentry Shop Substation for the prescribed excavation limits and sampling data limits. This building will have limited excavation since the northern side was remedied in 2012, including treatment, excavation, lower shade cloth demarcation layer and clean backfill. The east side is adjacent to the Cannon Building, the south an above grade vault and the west adjoining asphalt roadway. Soil volumes will be limited but worked around many fixed points.

1200 - Lunch

Ave Maria has been painted and the masking is being removed and picked up. Touch up work will be next to finish the new coating at the external surfaces.
Iniki is also at Bldg 360 (currently marked 360, Navy map 350) for final prep prior to applying LeadStop®. This building is the power service feed to nearby 349 Cold Storage.

1200 – Lunch

1300 - NWDE mobilizes to Bldg 3511 west of the current Midway Power Plant. The area has in use utilities for hydrant water and fiber optic. These skirt the excavation plot areas and will be handled carefully when wrecking concrete slabs and soil treatment. Begin demo of Bldg 3511 SK1 Warehouse Transformer.

1400 – Maectite® is calculated for applying to the Bldg 3511 soil plot area. Apply and mix the reagent into the soil treatment area at the manufacturer's advised rate of .75 gallons per cubic yard. Amend with hydrant water and mix mechanically with the straight edged excavator bucket.

Begin demo of Bldg 3509 Oxy/Acetylene wooden roofed CMU walled building.

1530 - Maectite® is calculated for applying to the Bldg 3509 soil plot area.
The 290 excavator with bucket and thumb is moving over towards the water tower region for Bldg 5361 Switch Station. The plot layout is set prior to demo. Demo begins and the degrading walls are quickly brought down and being loaded up. Hauling is to the R2 Cell 3.
Layout Bldg 5360 Substation prescribed excavation limits.

1620 – Bldg 3509 Oxy/Acetylene storage is mixed and carefully excavated out. At the northern edge of the plot area the pvc conduit for the fiber optic pull is identified while digging. The foil tracer tape gives early indication so no damage was encountered. The pvc top of pipe is shallow at only 1.3' bgs.
Bldg 3509 also is site to a buried object. The large hook ends up being a 5 sheave block for a crane. R.Baker Historical Archeologist oversight tags and documents the item.

The afternoon rounds out with demo and soil excavation work continuing at the respective DU-9 sites.
Inik has maintained steady progress to paint more manway vaults.

Today's load count includes 10 demo debris, 12 treated soil, 3 steel loads and one clean concrete trip.

1730 – End of work day.

Photographs:

Photo 01: View south- Ava Maria abated, prepped and masked.

Photo 02: View south- Ave Maria painted with LeadStop® paint.

Photo 03: View west- Bldg 4201 soil treatment nearing completion.

Photo 04: View northwest – Bldg 3511 ready for demolition.

Photo 05: Bldg 4201 perimeter foundation. Cut long rebar imbeds as needed prior to future backfill.

Photo 06: View southeast –Bldg 3509 demolition begins.

Photo 07: View northeast- Bldg 3509 winch block item. Can is shown for scale.

Photo 08: View southeast – Bldg 9149 Power Plant Shed demolition.

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Monday, October 3, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 5 mph, Temperature ~83F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Luis Martinez	NWDE Laborer	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10
Gary Lewis	Iniki Supervisor	10
Evan Esposito	Iniki Laborer	10
Lauren Lewis	Iniki Laborer	10
Kawena Kaawa	Iniki Laborer	10
Amber Lewis	Iniki Laborer	10
Philip Kneubuhl	Iniki Laborer	10
Keala Lewis	Iniki Laborer	10
Larry Vaa	Iniki Laborer	10
Ulrich Naki	Iniki Laborer	10
Delson Smith	Iniki Laborer	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Roger Baker	U.S. FWS Historical Archeologist oversight

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	88419.5 miles #3139
Flatbed Truck	Ford F450	105627.7 miles #0576
Container Truck	Peterbuilt	
Skid Steer	Bobcat S185	746.6 hrs #BC7030
Tracked Skid Steer	Bobcat T750	695.0 hrs #BC2200
Mini-Excavator	CAT 308	1123.0 hrs #EX1928
Excavator	Volvo EC290BLC	3577.6 hrs #EX1006
Excavator	Volvo EC290BLC	5130.0 hrs #EX1108
Off road Dump Truck	Volvo A30D	3400 hrs/ 20338.4 miles #4148
Off road Dump Truck	Volvo A30D	3378 hrs/ 18160.2 miles #4245
DBSI Excavator rental	Cat 325C	

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will be on DU-9 area soil treatment and demolition of listed buildings.
Iniki will be working to paint small structures and manway vaults.

0730 – NWDE is moving out of Bldg 3509 Oxygen/Acetylene storage with the soil excavation Volvo and headed towards the water tower area for treating soil at Bldg 5361 Switch Station Electrical Feeder 9. The plot at Bldg 5361 has been measured and calculated for the .75 gallons of Maectite® per cubic yard of soil application. The flat edged bucket is used for mixing the soil, reagent and hydrant water to a uniform consistency. Materials that will be excavated are to be hauled to the R2, Cell 3.

0800 – Iniki has a split crew today. The vault pedestals are continuing to be painted with LeadStop® white elastomeric paint on the prepared surfaces of concrete and steel.
The small R1 area Bldg 8106 Fresh Water substation is underway for the two coats of LeadStop® paint to the treated and scraped exterior walls.
A small crew also has been servicing the JLG manlift and cleaning up the NAF staging area for this season's painting supplies and equipment.

Layout Bldg 502 AT&T prescribed excavation limits. Call for morning utility locate to identify the roadway power and water lines that are within the work zone but outside of the immediate building or excavation area.
The fire hydrants near work area Bldg 5360 substation, Bldg 502 AT&T and Bldg 5267 Sewage Pump transformer are not functioning and are off. Discussions with DBSI indicate that these loop lines are isolated pending a repair. To keep adequate water supplied to mitigate demo dust and mix Maectite® NWDE works to round up more 1.5" firehose to run from the water tower area hydrant (42) northwest on Henderson, then turn west at Radford to make it to Bldg 502 AT&T.
DBSI Water Plant advises that when working at Bldg 5267 Sewage Pump that they can charge the nearest former taxiway fire hydrant during work hours.

0930 – Bldg 5360 Substation is being demolished using the Volvo 290 with toothed bucket and thumb. The building is down and approximately 70% loaded out in trucks when the excavator turns off. An electrical component has failed. Troubleshooting and logistics for parts is underway. By lunch it is determined the Volvo 290 will be down waiting on parts no sooner than the Oct 10th charter plane.

1000 - NWDE arranges to rent the on-island Cat 325C excavator with grapple. It is used for part of the day and determined to have a horsepower / hydraulic issue that makes using it not practical for the demolition tasks. By days end the rental excavator is returned.
Bldg 5360 soil is finishing up to be loaded out and hauled to the R2 repository.

1100 – At Bldg 502 AT&T equipment is moved in and the bucket changed out from the flat edge to the toothed bucket and thumb. Fire hose is rolled out for the long run to water the work site.
Bldg 5295 Hanger Aux Generator skeleton steel framework is being brought down with the rental 325C and fixed thumb grapple. Steel is sorted and then loaded into the Volvo A30 haul truck for placement at the Boneyard steel recycling stockpile. DBSI is in the works to remove the CAT generator once the structure is out. The silver JP-5 square tank west of the generator building is loaded and moved to the Boneyard.

1200 – Lunch

1230 - The flat roofed concrete AT&T building begins being torn down. The west wall is first to be taken out to weaken and then bring the roof down. The reinforced concrete beams in the roof prove to retain a great deal of strength. The remedy is to use the small steel wrecking ball to break out the sides of the beam and work to drop the heavy roof section down to ground level.

1400 – Mark out the prescribed excavation limits for Bldg 520 Fire Dept storage. This site will also be including soil sampling excavation limits for depths of 2' to 3' in three areas and a 45' buffer area to 1' deep on the southeast side of the footprint. For now, only the prescribed height based grid is marked which is key to re-establishing the building corners once the walls and slab are removed.

1445 – Bldg 520 Fire Dept storage demo begins. This is the structure that previously had the roof cave in during the off season. The remaining short walls come down quickly and are being loaded and hauled to the R2 Cell 3.
Bldg 502 AT&T continues to be worked over with the wrecking ball and 290 excavator. The pace is consistent but given the mass of the roof structure build the progress is many times slower that prior sites this year. Once the roof has made it to the ground the toothed bucket is processing the materials into smaller rubble and loaded.

1600 – To the Midway Water Plant with US FWS M. Amann for review to further delineate the sampling excavation limits. Make note that north of Bldg 5004 VFD Water Pump connex that the Treatment Plant's bladder tanks are setting on a layer of previously placed shade cloth.
Review Ave Maria location and DU-8 piping run to Fuel Pier for upcoming 2016 sampling.

Iniki has progressed at Bldg 8106 with the painting application and is picking up and doing touch up work. The crew has also moved to Bldg 400 Bravo switch feed to prep the exterior surface for upcoming paint.
Throughout the day more concrete pedestals and manway vaults have continued receiving LeadStop® being rolled on for the minimum two coat coverage.

Today's truck load count includes 8 demo debris, 4 treated soil, 6 steel loads.

1730 – End of work day.

Photographs:

Photo 01: View east- Bldg 5361 Maectite® and hydrant water mixing.

Photo 02: View east- Bldg 5360 demolition and loading of small structure.

Photo 03: View northeast- Bldg 5295 steel framing removal to be placed in steel recycling pile.

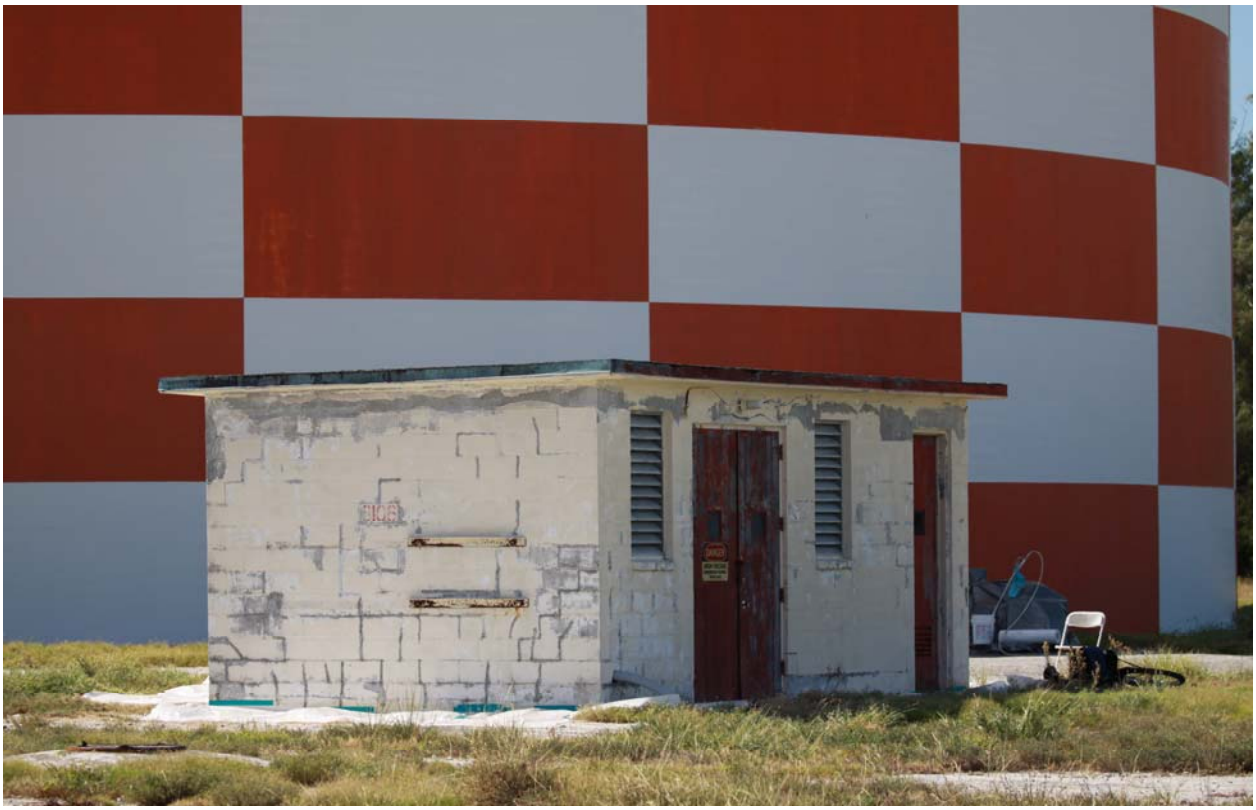


Photo 04: View northwest – Bldg 8106 prepped for LeadStop® elastomeric paint.

Photo 05: View south - Bldg 502 AT&T prior to demolition.

Photo 06: View southeast –Bldg 502 AT&T overview and dust control.

Photo 07: View east –Bldg 502 AT&T wrecking ball action.

Photo 08: View south – Bldg 520 Fire Dept storage overview.

Photo 09: View south – Bldg 5295 loading steel scrap. Former generator ready for DBSI to remove.

Photo 10: View northwest – Bldg 5267 Sewage Pump Transformer prescribed soil plot layout.

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Tuesday, October 4, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 6 mph, Temperature ~83F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Luis Martinez	NWDE Laborer	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10
Gary Lewis	Iniki Supervisor	10
Evan Esposito	Iniki Laborer	10
Lauren Lewis	Iniki Laborer	10
Kawena Kaawa	Iniki Laborer	10
Amber Lewis	Iniki Laborer	10
Philip Kneubuhl	Iniki Laborer	10
Keala Lewis	Iniki Laborer	10
Larry Vaa	Iniki Laborer	10
Ulrich Naki	Iniki Laborer	10
Delson Smith	Iniki Laborer	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Roger Baker	U.S. FWS Historical Archeologist oversight

Equipment:

Description	Model No.	Comments / Serial #	
Pickup Truck	F350 Service Truck	- miles	#3139
Flatbed Truck	Ford F450	- miles	#0576
Container Truck	Peterbuilt		
Skid Steer	Bobcat S185	- hrs	#BC7030
Tracked Skid Steer	Bobcat T750	- hrs	#BC2200
Mini-Excavator	CAT 308	- hrs	#EX1928
Excavator	Volvo EC290BLC	- hrs	#EX1006
Excavator	Volvo EC290BLC	- hrs	#EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will be on DU-9 area soil treatment and demolition of listed buildings.
Iniki will be working to paint small structures and manway vaults.

0730 – NWDE is back on task to continue demo work at Bldg 502 AT&T. With only the one Volvo 290 excavator the concrete rubble is being loaded into two off road trucks and hauled to the R2 Cell 3.

Iniki and NWDE are headed to Bldg 3524 Steam Heat near the former Navy Dining Hall. The overhead piping between the buildings will be cut in preparation for demolishing Bldg 3524. Using Iniki's JLG manlift the piping is accessed and cut.

0830 – Discussion on progress, goals and scheduling with US FWS M.Amann, Iniki G.Lewis, NWDE E.White and S.Wakefield. This morning the historical oversight group for current tasks has asked for a list of the intended order of demolition on the remaining buildings. This is geared towards a tight schedule of archeological oversight availability vs demo progress. Later in the day scheduling modifications are firming up that allow US FWS R.Baker to be available on Midway Atoll until the Oct 25th flight off island.

Iniki is applying LeadStop® paint to the active Bldg 5150 Sewage Pump Station.
At the R1 area, Bldg 8106 Freshwater Substation the Iniki crew is performing touch up for yesterday's painting and also preparing the nearby vault (Bldg 8105) for LeadStop®.
The utility vaults and manways are continuing to be painted at various sites across the island.
In use FAA NavAid building south of the R2 will begin paintwork today for applying LeadStop® elastomeric white paint. The building exterior has been prepared for the upcoming rolled on paint coats. Prior to beginning work on the FAA building this week the full time NavAid person was consulted relative to the painting activities and building operations.

A preliminary inspection of the 2016 season LBP work sites will be conducted today by US FWS M.Amann and Iniki G.Lewis. The dozens of DU-9 sites will be visually reviewed for beginning punch list work as the lead based paint abatement work begins to wrap up this week. Iniki is scheduled to depart next Tuesday, Oct 11th.

1000 – Bldg 502 AT&T processing and loading of concrete roof and walls continues. Maectite® plots and calculated gallons are ready to be applied once the heavy demo debris work nears completion.

1100 – Weekly conference call with Mainland and Hawaii project offices. See NWDE Midway Meeting Agenda for specific detail.

1200 – Lunch

1300 – Bldg 502 AT&T demo debris has been removed to the extent the prescriptive excavation area is available for treatment. Logistically to limit excavator bucket changing tasks on the one 290 Volvo, the machines are moved west to the next small demo site Bldg 5267 Sewage Pump Transformer. Here the thumb and toothed bucket allow demo for walls and slab, then loading into the two A30 off road trucks.

Changing the bucket once to the straight edged muck bucket then allows soil treatment work at Bldg 5267 Sewer, back to Bldg 502 AT&T, then going to Bldg 520 Fire Dept storage and Bldg 5295 Hanger Aux Gen in the upcoming days.

DBSI has removed the former Cat generator from the Bldg 5295 Hanger Aux slab.

1400 – Collection of confirmation sampling for previously excavated plots at Bldg 2127, Bldg 300, Bldg S464. 5-point composites with duplicates are gathered at the bottom of excavation, documented and COC.

Iniki has progressed at Bldg 8106 and the nearby concrete sump (Bldg 8105.)
Bldg 400 Bravo switch feed has LeadStop® spray applied to the small exterior walls and facia.
Throughout the day more concrete pedestals and manway vaults have continued receiving LeadStop® being rolled on for the minimum two coat coverage.

1600 – NWDE has mobilized back to Bldg 502 AT&T to begin plot treatment of the prescribed excavation area around the building. Soil treatment will finish out the afternoon, tomorrow expecting to include the concrete slab removal work task.

Today's truck load count includes 9 demo debris, 4 treated soil, 1.5 steel loads.

1730 – End of work day.

Photographs:

Photo 01: View southeast- Bldg 502 AT&T overview of removed concrete structure at end of day.

Photo 02: View east- Bldg 5267 Sewer Pump Transformer demolition begins.

Photo 03: View east- Active Bldg 5150 Sewage Pump Station LeadStop® applied.

Photo 04: View north – Active FAA building painting progress.

Photo 05: View south - Bldg 400 Bravo Switch with LeadStop® applied.

Photo 06: Various vaults and manways prepped and painted with LeadStop®.

Photo 07: View east –R2 Cell 3 & 4 DU-9 debris and soil placement prior to rough grading.

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Wednesday, October 5, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 6 mph, Temperature ~85F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Luis Martinez	NWDE Laborer	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10
Gary Lewis	Iniki Supervisor	10
Evan Esposito	Iniki Laborer	10
Lauren Lewis	Iniki Laborer	10
Kawena Kaawa	Iniki Laborer	10
Amber Lewis	Iniki Laborer	10
Philip Kneubuhl	Iniki Laborer	10
Keala Lewis	Iniki Laborer	10
Larry Vaa	Iniki Laborer	10
Ulrich Naki	Iniki Laborer	10
Delson Smith	Iniki Laborer	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Roger Baker	U.S. FWS Historical Archeologist oversight

Equipment:

Description	Model No.	Comments / Serial #	
Pickup Truck	F350 Service Truck	- miles	#3139
Flatbed Truck	Ford F450	- miles	#0576
Container Truck	Peterbuilt		
Skid Steer	Bobcat S185	- hrs	#BC7030
Tracked Skid Steer	Bobcat T750	- hrs	#BC2200
Mini-Excavator	CAT 308	- hrs	#EX1928
Excavator	Volvo EC290BLC	- hrs	#EX1006
Excavator	Volvo EC290BLC	- hrs	#EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	243 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will be on DU-9 area soil treatment and demolition of listed buildings.
Iniki will be working to paint small structures, manway vaults and servicing painting equipment.

0730 – NWDE is at Bldg 502 AT&T to continue the soil treatment that was started yesterday. The second and third plots will be applied and mixed with Maectite® to address the prescriptive excavation limits at three of the four sides of the foundation. The fourth side to the west is concrete surface.
The small JP-5 AST at the southeast corner of the excavation limits has been pumped by DBSI of fluids and will be removed by NWDE. The tank will be staged in an appropriate area per DBSI's instruction.

Iniki sets up for the morning to apply a second full coat of LeadStop® to Bldg 400.
At the NAF Staging area Iniki is balancing out shipping containers by moving materials to adjust the gross weights of each unit. Previously weighed (approximate weight) with the on-island Grove crane and noted;
Unit # 380861 @ 23,000 lbs.
Unit # 383704 @ 20,900 lbs.
Unit # 387635 @ 17,200 lbs.
Unit # 382764 @ 18,600 lbs.

0800 – Arrange a utility locate for Bldg 3524 Steam Heat and Bldg 3529 New Midway Laundry. The known 6" HDPE water main is immediately west of the work area and will be protected from demolition tasks and mobilization of equipment. East of Bldg 3529 the CATV cable will also be marked. All other utilities are advised to have been abandon in place and no longer energized or in use.

Iniki pushed forward for additional LeadStop® rolling onto the FAA building south of the R2. Touch up for the R1 Bldg 8106 and vault Bldg 8105 is wrapping up this morning.

0930 – NWDE has been working to remedy the second Volvo 290 excavator electrical problem. By mid-morning the specific failure identified and appropriate repair made to the main power distribution boards. The excavator is now operational. Resume work with the two 290 excavators for tasks.

1015 – Bldg 5360 at the water tower is being completed for the demo loading that has been delayed by the noted Volvo electrical repair. Once the rubble is loaded out with this toothed bucket excavator, it will move to the next site. Following up will be the next 290 excavator and flat edged muck bucket to mix and load out treated soils.
Layout work area at Bldg 3524 Steam Heat and Bldg 3529 New Midway Laundry. The demo will occur within the prescriptive excavation limits relative to building height. However, at this time the soil treatment around these two buildings will occur at a later date and not during the demo task.

Bldg 502 AT&T soil work is approximately 80% complete. This will continue and be wrapped up this morning for the excavation area. Following this the concrete slab will be removed and pulled towards the west and the hard surfaced driveway, loaded out to the R2.

1115 – Bldg 520 Fire Dept storage is being cleaned out for the small remaining demo debris with the toothed bucket. Materials are hauled to the R3 Cell 3.

1200 – Lunch

1240 - Iniki has part of the crew at the NAF Staging area to continue servicing and cleaning painting equipment for the end of the season wrap up.

The toothed bucket, thumb and small wrecking ball are in use at Bldg 5295 Hanger Aux Generator to remove the remaining treated concrete slab for hauling to the R2. The perimeter foundation and slab are easily manageable. Within the foundation there are two pads appx 16' L x 6' W x 3' D. These concrete "blocks" were the monolithic base footing that the auxiliary generators were mounted to. Consult with US FWS M.Amann for directive on how the large concrete blocks should be handled. Options include lengthy attempt to downsize with the wrecking ball or evaluate the material to be interred in their current location. For now, the remaining painted slab concrete and debris is being loaded for transport to the R2 Cell 3.

1500 – Bldg 520 Fire Dept storage plot area is being treated with Maectite®. This is the first of the prescriptive excavation limits for a 1' depth. Once this plot is treated and removed to the R2 the additional sampling based excavation limits will be laid out, reagent applied, mixed and then hauled to the R2.

1600 – The toothed bucket Volvo excavator is mobilizing out to the R2, Cell 3 and Cell 4. The season loads placed so far from DU-9 are to be knocked down and roughed in to the raising grade within the R2. Bucket work and traversing the cells with the 290 excavator aid to lay down the rubble and soils on top of the cells.

A discovery at Bldg 520's northeast corner daylights a vertical casing, presumably a water well casing based on field observations. The top of casing has no monument and may have been covered over through the years. It is approximately 20" dia, 15' deep, static WL 8.0ft bgs, casing fluid is groundwater. US FWS will be consulted for desired action, be it to decommission or protect in place.

Today's truck load count includes 6 demo debris, 14 treated soil, 1 steel and 1 clean concrete.

1730 – End of work day.

Photographs:

Photo 01: View west- Bldg 502 AT&T overview of soil treatment tasks.

Photo 02: View northeast- Bldg 3524 Steam Heat work area layout prior to demo.

Photo 03: View south- Bldg 5295 Hanger Aux Generator concrete footings.

Photo 04: View northwest – Bldg 8106 LeadStop® elastomeric paint applied.

Photo 05: View southwest - Bldg 8105 sump with LeadStop® applied to vertical walls.

Photo 06: Bldg 520 Fire Dept storage. ~20” dia x 15’ TD well casing day lighted at NE edge of excavation.

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Thursday, October 6, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 6 mph, Temperature ~85F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Luis Martinez	NWDE Laborer	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10
Gary Lewis	Iniki Supervisor	10
Evan Esposito	Iniki Laborer	10
Lauren Lewis	Iniki Laborer	10
Kawena Kaawa	Iniki Laborer	10
Amber Lewis	Iniki Laborer	10
Philip Kneubuhl	Iniki Laborer	10
Keala Lewis	Iniki Laborer	10
Larry Vaa	Iniki Laborer	10
Ulrich Naki	Iniki Laborer	10
Delson Smith	Iniki Laborer	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Roger Baker	U.S. FWS Historical Archeologist oversight

Equipment:

Description	Model No.	Comments / Serial #	
Pickup Truck	F350 Service Truck	- miles	#3139
Flatbed Truck	Ford F450	- miles	#0576
Container Truck	Peterbuilt		
Skid Steer	Bobcat S185	- hrs	#BC7030
Tracked Skid Steer	Bobcat T750	- hrs	#BC2200
Mini-Excavator	CAT 308	- hrs	#EX1928
Excavator	Volvo EC290BLC	- hrs	#EX1006
Excavator	Volvo EC290BLC	- hrs	#EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will be on DU-9 area soil treatment and demolition of listed buildings.
Iniki will be working to touch up punch list items and servicing painting equipment.

0740 – Bldg 520 Fire Dept storage soil work will continue to knock out the sampling data excavation limits adjacent to the prescriptive excavation work yesterday. This includes treatment of 3' bgs plots that are treated in two lifts of 1.5' each. Each cut is calculated for applying Maectite®, amended with hydrant water and mechanically mixed using the Volvo 290 with straight edged bucket. The first cut is then excavated and the process repeated for the 1.5'bgs to 3' bgs target depth.

At R2 Cell 3, the second 290 excavator is rough grading the treated soil piles down and tracking it into place for an even lift on the south side of the cell. This allows the A30 off road trucks to continue load placements and wheel roll as repetitive loads cycle in and out of the R2.

0830 – Iniki will work through the day continuing to service painting equipment, inventory, staging materials in shipping containers and picking up for the season. A small crew is also working around the island to finish out punch list items such as touch up, demask and final task debris collection.
Iniki has a two person crew at the FAA NavAid building south of the R2. The exterior walls have the LeadStop® applied yesterday and now are being top coated with an additional exterior paint for long term durability.

1000 – At Bldg 520 Fire Dept storage the south east plot area is being defined for treatment. This larger plot is approximately 6"+ of sand and grasses over a thin 2" asphalt roadway. The treatment area depth is verified and adjusted for the limited soil depth prior to reagent application and mixing.
The vertical 20" well casing that is 9' northeast of the northeast building corner has been dug around. It appears the well had wood planks over it that degraded over time. Discussions with US FWS M.Amann determine that the well will be protected in place with a suitable cover that is secure and accessible. The well will not be decommissioned at this time. NWDE will find and place a stick up to cap off the well.

1130 – The 290 Volvo at the R2 has tracked over to the NAF Staging area to swap the toothed bucket and thumb for a UP-40 with jaws. This is being set up to demo Bldg 5342 that has both cast sections and CMU block. The larger buildings use of poured concrete are better served to use the UP-40 than only a bucket.

1200 – Lunch

1330 – Bldg 520 Fire Dept storage continues to work to finish up the last plot of soil treatment and hauling to the R2 Cell 3.

1500 – Bldg 5342 Telephone Exchange is set up to begin demolition of the structure. The jaws are in use to process the concrete as it is brought down to the ground.
In the building's southwest corner is the small vault room where below ground cables enter, then were split out, run up a wire loom support and enter into the building's communication board equipment. The conductors are a lead clad shielded cable. DBSI advised the cables can be cut where they enter into the

vault. US FWS M.Amann determines that the lead cables within the vault will be removed during demolition work and staged at the Boneyard.

1700 – Bldg 5295 Hanger Aux Generator soil plots have been laid out and Maectite® is being applied to the east section that adjoins Bldg 520 Fire Dept storage.
Soil work for Bldg 5295 and Bldg 520 have moved forward this season given the complexity of grade, rolling hill, slab and structure removal with anticipation to backfill in the next few weeks. Going forward sites for demo will have limited soil work that will be held over until next season for planned DU-9 excavation scope.

One item of note continues to be the use of fire hoses and lay flat discharge hoses to get hydrant water to Bldg 520 and Bldg 5295. The nearest functioning hydrant is to the east, east of the water tower, hydrant #45. This long run length requires all the hoses available that NWDE has on hand. Also three hose sections are in use for demo at Bldg 5342 Telephone Exchange. The point being that considerable time has been spent rolling out hose across terrain to get to Bldg 502, Bldg 520 and Bldg 5295 work areas.

Today's truck load count includes 10 treated soil loads to the R2, Cell 3.

1730 – End of work day.

Photographs:

Photo 01: View east- Bldg 520 Fire Dept storage overview of soil treatment tasks.

Photo 02: View northeast- Bldg 5295 Hanger Aux Generator overview of soil treatment tasks.

Photo 03: View east- Bldg 5295 Hanger Aux Generator Maectite® application.

Photo 04: Bldg 5342 Telephone Exchange cables inside the southwest room pull vault.

Photo 05: View west - Bldg 5342 Telephone Exchange demolition begins.

Photo 06: View north - Bldg 5342 Telephone Exchange demo and the southwest room pull vault.

Photo 07: View east – Overview of the R2, Cell 3 roughed in grade for the DU-9 treated soil.

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Friday, October 7, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Overcast, wind 5 mph, Temperature ~84F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Luis Martinez	NWDE Laborer	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10
Gary Lewis	Iniki Supervisor	10
Evan Esposito	Iniki Laborer	10
Lauren Lewis	Iniki Laborer	10
Kawena Kaawa	Iniki Laborer	10
Amber Lewis	Iniki Laborer	10
Philip Kneubuhl	Iniki Laborer	10
Keala Lewis	Iniki Laborer	10
Larry Vaa	Iniki Laborer	10
Ulrich Naki	Iniki Laborer	10
Delson Smith	Iniki Laborer	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Roger Baker	U.S. FWS Historical Archeologist oversight

Equipment:

Description	Model No.	Comments / Serial #	
Pickup Truck	F350 Service Truck	- miles	#3139
Flatbed Truck	Ford F450	- miles	#0576
Container Truck	Peterbuilt		
Skid Steer	Bobcat S185	- hrs	#BC7030
Tracked Skid Steer	Bobcat T750	- hrs	#BC2200
Mini-Excavator	CAT 308	- hrs	#EX1928
Excavator	Volvo EC290BLC	- hrs	#EX1006
Excavator	Volvo EC290BLC	- hrs	#EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	193 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will be on DU-9 area soil treatment and demolition of listed buildings.
Iniki will be working on activities for end of the year clean up and prepping to close out the season.

0730 – Bldg 5295 Hanger Aux Generator plot treated ending yesterday is being loaded out into the A30 off road trucks. Materials are being placed in the R2 Cell 3. The former foundation area and surrounding prescriptive excavation is being worked from east to west, loading trucks at the southwest corner.

The second Volvo 290 with UP-40 jaw is continuing the demo of Bldg 5342 Telephone Exchange. The last bit of wall and roof above the vault is brought down then begin processing the poured sections. Hydrant water for dust suppression is in use for the demo work.

Iniki is organizing the NAF staging area for supplies, continuing inventory and preparing equipment for shipping off island next season. Currently the LBP abatement scope of work is drawing to a close and the largest remaining task for Iniki next year is demobilization of supplies and the JLG manlift via barge.

0920 – The UP-40 is changed out for a toothed bucket and thumb to make room and load out Bldg 5342 Telephone Exchange. The demo must take place within the footprint of the foundation and not exceed the prescriptive excavation limit area, so the working area is confining. The task goal for this building is to demo, clean up and move forward to the next listed structure. The prescriptive and sampling data excavation limits will occur no later than next season for the scheduled DU-9 soil work.

1030 – Bldg 5295 Hanger Aux Generator is nearing completion for excavation. The last plot of soil work area is treated with Maectite® at the southwest corner and being mixed with supplemental hydrant water.

1200 – Lunch

1245 – Bldg 5295 Hanger Aux Generator excavation is complete. The 290 excavator has been decon'd and moving to Bldg 502 AT&T. There a bucket swap to a toothed unit with thumb begins the former building slab removal. The small wrecking ball is in use to initiate punching through the slab for the bucket starting point. As the slab is removed, the top section of treated paint on the load bearing stem wall is also removed to be hauled out to the R2.

Bldg 5342 Telephone Exchange continues to have concrete demo materials loaded up into the two alternating off road trucks destined for the R2 Cell 3. Ferrous and nonferrous materials are sorted and stockpiled separate of the concrete debris to be transported to the Boneyard recycling piles.

Bldg 520 Fire Dept storage confirmation sampling 5pt composite layout, collection and documentation.

1430 - Bldg 5295 Hanger Aux Generator confirmation sampling 5pt composite layout, collection and documentation.

1615 – Bldg 502 AT&T slab removal and stem wall processing continues through the afternoon.

Today's truck load count includes 10 treated soil, 14 demo debris loads to the R2, Cell 3 and ½ load of clean concrete to the Seaplane apron processing stockpile.

1730 – End of work day.

Photographs:

Photo 01: View southwest- Bldg 5295 Hanger Aux Generator prescriptive soil excavation.

Photo 02: View south- Bldg 5295 Hanger Aux Generator overview soil treatment excavation.

Photo 03: View southwest- Bldg 5342 Telephone Exchange material processing.

Photo 04: View southwest- Bldg 5342 Telephone Exchange end of day progress.

Photo 05: View south - Bldg 502 AT&T concrete foundation removal.

Table 1. Maectite and Treated Soil Total Estimates

Date	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
	Soils (DU9)	(~)	(~)	NWDE Walls (DU9)	Iniki Walls (DU9)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/3/16	35.5			0	0	640	4	48.7	767
10/4/16	76			0	0	698	4	79.6	847
10/5/16	104.5			0	0	828.5	14	179	1026
10/6/16	101.5			0	0	988	10	218.8	1245
10/7/16	86			0	0	1057.5	10	95.3	1340
10/8/16									
Total to Date	977 soil gallons			80.5 gallons	140 gallons		97.5 loads		

Notes: 1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.

DU 9 – Bldg 170, 180, 200, 300, 340, S464, 502, 503, 520, S1119, S1123, 2127, 2411, 3506, 3509, 3511, 3514, 3524, 3529, 4201, 4214, 5126, 5267, 5295, 5301, 5339, 5340, 5341, 5342, 5350, 5360, 5361, 5378, 9149, R2 sand filter tanks, Fire Hydrants and other ancillary structures.

Table 2. Clean Backfill Total Estimates

Date /Loads		DU9 Clean Backfill Totals	
		Excavated and Placed Today in DU9 (cyd) Cargo Pier Source Area	Total to Date in DU9 (cyd)
10/3/16	0	0	240
10/4/16	0	0	240
10/5/16	0	0	240
10/6/16	0	0	240
10/7/16	0	0	240
10/8/16			
Total to date- 16 loads			

Notes:
A.

Date /Loads		Clean Backfill for misc slabs removed on island	
		Excavated and Placed Today for slabs (cyd) Cargo Pier Source Area	Total to Date for slabs (cyd)
10/3/16	0	0	480
10/4/16	0	0	480
10/5/16	0	0	480
10/6/16	0	0	480
10/7/16	0	0	480
10/8/16			
Total to date- 32 loads			

Notes:
A. Slabs removed are being process for clean 3” minus.

DU 5 BUTTRESS IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/3/2016	0	0	0	0	0	0
10/4/2016	0	0	0	0	0	0
10/5/2016	0	0	0	0	0	0
10/6/2016	0	0	0	0	0	0
10/7/2016	0	0	0	0	0	0
10/8/2016	0	0	0	0	0	0
Load count per wall	0	0	33	41		
15cuyd estimate per wall	0	0	495	615		
2016 Total R2 combined Buttress clean import LOADS				74		
Loads x 15cuyd estimate				1110		

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads	Clean Wood Loads	~	Clean coral backfill for R2 Ramp
10/3/16	8	0	0	0		0
10/4/16	9	0	0	0		0
10/5/16	6	0	1	0		0
10/6/16	0	0	0	0		0
10/7/16	14	0	0.5	0		0
10/8/16						
Season Total	52.5 loads	47 loads	21.5 loads	0 loads		0 loads

Table 4. Soil Sample Collection-

12 collection points / 24 Whirlpak samples collected today, 0 sample refused:

520 P100 0-2"	520 P104 0-2"	5295 P102 0-2"
520 P100 0-2" DUP	520 P104 0-2" DUP	5295 P102 0-2" DUP
520 P101 0-2"	520 P105 0-2"	5295 P103 0-2"
520 P101 0-2" DUP	520 P105 0-2" DUP	5295 P103 0-2" DUP
520 P102 0-2"	5295 P100 0-2"	5295 P104 0-2"
520 P102 0-2" DUP	5295 P100 0-2" DUP	5295 P104 0-2" DUP
520 P103 0-2"	5295 P101 0-2"	5295 P105 0-2"
520 P103 0-2" DUP	5295 P101 0-2" DUP	5295 P105 0-2" DUP

Notes:
1. MIS confirmation sampling @ bottom of excavation specified MIS. Other sample IDs are 5-point composite 0-2" at small plots.
2. P points 0-6" are a 5-point composite.

Table 5. Demolition of Structures-

DECISION UNIT 9 BUILDING PROGRESS - 10/7/16

DEMOLITION			
Facility #	Facility Name	Asbestos Abatement Complete (date)	Demolition Complete (date)
170	Switch Station Electrical Feeder 1	9/10/2016	9/21/2016
180	Electrical Building	9/9/2016	9/21/2016
200	Switch Station	9/29/2016	
300	Fuel Farm Transform Bank (Fuels Office)	9/15/2016	9/28/2016
340	Carpentry Shop substation	9/19/2016	
S464	Fuel Oil Pumphouse	N/A	9/29/2016
502	AT&T Shed	9/12/2016	10.7.16 Slab in progress
503	Barracks Substation	N/A	
520	Fire Dept. Storage	9/24/2016	10/6/2016
S1119	Tug Pier Substation	N/A	9/21/2016
S1123	Electric Distribution Building	N/A	9/21/2016
2127	POL Office	9/15/2016	9/27/2016
2411	Fuel Farm Lab	N/A	9/28/2016
3506	Liquid Oxygen Storage	9/29/2016	
3509	Oxy/Acetylene Storage	N/A	10.1.16
3511	Sk1 Warehouse Transformer (substation)	9/20/2016	10.1.16
3514	Security Bldg. Storage	9/14/2016	
3524	Steam heat bldg.	N/A	
3529	Midway Laundry	N/A	
4201	JP-5 Pumping Station	N/A	10.1.16
4214	Substation electrical feeder 4	N/A	
5126	Sewage Pump station	9/27/2016	
5267	Sewage Pump Transformer	9/20/2016	10/4/2016
5295	Hangar Aux. Generator Bldg.	9/26/2016	10/7/2016
5301	Runway light controls	N/A	
5339	Water treatment Bldg. @ R2	9/28/2016	
5340	Substation	9/29/2016	
5341	R2 Chlorinator Bldg	N/A	
5342	Telephone Switch Bldg.	9/13/2016	10/6/16 demo in progress
5350	Electrical Switch station	N/A	
5360	Substation	9/20/2016	10.3.16
5361	Switch Station Electrical Feeder 9	9/16/2016	10.2.16
5378	Metal Shed near R2	N/A	
9149	Power Plant shed	N/A	10.1.16 - soil in progress
R2	Tanks on West side	N/A	

LEAD PAINT ABATE/MAECTITE/LEAD STOP					
Facility #	Facility Name	Complete (date)	Facility #	Facility Name	Complete (date)
140	Substation	9/19/2016		Large Tank/Vault	
S228	High Voltage Bldg.	9/19/2016		Concrete block/vault	
309	Power Plant #3	9/27/2016		Ave Maria	10/3/2016
347	Water System Bldg.	9/30/2016		Cross	9/15/2016
425	Receiver Building - Satellite area	Trade for 400		Platforms (2)	
426	Satellite TV	Trade for 400		Manholes (43)	10/6/2016
1124	Waste Storage Building	9/15/2016		3 AST by generator building 309 (?)	
S1126	Harbor Office/Buddhist Temple	9/15/2016	144	Power Plant	Maectite only 9/14/16
3501	Main Freshwater Pump station	9/30/2016	S361	Pesticide Storage	9/28/2016
5004	Water Storage bldg.	Not applicable	400	BEQ Transformer Bldg.	10/5/2016
5150	Sewage Pump Station	10/4/2016		FAA Bldg near R2	
8106	Freshwater Substation	10/4/2016			

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Saturday, October 8, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Overcast, wind 7 mph, Temperature ~84F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Luis Martinez	NWDE Laborer	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10
Gary Lewis	Iniki Supervisor	8
Evan Esposito	Iniki Laborer	8
Lauren Lewis	Iniki Laborer	8
Kawena Kaawa	Iniki Laborer	8
Amber Lewis	Iniki Laborer	8
Philip Kneubuhl	Iniki Laborer	8
Keala Lewis	Iniki Laborer	8
Larry Vaa	Iniki Laborer	8
Ulrich Naki	Iniki Laborer	8
Delson Smith	Iniki Laborer	8

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Roger Baker	U.S. FWS Historical Archeologist oversight

Equipment:

Description	Model No.	Comments / Serial #	
Pickup Truck	F350 Service Truck	- miles	#3139
Flatbed Truck	Ford F450	- miles	#0576
Container Truck	Peterbuilt		
Skid Steer	Bobcat S185	- hrs	#BC7030
Tracked Skid Steer	Bobcat T750	- hrs	#BC2200
Mini-Excavator	CAT 308	- hrs	#EX1928
Excavator	Volvo EC290BLC	- hrs	#EX1006
Excavator	Volvo EC290BLC	- hrs	#EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	143 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will be on DU-9 area soil treatment and demolition of listed buildings.
Iniki will be working on activities for end of the year clean up and prepping to close out the season.

0740 – Bldg 502 AT&T former concrete slab has been previously downsized and is being loaded up. Materials are moved to the R2 with the off road trucks. As the concrete is cleared the #5 stem wall rebar is noted for being sawn off flush when the site work begins being tidied up.

Iniki has a small crew at Bldg 400 that has been abated and LeadStop painted. Today the last few coats of green accent trim paint to the fascia and double doors is applied.
Iniki is also collecting final items to be stored away for closing up the last season for DU-9 work.

Bldg 5342 Telephone Exchange is on the tail end of being loaded and hauled to the R2 for the structure's treated demo debris. The foundation slab has been processed for removal. The lower stem wall sections have been broken down to include painted surfaces being removed near grade.

0815 – Collect 5-point composite confirmation samples at Bldg 4201 JP-5 Pumping Station.

0900 – Progress at Bldg 5342 Telephone Exchange has the cable vault in the southeast corner remaining to be cleared of demo debris. This shallow concrete enclosure's side has been relieved to decrease the height of the vault wall to aid in hand removal of the rubble and wood debris within.

0945 – The lead excavator is beginning a new building demo, Bldg 3524 Steam Heat near the former Navy Dining Hall. This tin sided small structure first gets the metal roof and walls pulled free and stacked using the thumbed bucket. Steel is hauled to the Boneyard for staging in the recycle area. Once the building has been removed the remaining horizontal tank and piping is picked and loaded for a trip to the Boneyard as well.

Making pre demo preparations at Bldg 3529 New Midway Laundry. Stake out prescriptive excavation limits based on building height for a working space of demo tasks. The large plain unpainted concrete slab for this laundry building will allow folding the building inward and processing within the footprint to maximize housekeeping goals.

1200 – Lunch

1240 – The work to load out Bldg 3524 Steam Heat is nearing the end. The prescriptive excavation limits have been worked within and demo debris is picked up. This soil excavation area will remain in place to be treated and excavated no later than the planned 2017 season.

1320 – The lead 290 excavator moves to the east side of the Navy Dining Hall to begin demo for Bldg 3529 New Midway Laundry. The steel tin roof and sides above the pony wall are pulled free with the thumbed bucket and staged for loading out for recycle. Hydrant water is in use for dust suppression.

Bldg 5342 Telephone Exchange 6" scape of demo area is formed up to be Maectite® treated. The slab has been removed and reinforcing plain steel rebar are being sawn with the HotSaw and abrasive wheel. At the cable run vault materials are hand loaded into the tracked Bobcat and moved into the A30 Volvo.

1530 - Collect 5-point composite confirmation samples at Bldg 5360 Substation below the iconic water tower and Bldg 5361 Switch Station Electrical Feeder #9.

Demo at Bldg 3529 New Midway Laundry continues for breaking out tin, steel, piping and CMU demo debris. Both Volvo off road trucks are being used to make round trips to the respective Boneyard and R2 Cell 3 as required.

The second 290 excavator departs the Telephone Exchange and moves down to be staged near Bldg 4214 Substation Electrical Feeder 4. This small structure will be pulled out on Monday.

Today's truck load count includes 3 treated soil and 6 demo debris loads to the R2 with an additional 6 loads of steel to the Boneyard recycling staging area.

1730 – End of work day.

Photographs:

Photo 01: View northeast- Bldg 400 Bravo Switch overview.

Photo 02: View west- Bldg 3524 Steam Heat demolition begins.

Photo 03: View south- Bldg 3524 Steam Heat demo progress.

Photo 04: View southeast- Bldg 3529 New Midway Laundry ready for removal.

Photo 05: View southeast- Bldg 3529 New Midway Laundry progress.

Photo 06: View southeast- Bldg 3529 New Midway Laundry days' end progress.

Photo 06: View east- 5342 Telephone Exchange minor soil scrape of work area.

Table 1. Maectite and Treated Soil Total Estimates

Date	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
	Soils (DU9)	(~)	(~)	NWDE Walls (DU9)	Iniki Walls (DU9)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/3/16	35.5			0	0	640	4	48.7	767
10/4/16	76			0	0	698	4	79.6	847
10/5/16	104.5			0	0	828.5	14	179	1026
10/6/16	101.5			0	0	988	10	218.8	1245
10/7/16	86			0	0	1057.5	10	95.3	1340
10/8/16	4.5			0	0	1062	3	6.2	1346
Total to Date	982 soil gallons			80.5 gallons	140 gallons		100.5 loads		

Notes: 1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.

DU 9 – Bldg 170, 180, 200, 300, 340, S464, 502, 503, 520, S1119, S1123, 2127, 2411, 3506, 3509, 3511, 3514, 3524, 3529, 4201, 4214, 5126, 5267, 5295, 5301, 5339, 5340, 5341, 5342, 5350, 5360, 5361, 5378, 9149, R2 sand filter tanks, Fire Hydrants and other ancillary structures.

Table 2. Clean Backfill Total Estimates

Date /Loads		DU9 Clean Backfill Totals	
		Excavated and Placed Today in DU9 (cyd)	
		Cargo Pier Source Area	Total to Date in DU9 (cyd)
10/3/16	0	0	240
10/4/16	0	0	240
10/5/16	0	0	240
10/6/16	0	0	240
10/7/16	0	0	240
10/8/16	0	0	240
Total to date- 16 loads			

Notes:
A.

Date /Loads		Clean Backfill for misc slabs removed on island	
		Excavated and Placed Today for slabs (cyd)	
		Cargo Pier Source Area	Total to Date for slabs (cyd)
10/3/16	0	0	480
10/4/16	0	0	480
10/5/16	0	0	480
10/6/16	0	0	480
10/7/16	0	0	480
10/8/16	0	0	480
Total to date- 32 loads			

Notes:
A. Slabs removed are being process for clean 3” minus.

DU 5 BUTTRESS IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/3/2016	0	0	0	0	0	0
10/4/2016	0	0	0	0	0	0
10/5/2016	0	0	0	0	0	0
10/6/2016	0	0	0	0	0	0
10/7/2016	0	0	0	0	0	0
10/8/2016	0	0	0	0	0	0
Load count per wall	0	0	33	41		
15cuyd estimate per wall	0	0	495	615		
2016 Total R2 combined Buttress clean import LOADS				74		
Loads x 15cuyd estimate				1110		

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads	Clean Wood Loads	~	Clean coral backfill for R2 Ramp
10/3/16	8	0	0	0		0
10/4/16	9	0	0	0		0
10/5/16	6	0	1	0		0
10/6/16	0	0	0	0		0
10/7/16	14	0	0.5	0		0
10/8/16	6	0	6	0		0
Season Total	58.5 loads	47 loads	27.5 loads	0 loads		0 loads

Table 4. Soil Sample Collection-

9 collection points / 18 Whirlpak samples collected today, 0 sample refused:

4201 P100 0-2"	4201 P103 0-2"	5360 P101 0-2"
4201 P100 0-2" DUP	4201 P103 0-2" DUP	5360 P101 0-2" DUP
4201 P101 0-2"	4201 P104 0-2"	5361 P100 0-2"
4201 P101 0-2" DUP	4201 P104 0-2" DUP	5361 P100 0-2" DUP
4201 P102 0-2"	5360 P100 0-2"	5361 P101 0-2"
4201 P102 0-2" DUP	5360 P100 0-2" DUP	5361 P101 0-2" DUP

Notes:
1. MIS confirmation sampling @ bottom of excavation specified MIS. Other sample IDs are 5-point composite 0-2" at small plots.
2. P points 0-6" are a 5-point composite.

Table 5. Demolition of Structures-

DECISION UNIT 9 BUILDING PROGRESS - 10/8/16

DEMOLITION			
Facility #	Facility Name	Asbestos Abatement Complete (date)	Demolition Complete (date)
170	Switch Station Electrical Feeder 1	9/10/2016	9/21/2016
180	Electrical Building	9/9/2016	9/21/2016
200	Switch Station	9/29/2016	
300	Fuel Farm Transform Bank (Fuels Office)	9/15/2016	9/28/2016
340	Carpentry Shop substation	9/19/2016	
S464	Fuel Oil Pumphouse	N/A	9/29/2016
502	AT&T Shed	9/12/2016	10.7.16
503	Barracks Substation	N/A	
520	Fire Dept. Storage	9/24/2016	10/6/2016
S1119	Tug Pier Substation	N/A	9/21/2016
S1123	Electric Distribution Building	N/A	9/21/2016
2127	POL Office	9/15/2016	9/27/2016
2411	Fuel Farm Lab	N/A	9/28/2016
3506	Liquid Oxygen Storage	9/29/2016	
3509	Oxy/Acetylene Storage	N/A	10.1.16
3511	Sk1 Warehouse Transformer (substation)	9/20/2016	10.1.16
3514	Security Bldg. Storage	9/14/2016	
3524	Steam heat bldg.	N/A	10/8/2016
3529	Midway Laundry	N/A	Demo in progress
4201	JP-5 Pumping Station	N/A	10.1.16
4214	Substation electrical feeder 4	N/A	
5126	Sewage Pump station	9/27/2016	
5267	Sewage Pump Transformer	9/20/2016	10/4/2016
5295	Hangar Aux. Generator Bldg.	9/26/2016	10/7/2016
5301	Runway light controls	N/A	
5339	Water treatment Bldg. @ R2	9/28/2016	
5340	Substation	9/29/2016	
5341	R2 Chlorinator Bldg	N/A	
5342	Telephone Switch Bldg.	9/13/2016	10/8/2016
5350	Electrical Switch station	N/A	
5360	Substation	9/20/2016	10.3.16
5361	Switch Station Electrical Feeder 9	9/16/2016	10.2.16
5378	Metal Shed near R2	N/A	
9149	Power Plant shed	N/A	10.1.16 - soil in progress
R2	Tanks on West side	N/A	

LEAD PAINT ABATE/MAECTITE/LEAD STOP					
Facility #	Facility Name	Complete (date)	Facility #	Facility Name	Complete (date)
140	Substation	9/19/2016		Large Tank/Vault	
S228	High Voltage Bldg.	9/19/2016		Concrete block/vault	
309	Power Plant #3	9/27/2016		Ave Maria	10/3/2016
347	Water System Bldg.	9/30/2016		Cross	9/15/2016
425	Receiver Building - Satellite area	Trade for 400		Platforms (2) R3 S3126W & S3127E	9/30/2016
426	Satellite TV	Trade for 400		Manholes (43)	10/6/2016
1124	Waste Storage Building	9/15/2016		3 AST by generator building 309. Red tanks	9/26/2016
S1126	Harbor Office/Buddhist Temple	9/15/2016	144	Power Plant	Maectite only 9/14/16
3501	Main Freshwater Pump station	9/30/2016	S361	Pesticide Storage	9/28/2016
5004	Water Storage bldg.	Not applicable	400	BEQ Transformer Bldg.	10/5/2016
5150	Sewage Pump Station	10/4/2016		FAA Bldg near R2	10/7/2016
8106	Freshwater Substation	10/4/2016			

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Sunday, October 9, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Overcast, wind 15 mph, Temperature ~82F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	0
Jevon Stone	NWDE Operator	0
Ruth Inmon	NWDE Operator	0
Luis Martinez	NWDE Laborer	0
Viavia Manuma	NWDE Laborer	0
Joel Smith	NWDE Laborer	0
Matt Manning	NWDE Operator	0
Gary Lewis	Iniki Supervisor	0
Evan Esposito	Iniki Laborer	0
Lauren Lewis	Iniki Laborer	0
Kawena Kaawa	Iniki Laborer	0
Amber Lewis	Iniki Laborer	0
Philip Kneubuhl	Iniki Laborer	0
Keala Lewis	Iniki Laborer	0
Larry Vaa	Iniki Laborer	0
Ulrich Naki	Iniki Laborer	0
Delson Smith	Iniki Laborer	0

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #	
Pickup Truck	F350 Service Truck	- miles	#3139
Flatbed Truck	Ford F450	- miles	#0576
Container Truck	Peterbuilt		
Skid Steer	Bobcat S185	- hrs	#BC7030
Tracked Skid Steer	Bobcat T750	- hrs	#BC2200
Mini-Excavator	CAT 308	- hrs	#EX1928
Excavator	Volvo EC290BLC	- hrs	#EX1006
Excavator	Volvo EC290BLC	- hrs	#EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Tailgate safety meeting.

Today is geared towards collection of DU-9 additional soil sampling at the Midway Water Plant and confirmation sampling for completed excavation areas that are ready for backfill. Collect, document and update figures.

1130 – Lunch

1730 – End of work day.

Table 4. Soil Sample Collection-

18 collection points / 42 Whirlpak samples collected today, 0 sample refused:

3127W P6 0-6"	3501 P10 24-30"	502 P103 0-2"
3127W P6 12-18"	3501 P11 0-6"	502 P103 0-2" DUP
3127W P6 24-30"	3501 P11 12-18"	2411 P100 0-2"
347 P9 0-6"	3501 P11 24-30"	2411 P100 0-2" DUP
347 P9 12-18"	5267 P100 0-2"	2411 P101 0-2"
347 P9 24-30"	5267 P100 0-2" DUP	2411 P101 0-2" DUP
3501 P8 0-6"	5267 P101 0-2"	3509 P100 0-2"
3501 P8 12-18"	5267 P101 0-2" DUP	3509 P100 0-2" DUP
3501 P8 24-30"	502 P100 0-2"	3509 P101 0-2"
3501 P9 0-6"	502 P100 0-2" DUP	3509 P101 0-2" DUP
3501 P9 12-18"	502 P101 0-2"	3511 P100 0-2"
3501 P9 24-30"	502 P101 0-2" DUP	3511 P100 0-2" DUP
3501 P10 0-6"	502 P102 0-2"	3511 P101 0-2"
3501 P10 12-18"	502 P102 0-2" DUP	3511 P101 0-2" DUP

Notes:
1. MIS confirmation sampling @ bottom of excavation specified MIS. Other sample IDs are 5-point composite 0-2" at small plots.
2. P points 0-6" are a 5-point composite.

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Monday, October 10, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 10 mph, Temperature ~83F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Luis Martinez	NWDE Laborer	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10
Gary Lewis	Iniki Supervisor	0
Evan Esposito	Iniki Laborer	0
Lauren Lewis	Iniki Laborer	0
Kawena Kaawa	Iniki Laborer	0
Amber Lewis	Iniki Laborer	0
Philip Kneubuhl	Iniki Laborer	0
Keala Lewis	Iniki Laborer	0
Larry Vaa	Iniki Laborer	0
Ulrich Naki	Iniki Laborer	0
Delson Smith	Iniki Laborer	0

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Roger Baker	U.S. FWS Historical Archeologist oversight

Equipment:

Description	Model No.	Comments / Serial #	
Pickup Truck	F350 Service Truck	- miles	#3139
Flatbed Truck	Ford F450	- miles	#0576
Container Truck	Peterbuilt		
Skid Steer	Bobcat S185	- hrs	#BC7030
Tracked Skid Steer	Bobcat T750	- hrs	#BC2200
Mini-Excavator	CAT 308	- hrs	#EX1928
Excavator	Volvo EC290BLC	- hrs	#EX1006
Excavator	Volvo EC290BLC	- hrs	#EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	128 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will be on DU-9 area soil treatment and demolition of listed buildings.
Iniki has closed out the 2016 season, preparing to depart Midway Atoll tomorrow morning.

0730 – Layout and utility locate at Bldg 4214 Substation Electrical Feeder 4. The hydrant line must be crossed with the haul trucks. At the building's west side, a CATV line at 1.0'bgs runs north/south. The 1.25" pvc encased cable is 3' west of the foundation within the prescriptive excavation limits. It is potholed prior to work in two positions for positive location. Begin wrecking the CMU walls and concrete roof with the 290 Volvo.

Bldg 3529 New Midway Laundry work keeps going forward this morning with hauling out demo debris. The unpainted concrete slab work area is being scraped and washed westerly to a row to be picked up and loaded.

0918 – Bldg 4214 Substation Electrical Feeder 4 has been processed, steel separated and progress made to haul the material to the R2. Being an electrical service building the concrete encasement for the multiple 4" steel conduits under the center of the slab is substantial. The concrete block is broken down and loaded.

Layout Bldg 3506 Liquid Oxygen Storage.

1045 – Bldg 4214 is cleaned up and the 6" demo scrape within the footprint is Maectite® treated, mixed and loaded out to the R2. The prescriptive area is larger than the footprint of the building and encompasses the CATV utility, along with a water line to the north. For today the west edge of soil and north edge band of 9' will be left in place to be treated no later than the 2017 season.

1200 - Lunch

1230 – Bldg 3529 New Midway Laundry slab is being pulled. The wrecking ball punches the initial access break to get the toothed bucket started. As the slab concrete slab is broken out it has a chain link fence mat imbedded for wire mesh reinforcement. NWDE quickly identifies that this metal fencing if broken up and run through the crusher will create an enormous blending of metal sharps and jibs in the downsized concrete. It is decided that the Laundry slab will go to the R2 for internment.
Progress forward pulling the slab working south to north, loading the alternating off road trucks.

1400 – Open up a trial from the Midway Theater heading west to gain access to Bldg 3506 Liquid Oxygen Storage. The small CMU and concrete flat roofed structure is broken down within the footprint and small steel separated out. Loads of demo debris are hauled to the R2.

1620 – Bldg 3506 Liquid Oxygen Storage prescriptive excavation limits is easily accessed and treated with Maectite® to the target 1.0' depth. The soil treatment occurs due to the site's simplicity and small area that makes a one-time soil work event feasible.

1545 – Bldg 3529 New Midway Laundry concrete slab continues being loaded out and areas cleaned up of debris. The shade cloth to the east and south that were pulled back are reset to their original positions and

sandbags will be placed to secure the cloth. The afternoon finishes out with the slab being removed and site tidied up. A bit of finish work at the north end will occur in the morning to finish off the Laundry demo.

Verify Bldg 200 and layout Bldg 5350 as the next work sites.

Bldg 3506 Liquid Oxygen Storage is near completion for hauling the treated soil scrape to the R2.

Today's DU-9 truck load counts includes 3 treated soil and 13 demo debris loads to the R2 with an additional 1.5 loads of steel to the Boneyard recycling staging area.

1730 – End of work day.

Photographs:

Photo 01: View southeast- Bldg 4214 Substation Electrical Feeder 4. Potholing for CATV and waterline.

Photo 02: View west- Bldg 4214 Substation Electrical Feeder 4 removed and picking up.

Photo 03: View southwest- Bldg 3529 New Midway Laundry structure debris loading.

Photo 04: View northeast- Bldg 3529 New Midway Laundry slab demolition.

Photo 05: View south- Bldg 3506 Liquid Oxygen Storage demo progress.

Table 1. Maectite and Treated Soil Total Estimates

Date	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
	Soils (DU9)	(~)	(~)	NWDE Walls (DU9)	Iniki Walls (DU9)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/10/16	29			0	0	1091	3	40	1386
10/11/16				0	0				
10/12/16				0	0				
10/13/16				0	0				
10/14/16				0	0				
10/15/16				0	0				
Total to Date	1011 soil gallons			80.5 gallons	140 gallons		103.5 loads		

Notes: 1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.

DU 9 – Bldg 170, 180, 200, 300, 340, S464, 502, 503, 520, S1119, S1123, 2127, 2411, 3506, 3509, 3511, 3514, 3524, 3529, 4201, 4214, 5126, 5267, 5295, 5301, 5339, 5340, 5341, 5342, 5350, 5360, 5361, 5378, 9149, R2 sand filter tanks, Fire Hydrants and other ancillary structures.

Table 2. Clean Backfill Total Estimates

Date /Loads		DU9 Clean Backfill Totals	
		Excavated and Placed Today in DU9 (cyd) Cargo Pier Source Area	Total to Date in DU9 (cyd)
10/10/16	0	0	240
10/11/16			
10/12/16			
10/13/16			
10/14/16			
10/15/16			
Total to date- 16 loads			

Notes:
A.

Date /Loads		Clean Backfill for misc slabs removed on island	
		Excavated and Placed Today for slabs (cyd) Cargo Pier Source Area	Total to Date for slabs (cyd)
10/10/16	0	0	480
10/11/16			
10/12/16			
10/13/16			
10/14/16			
10/15/16			
Total to date- 32 loads			

Notes:
A. Slabs removed are being process for clean 3” minus.

DU 5 BUTTRESS IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/10/2016	0	0	0	0	0	0
10/11/2016	0	0	0	0	0	0
10/12/2016	0	0	0	0	0	0
10/13/2016	0	0	0	0	0	0
10/14/2016	0	0	0	0	0	0
10/15/2016	0	0	0	0	0	0
Load count per wall	0	0	33	41		
15cuyd estimate per wall	0	0	495	615		
2016 Total R2 combined Buttress clean import LOADS				74		
Loads x 15cuyd estimate				1110		

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads	Clean Wood Loads	~	Clean coral backfill for R2 Ramp
10/10/16	13	0	1.5	0		0
10/11/16						
10/12/16						
10/13/16						
10/14/16						
10/15/16						
Season Total	71.5 loads	47 loads	29 loads	0 loads		0 loads

Table 4. Soil Sample Collection-

0 collection points / 0 Whirlpak samples collected today, 0 sample refused:

-	-	-
-	-	-

Notes: 1. MIS confirmation sampling @ bottom of excavation specified MIS. Other sample IDs are 5-point composite 0-2" at small plots.
2. P points 0-6" are a 5-point composite.

Table 5. Demolition of Structures-

DECISION UNIT 9 BUILDING PROGRESS - 10/11/16

DENOTES UPDATE FROM LAST WEEK

DEMOLITION				
Facility #	Facility Name	Asbestos Abatement Complete (date)	Demolition Complete (date)	Soil Excavation
170	Switch Station Electrical Feeder 1	9/10/2016	9/21/2016	Full dig 9/22/16
180	Electrical Building	9/9/2016	9/21/2016	Full dig 9/22/16
200	Switch Station	9/29/2016		
300	Fuel Farm Transform Bank (Fuels Office)	9/15/2016	9/28/2016	Full dig 9/29/16
340	Carpentry Shop substation	9/19/2016		
S464	Fuel Oil Pumphouse	N/A	9/29/2016	Full dig 10/1/16
502	AT&T Shed	9/12/2016	10/7/2016	Full dig 10/8/16
503	Barracks Substation	N/A		
520	Fire Dept. Storage	9/24/2016	10/6/2016	Full dig 10/6/16
S1119	Tug Pier Substation	N/A	9/21/2016	Full scrape 9/22/16
S1123	Electric Distribution Building	N/A	9/21/2016	Full scrape 9/22/16
2127	POL Office	9/15/2016	9/27/2016	Full dig 9/29/16
2411	Fuel Farm Lab	N/A	9/28/2016	Full dig 9/29/16
3506	Liquid Oxygen Storage	9/29/2016	10/10/2016	Full dig 10/10/16
3509	Oxy/Acetylene Storage	N/A	10/1/2016	Full dig 10/3/16
3511	Sk1 Warehouse Transformer (substation)	9/20/2016	10/1/2016	Full dig 10/3/16
3514	Security Bldg. Storage	9/14/2016		
3524	Steam heat bldg.	N/A	10/8/2016	Scrape 10/11/16
3529	Midway Laundry	N/A	10/11/2016	Scrape 10/11/16
4201	JP-5 Pumping Station	N/A	10/1/2016	Full dig 10/1/2016
4214	Substation electrical feeder 4	N/A	10/11/2016	Scrape 10/11/16
5126	Sewage Pump station	9/27/2016		
5267	Sewage Pump Transformer	9/20/2016	10/4/2016	Full dig 10/4/16
5295	Hangar Aux. Generator Bldg.	9/26/2016	10/7/2016	Full dig 10/7/16
5301	Runway light controls	N/A		
5339	Water treatment Bldg. @ R2	9/28/2016		
5340	Substation	9/29/2016		
5341	R2 Chlorinator Bldg	N/A		
5342	Telephone Switch Bldg.	9/13/2016	10/8/2016	Scrape 10/8/16
5350	Electrical Switch station	N/A		
5360	Substation	9/20/2016	10/3/2016	Full 10/6/16
5361	Switch Station Electrical Feeder 9	9/16/2016	10/2/2016	Full 10/6/16
5378	Metal Shed near R2	N/A		
9149	Power Plant shed	N/A	10/1/2016	
R2	Tanks on West side	N/A		

LEAD PAINT ABATE/MAECTITE/LEAD STOP					
Facility #	Facility Name	Complete (date)	Facility #	Facility Name	Complete (date)
140	Substation	9/19/2016	8105	R1 Concrete block/vault	10/5/2016
S228	High Voltage Bldg.	9/19/2016		Ave Maria	10/3/2016
309	Power Plant #3	9/27/2016		Cross	9/15/2016
347	Water System Bldg.	9/30/2016		Platforms (2) R3 S3126W/S3127E	9/30/2016
425	Receiver Building - Satellite area	Trade for 400		Manholes (43)	10/6/2016
426	Satellite TV	Trade for 400		3 red AST by generator building 309	9/26/2016
1124	Waste Storage Building	9/15/2016			
S1126	Harbor Office/Buddhist Temple	9/15/2016	OPTIONS		
3501	Main Freshwater Pump station	9/30/2016	144	Power Plant	Maectite only 9/14/16
5004	Water Storage bldg.	Not Applicable	S361	Pesticide Storage	9/28/2016
5150	Sewage Pump Station	10/4/2016	400	BEQ Transformer Bldg.	10/5/2016
8106	Freshwater Substation	10/4/2016		FAA Bldg near R2	10/7/2016

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Tuesday, October 11, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 10 mph, Temperature ~83F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Luis Martinez	NWDE Laborer	0
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10
Gary Lewis	Iniki Supervisor	0
Evan Esposito	Iniki Laborer	0
Lauren Lewis	Iniki Laborer	0
Kawena Kaawa	Iniki Laborer	0
Amber Lewis	Iniki Laborer	0
Philip Kneubuhl	Iniki Laborer	0
Keala Lewis	Iniki Laborer	0
Larry Vaa	Iniki Laborer	0
Ulrich Naki	Iniki Laborer	0
Delson Smith	Iniki Laborer	0

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Roger Baker	U.S. FWS Historical Archeologist oversight

Equipment:

Description	Model No.	Comments / Serial #	
Pickup Truck	F350 Service Truck	- miles	#3139
Flatbed Truck	Ford F450	- miles	#0576
Container Truck	Peterbuilt		
Skid Steer	Bobcat S185	- hrs	#BC7030
Tracked Skid Steer	Bobcat T750	- hrs	#BC2200
Mini-Excavator	CAT 308	- hrs	#EX1928
Excavator	Volvo EC290BLC	- hrs	#EX1006
Excavator	Volvo EC290BLC	- hrs	#EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	189 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will be on DU-9 area soil treatment and demolition of listed buildings.
Iniki has closed out the 2016 season and is departing Midway Atoll this morning. The project work on island has been completed with exception of the ACM/LBP transport and disposal. The disposal task has been slated to occur in 2017.

0735 – NWDE is wrapping up to complete Bldg 3506 Liquid Oxygen Storage full prescriptive soil excavation. The tail end of loading soil goes into the off road truck and makes it to the R2 Cell 4.

Layout Bldg 5340 Substation south of the NAF in the trees.

Bldg 5350 Electrical Switch Station near Bldg 5340 northwest of intersect at Madole St and Branon Ave. NWDE is tracking the 290 toothed bucket excavator towards it to begin demo of the small CMU building with framed roof and tin sheeting. The small former utility building is brought down, steel separated for recycling and concrete slab processed. Debris is hauled to the R2 Cell 4.

0900 – The toothed bucket excavator proceeds northwest to nearby Bldg 5340 Substation. This mid-sized CMU structure with concrete flat roof is in the trees. Demolition and processing of the rubble is aided using the typical hydrant water for dust suppression. The flush abandon utility vaults on either side of the building are protected in place.

Bldg 200 Switch Station north of the Boneyard in the trees has equipment moving in to pull it down. The recently removed electrical services have been pulled by DBSI. Iniki has also previously abated the transite tile roof panels. The second Volvo 290 with tooth and thumb bucket brings down the CMU walls, separates steel channel purlins and processes the concrete slab.

1000 – Bldg 5340 progress is nearly down with debris being loaded in one of two A30 off road trucks.

Layout Bldg 5301 Runway Light Controls for work area, figure and prescriptive excavation limits typical of each site. Mark out the in-use utilities parallel to the work site road access for below ground fiber optic and high voltage grid.

1125 – The scheduled charter flight has arrived, is loaded and currently lifting off from PMDY in route to HNL. Onboard is the 2016 Iniki Enterprise crew departing Midway Atoll.

1200 – Lunch

1245 – The Volvo 290 has made it into the next work site, Bldg 5301 Runway Light Controls east of the former Marine Barracks Bldg 578. The nearby hydrant #6 is coupled with hoses for dust suppression during demo tasks, typical of each site. The toothed bucket and thumb bring down the CMU walls, concrete beams, posts and concrete roof. Processing concrete and plain #5 & #7 rebar is also taking place with in the footprint of the slab foundation.

1330 – Bldg 200 with the second Volvo 290 excavator demo is finishing up. The former electrical utilities are encased in a concrete block typical of the era. This is downsized and removed to the R2.
A hydraulic hose for the thumb circuit has developed a leak. Parts arriving today are not an exact fit to replace the hose and hard pipe line. Repair options are forthcoming but for now this machine will be fitted only with the straight edged bucket for soil work. Demo work with the thumb is needed to process steel out of the rubble, moved downsized materials while limiting dirt removal and a proper heavy service toothed bucket to bust slabs.

Full prescriptive excavation at Bldg 200 to 1.0'bgs. With the above mentioned limiting factor of bucket selection and a positive open work area the Maectite® reagent is applied, amended with hydrant water while mechanical mixing occurs with the straight edged bucket. Materials will be loaded into the off road truck and hauled to the R2 Cell 4.

1430 – Layout Bldg 340 Carpentry Shop Substation. This building is confined on four sides with an asphalt road to the west, Cannon Bldg 354 to the east, concrete stickup vault to the south and previously completed DU-6 to at the north building edge. Adjustments are made for the prescribed excavation area that will leave hard surfaces, adjacent buildings and DU areas untouched.

1530 – Bldg 200 is nearly loaded out and being picked up for the last of the excavation work. A lengthy run of 1.5" hydrant hose has been spooled out and will be re-rolled for this site.

1625 – The straight edged bucket excavator is moving on to Bldg 5350 Electrical Switch Station. The full prescriptive excavation area to 1.0' bgs is treated. With the small building footprint and small excavation area the effective method is to treat, remove and then collect confirmation samples. Additional factor is that the straight edge bucket machine will be caught up with the other 290 demo bucket machine soon at Bldg 5301 Runway Light Controls.

Finishing out the day Bldg 5350 Electrical Switch Station has been treated and one load to the truck. Bldg 5301 Runway Light Controls roof and walls are down, continuing to be processed and loaded out.

Today's flight arrival has brought in parts to repair the Cat 308 mini excavator. NWDE is in the process to finalize the hose replacement.

Today's DU-9 truck load counts includes 6 treated soil and 12 demo debris loads to the R2 with an additional 1 loads of steel to the Boneyard recycling staging area.

1730 – End of work day.

Photographs:

Photo 01: View southeast- Bldg 200 demolition work.

Photo 02: View southeast- Bldg 200 prescriptive excavation limits.

Photo 03: View northeast- Bldg 5340 Substation progress of tasks.

Photo 04: View west- Bldg 5350 Electrical Switch Station demolition begins.

Photo 05: View east- Bldg 5301 Runway Light Controls material processing.

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	(~)	(~)	NWDE Walls (DU9)	Iniki Walls (DU9)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/10/16	29			0	0	1091	3	40	1386
10/11/16	58			0	0	1149	6	80	1466
10/12/16				0	0				
10/13/16				0	0				
10/14/16				0	0				
10/15/16				0	0				
Total to Date	1069 soil gallons			80.5 gallons	140 gallons		109.5 loads		

Notes: 1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.

DU 9 – Bldg 170, 180, 200, 300, 340, S464, 502, 503, 520, S1119, S1123, 2127, 2411, 3506, 3509, 3511, 3514, 3524, 3529, 4201, 4214, 5126, 5267, 5295, 5301, 5339, 5340, 5341, 5342, 5350, 5360, 5361, 5378, 9149, R2 sand filter tanks, Fire Hydrants and other ancillary structures.

Table 2. Clean Backfill Total Estimates

Date /Loads		DU9 Clean Backfill Totals: Excavated and Placed Today in DU9 (cyd) Cargo Pier Source Area	DU9 Clean Backfill Totals: Total to Date in DU9 (cyd)
10/10/16	0	0	240
10/11/16	0	0	240
10/12/16			
10/13/16			
10/14/16			
10/15/16			
Total to date- 16 loads			

Notes:
A.

Date /Loads		Clean Backfill for misc slabs removed on island: Excavated and Placed Today for slabs (cyd) Cargo Pier Source Area	Clean Backfill for misc slabs removed on island: Total to Date for slabs (cyd)
10/10/16	0	0	480
10/11/16	0	0	480
10/12/16			
10/13/16			
10/14/16			
10/15/16			
Total to date- 32 loads			

Notes:
A. Slabs removed are being process for clean 3" minus.

DU 5 BUTTRESS IMPORT CLEAN CORAL

DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/10/2016	0	0	0	0	0	0
10/11/2016	0	0	0	0	0	0
10/12/2016	0	0	0	0	0	0
10/13/2016	0	0	0	0	0	0
10/14/2016	0	0	0	0	0	0
10/15/2016	0	0	0	0	0	0
Load count per wall	0	0	33	41		
15cuyd estimate per wall	0	0	495	615		
2016 Total R2 combined Buttress clean import LOADS				74		
Loads x 15cuyd estimate				1110		

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads	Clean Wood Loads	~	Clean coral backfill for R2 Ramp
10/10/16	13	0	1.5	0		0
10/11/16	12	0	1	0		0
10/12/16						
10/13/16						
10/14/16						
10/15/16						
Season Total	83.5 loads	47 loads	30 loads	0 loads		0 loads

Table 4. Soil Sample Collection-

0 collection points / 0 Whirlpak samples collected today, 0 sample refused:

-	-	-
-	-	-

Notes: 1. MIS confirmation sampling @ bottom of excavation specified MIS. Other sample IDs are 5-point composite 0-2" at small plots.
2. P points 0-6" are a 5-point composite.

Table 5. Demolition of Structures-

DECISION UNIT 9 BUILDING PROGRESS - 10/11/16

DENOTES UPDATE FROM LAST WEEK

DEMOLITION				
Facility #	Facility Name	Asbestos Abatement Complete (date)	Demolition Complete (date)	Soil Excavation
170	Switch Station Electrical Feeder 1	9/10/2016	9/21/2016	Full dig 09/22/16
180	Electrical Building	9/9/2016	9/21/2016	Full dig 09/22/16
200	Switch Station	9/29/2016		
300	Fuel Farm Transform Bank (Fuels Office)	9/15/2016	9/28/2016	Full dig 09/29/16
340	Carpentry Shop substation	9/19/2016		
S464	Fuel Oil Pumphouse	N/A	9/29/2016	Full dig 10/01/16
502	AT&T Shed	9/12/2016	10/7/2016	Full dig 10/08/16
503	Barracks Substation	N/A		
520	Fire Dept. Storage	9/24/2016	10/6/2016	Full dig 10/06/16
S1119	Tug Pier Substation	N/A	9/21/2016	Full dig 09/22/16
S1123	Electric Distribution Building	N/A	9/21/2016	Full dig 09/22/16
2127	POL Office	9/15/2016	9/27/2016	Full dig 09/29/16
2411	Fuel Farm Lab	N/A	9/28/2016	Full dig 09/29/16
3506	Liquid Oxygen Storage	9/29/2016	10/10/2016	Full dig 10/10/16
3509	Oxy/Acetylene Storage	N/A	10/1/2016	Full dig 10/03/16
3511	Sk1 Warehouse Transformer (substation)	9/20/2016	10/1/2016	Full dig 10/03/16
3514	Security Bldg. Storage @TOC	9/14/2016		
3524	Steam heat bldg.	N/A	10/8/2016	Scrape 10/11/16
3529	Midway Laundry	N/A	10/11/2016	Scrape 10/11/16
4201	JP-5 Pumping Station	N/A	10/1/2016	Full dig 10/01/16
4214	Substation electrical feeder 4	N/A	10/11/2016	Scrape 10/11/16
5126	Sewage Pump station	9/27/2016		
5267	Sewage Pump Transformer	9/20/2016	10/4/2016	Full dig 10/04/16
5295	Hangar Aux. Generator Bldg.	9/26/2016	10/7/2016	Full dig 10/07/16
5301	Runway light controls	N/A		
5339	Water treatment Bldg. @ R2	9/28/2016		
5340	Substation	9/29/2016		
5341	R2 Chlorinator Bldg	N/A		
5342	Telephone Switch Bldg.	9/13/2016	10/8/2016	Scrape 10/8/16
5350	Electrical Switch station	N/A	10/11/2016	Full dig 10/12/16
5360	Substation	9/20/2016	10/3/2016	Full dig 10/06/16
5361	Switch Station Electrical Feeder 9	9/16/2016	10/2/2016	Full dig 10/06/16
5378	Metal Shed near R2	N/A		
9149	Power Plant shed	N/A	10/1/2016	
R2	Tanks on West side	N/A		

LEAD PAINT ABATE/MAECTITE/LEAD STOP					
Facility #	Facility Name	Complete (date)	Facility #	Facility Name	Complete (date)
140	Substation	9/19/2016	8105	R1 Concrete block/vault	10/5/2016
S228	High Voltage Bldg.	9/19/2016		Ave Maria	10/3/2016
309	Power Plant #3	9/27/2016		Cross	9/15/2016
347	Water System Bldg.	9/30/2016		Platforms (2) R3 S3126W/S3127E	9/30/2016
425	Receiver Building - Satellite area	Trade for 400		Manholes (43)	10/6/2016
426	Satellite TV	Trade for 400		3 red AST by generator building 309	9/26/2016
1124	Waste Storage Building	9/15/2016			
S1126	Harbor Office/Buddhist Temple	9/15/2016	OPTIONS		
3501	Main Freshwater Pump station	9/30/2016	144	Power Plant	Maectite only 9/14/16
5004	Water Storage bldg.	Not Applicable	S361	Pesticide Storage	9/28/2016
5150	Sewage Pump Station	10/4/2016	400	BEQ Transformer Bldg.	10/5/2016
8106	Freshwater Substation	10/4/2016		FAA Bldg near R2	10/7/2016

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Wednesday, October 12, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 14 mph, Temperature ~84F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Roger Baker	U.S. FWS Historical Archeologist oversight

Equipment:

Description	Model No.	Comments / Serial #	
Pickup Truck	F350 Service Truck	- miles	#3139
Flatbed Truck	Ford F450	- miles	#0576
Container Truck	Peterbuilt		
Skid Steer	Bobcat S185	- hrs	#BC7030
Tracked Skid Steer	Bobcat T750	- hrs	#BC2200
Mini-Excavator	CAT 308	- hrs	#EX1928
Excavator	Volvo EC290BLC	- hrs	#EX1006
Excavator	Volvo EC290BLC	- hrs	#EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will be on DU-9 area soil treatment and demolition of listed buildings.

0730 – Bldg 5301 Runway Light Controls work is resuming for loading demo debris, processing and breaking out the foundation. Steel rebar continues to be separated for the steel recycling stockpile.

Layout Bldg 503 Barracks Substation and Bldg 5126 Sewage Pump Station for the prescriptive work area limits when bringing the roof and walls down.

Bldg 5340 Substation in the trees south of the NAF is being loaded out with the 290 Volvo. The treated soil is hauled to the R2 Cell 4 and placed in sequential piles. Since Cell 3 & 4 are growing with piles one excavator will be sent over today to knock down to a rough grade lift across the cells.

1030 - Bldg 5340 Substation is wrapping up with the prescriptive soil excavation. Fire hydrant hoses are being rolled up and equipment moved back out to the road.
The thumb hydraulic circuit repair has been ongoing this morning to locate a means to fix the circuit. By days end a remedy is installed. However, today soil treatment work is being completed at sites for achieving the greatest project production given the temporary limitations.

1100 – Part of the NWDE crew is going to previous work plots to clear abandon utilities that need addressed within the excavated area. Primarily this is wires or significant steel conduits. These are cut using a saw and materials are loaded up and placed at the Boneyard recycling pile.

At Bldg 5301 Runway Light Controls the demo 290 excavator with thumb bucket is nearly complete with removal of building materials and foundation. After lunch this machine will move to the R2 to level out dump piles of treated soil and treated demo debris.

1200 – Lunch

1315 – The 290 excavator and straight edged bucket are into Bldg 5301 Runway Light Controls. The Maectite® truck is also in place and the full prescriptive excavation plot is calculated and applied. The reagent is pumped on in standard fashion using the pneumatic double diaphragm pump directly from the chemical tote. Once the liquid is placed evenly within the plot, the materials are amended with hydrant water and mechanically mixed with the excavator bucket to a uniform consistency.

1445 – Confirmation sampling for prescriptive excavation limits at Bldgs 5340, 5350, 200 & 3506.

At the R2 Cell 3 & 4 the rough grade is being established for the lift. This includes demo debris and treated soil combined for a uniform density free of voids within the lift. The 290 excavator has been tracking back and forth as the work is done for compaction.

1715 - Bldg 5301 Runway Light Controls area is wrapping up having been hauled away to the R2 this afternoon. Today's DU-9 truck load counts includes 12 treated soil and 6 demo debris loads to the R2 with an additional 1 load of steel to the Boneyard recycling staging area, two loads of clean concrete to the Seaplane apron crusher stockpile.

1730 – End of work day.

Photographs:

Photo 01: View southeast- Bldg 503 Barracks Substation demo layout.

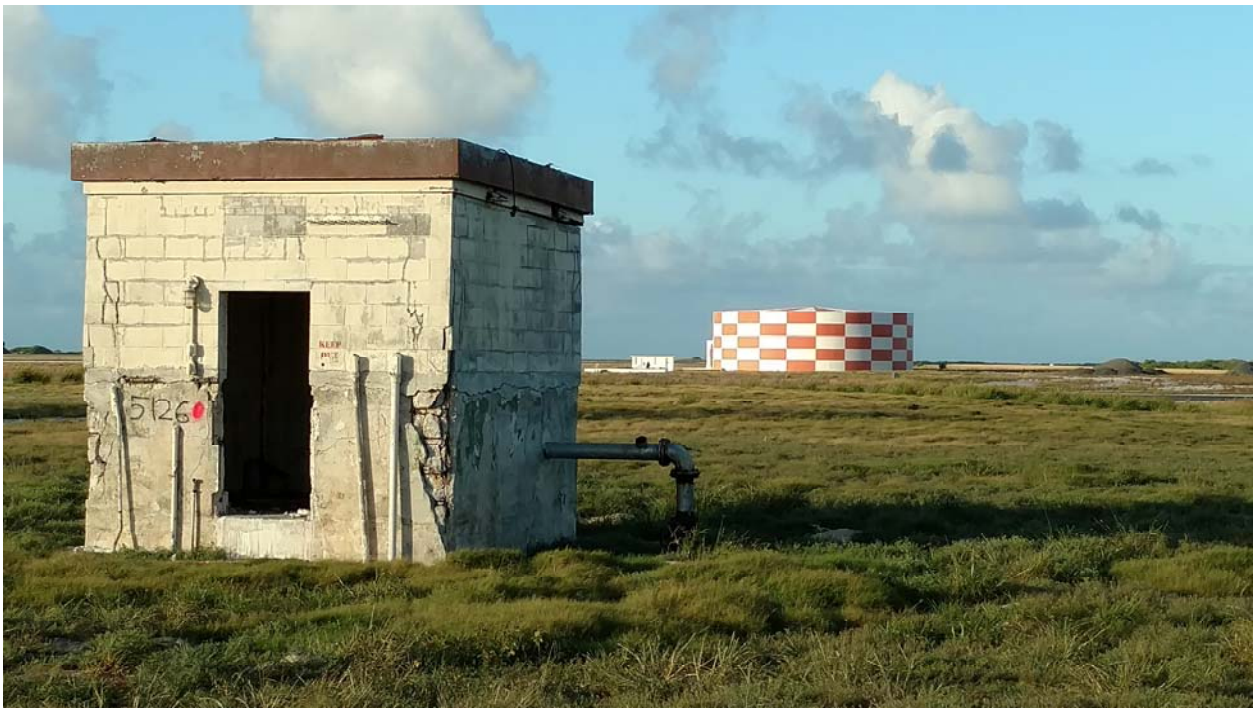


Photo 02: View southwest- Bldg 5126 Sewage Pump Station demo layout.

Photo 03: View north- Bldg 5301 Runway Light Controls progress of demo tasks.

Photo 04: View south- Bldg 5301 Runway Light Controls Maectite® application and mixing.

Photo 05: View east- R2 Cell 3 and 4 treated soil and debris to date.

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						**Treated Soil Totals**[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	(~)	(~)	NWDE Walls (DU9)	Iniki Walls (DU9)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/10/16	29			0	0	1091	3	40	1386
10/11/16	58			0	0	1149	6	80	1466
10/12/16	112			0	0	1261	12	154	1619
10/13/16				0	0				
10/14/16				0	0				
10/15/16				0	0				
Total to Date	1081 soil gallons			80.5 gallons	140 gallons		121.5 loads		

Notes: 1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.

DU 9 – Bldg 170, 180, 200, 300, 340, S464, 502, 503, 520, S1119, S1123, 2127, 2411, 3506, 3509, 3511, 3514, 3524, 3529, 4201, 4214, 5126, 5267, 5295, 5301, 5339, 5340, 5341, 5342, 5350, 5360, 5361, 5378, 9149, R2 sand filter tanks, Fire Hydrants and other ancillary structures.

Table 2. Clean Backfill Total Estimates

Date /Loads		DU9 Clean Backfill Totals: Excavated and Placed Today in DU9 (cyd) Cargo Pier Source Area	DU9 Clean Backfill Totals: Total to Date in DU9 (cyd)
10/10/16	0	0	240
10/11/16	0	0	240
10/12/16	0	0	240
10/13/16			
10/14/16			
10/15/16			
Total to date- 16 loads			

Notes:
A.

Date /Loads		Clean Backfill for misc slabs removed on island: Excavated and Placed Today for slabs (cyd) Cargo Pier Source Area	Clean Backfill for misc slabs removed on island: Total to Date for slabs (cyd)
10/10/16	0	0	480
10/11/16	0	0	480
10/12/16	0	0	480
10/13/16			
10/14/16			
10/15/16			
Total to date- 32 loads			

Notes:
A. Slabs removed are being process for clean 3" minus.

DU 5 BUTTRESS IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/10/2016	0	0	0	0	0	0
10/11/2016	0	0	0	0	0	0
10/12/2016	0	0	0	0	0	0
10/13/2016	0	0	0	0	0	0
10/14/2016	0	0	0	0	0	0
10/15/2016	0	0	0	0	0	0
Load count per wall	0	0	33	41		
15cuyd estimate per wall	0	0	495	615		
2016 Total R2 combined Buttress clean import LOADS				74		
Loads x 15cuyd estimate				1110		

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads	Clean Wood Loads	~	Clean coral backfill for R2 Ramp
10/10/16	13	0	1.5	0		0
10/11/16	12	0	1	0		0
10/12/16	6	2	1	0		0
10/13/16						
10/14/16						
10/15/16						
Season Total	89.5 loads	49 loads	31 loads	0 loads		0 loads

Table 4. Soil Sample Collection-

8 collection points / 16 Whirlpak samples collected today, 0 sample refused:

5340 P100 0-2"	5350 P101 0-2"	3506 P100 0-2"
5340 P100 0-2" DUP	5350 P101 0-2" DUP	3506 P100 0-2" DUP
5340 P101 0-2"	200 P100 0-2"	3506 P101 0-2"
5340 P101 0-2" DUP	200 P100 0-2" DUP	3506 P101 0-2" DUP
5350 P100 0-2"	200 P101 0-2"	-
5350 P100 0-2" DUP	200 P101 0-2" DUP	-

Notes:
1. MIS confirmation sampling @ bottom of excavation specified MIS. Other sample IDs are 5-point composite 0-2" at small plots.
2. P points 0-6" are a 5-point composite.

Table 5. Demolition of Structures-

DECISION UNIT 9 BUILDING PROGRESS - 10/12/16

DENOTES UPDATE FROM LAST WEEK

DEMOLITION				
Facility #	Facility Name	Asbestos Abatement Complete (date)	Demolition Complete (date)	Soil Excavation
170	Switch Station Electrical Feeder 1	9/10/2016	9/21/2016	Full dig 09/22/16
180	Electrical Building	9/9/2016	9/21/2016	Full dig 09/22/16
200	Switch Station	9/29/2016	10/11/2016	Full dig 10/11/16
300	Fuel Farm Transform Bank (Fuels Office)	9/15/2016	9/28/2016	Full dig 09/29/16
340	Carpentry Shop substation	9/19/2016		
S464	Fuel Oil Pumphouse	N/A	9/29/2016	Full dig 10/01/16
502	AT&T Shed	9/12/2016	10/7/2016	Full dig 10/08/16
503	Barracks Substation	N/A		
520	Fire Dept. Storage	9/24/2016	10/6/2016	Full dig 10/06/16
S1119	Tug Pier Substation	N/A	9/21/2016	Full dig 09/22/16
S1123	Electric Distribution Building	N/A	9/21/2016	Full dig 09/22/16
2127	POL Office	9/15/2016	9/27/2016	Full dig 09/29/16
2411	Fuel Farm Lab	N/A	9/28/2016	Full dig 09/29/16
3506	Liquid Oxygen Storage	9/29/2016	10/10/2016	Full dig 10/10/16
3509	Oxy/Acetylene Storage	N/A	10/1/2016	Full dig 10/03/16
3511	Sk1 Warehouse Transformer (substation)	9/20/2016	10/1/2016	Full dig 10/03/16
3514	Security Bldg. Storage @TOC	9/14/2016		
3524	Steam heat bldg.	N/A	10/8/2016	Scrape 10/11/16
3529	Midway Laundry	N/A	10/11/2016	Scrape 10/11/16
4201	JP-5 Pumping Station	N/A	10/1/2016	Full dig 10/01/16
4214	Substation electrical feeder 4	N/A	10/11/2016	Scrape 10/11/16
5126	Sewage Pump station	9/27/2016		
5267	Sewage Pump Transformer	9/20/2016	10/4/2016	Full dig 10/04/16
5295	Hangar Aux. Generator Bldg.	9/26/2016	10/7/2016	Full dig 10/07/16
5301	Runway light controls	N/A	10/12/2016	Full dig 10/12/16
5339	Water treatment Bldg. @ R2	9/28/2016		
5340	Substation	9/29/2016	10/11/2016	Full dig 10/12/16
5341	R2 Chlorinator Bldg	N/A		
5342	Telephone Switch Bldg.	9/13/2016	10/8/2016	Scrape 10/8/16
5350	Electrical Switch station	N/A	10/11/2016	Full dig 10/12/16
5360	Substation	9/20/2016	10/3/2016	Full dig 10/06/16
5361	Switch Station Electrical Feeder 9	9/16/2016	10/2/2016	Full dig 10/06/16
5378	Metal Shed near R2	N/A		
9149	Power Plant shed	N/A	10/1/2016	
R2	Tanks on West side	N/A		

LEAD PAINT ABATE/MAECTITE/LEAD STOP					
Facility #	Facility Name	Complete (date)	Facility #	Facility Name	Complete (date)
140	Substation	9/19/2016	8105	R1 Concrete block/vault	10/5/2016
S228	High Voltage Bldg.	9/19/2016		Ave Maria	10/3/2016
309	Power Plant #3	9/27/2016		Cross	9/15/2016
347	Water System Bldg.	9/30/2016		Platforms (2) R3 S3126W/S3127E	9/30/2016
425	Receiver Building - Satellite area	Trade for 400		Manholes (43)	10/6/2016
426	Satellite TV	Trade for 400		3 red AST by generator building 309	9/26/2016
1124	Waste Storage Building	9/15/2016			
S1126	Harbor Office/Buddhist Temple	9/15/2016	OPTIONS		
3501	Main Freshwater Pump station	9/30/2016	144	Power Plant	Maectite only 9/14/16
5004	Water Storage bldg.	Not Applicable	S361	Pesticide Storage	9/28/2016
5150	Sewage Pump Station	10/4/2016	400	BEQ Transformer Bldg.	10/5/2016
8106	Freshwater Substation	10/4/2016		FAA Bldg near R2	10/7/2016

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Thursday, October 13, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 14 mph, Temperature ~85F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Roger Baker	U.S. FWS Historical Archeologist oversight

Equipment:

Description	Model No.	Comments / Serial #	
Pickup Truck	F350 Service Truck	- miles	#3139
Flatbed Truck	Ford F450	- miles	#0576
Container Truck	Peterbuilt		
Skid Steer	Bobcat S185	- hrs	#BC7030
Tracked Skid Steer	Bobcat T750	- hrs	#BC2200
Mini-Excavator	CAT 308	- hrs	#EX1928
Excavator	Volvo EC290BLC	- hrs	#EX1006
Excavator	Volvo EC290BLC	- hrs	#EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will be on DU-9 area soil treatment and demolition of listed buildings.

0730 – Machines are prepped to begin work at Bldg 503 Barracks Substation. This small concrete is quickly brought down, processed and the Maectite® treated walls and roof are loaded into the off road truck with 290 excavator #1108. Materials are hauled to the R2 Cell 3.

Volvo excavator #1106 is at the east side of the R2 for three items to break out. Bldg 5339 Water Treatment is a CMU wall with concrete flat roof and includes the 4' dia x 5' tall mixing tub. These structures are broken up with the toothed bucket and set over into the R2. To the south is the concrete enclosure for the former power transformer. This is Bldg 5338 Transformer and it too will pulled, processed and passed over into the R2.

0900 – Bldg 503 is wrapping up and the excavator moves over to Bldg 5126 Sewage Pump Station. Here the steel pipe is disconnected from the north side of the small building. This small 12' x 12' x 12.5' tall pump room would have had a turbine pump lowered in through the roof hatch into the vault when in use. Under the slab floor that is 1.5' thick is the former sewage concrete batch vault. At 12' x 12' x 15.5' tall it's total capacity is 16,000 gallons. Static water level is at approximately 7' below top of slab, currently retaining ~ 9150 gallons of presumably rain or groundwater infiltration.

US FWS M.Amann and refuge manager B.Peyton indicate the desired method of decommissioning the vault will be to break out the top of the concrete vault, prep and backfill with clean coral sand. This clean fill volume will be ~ 80 cubic yards to be hauled from the Borrow Source at the Cargo Pier.

Currently this morning the building will be torn down and hauled to the R2 and steel roof structure going to the recycle pile at the Boneyard. Soil work is paused pending the final removal of the top slab. The 4' diameter opening to the vault is plated with ¼" steel diamond plates of scrap steel doors temporarily.

1015 – At the east exterior wall of the R2, the low height concrete transformer Bldg 5338 is punched in and debris is set over into the R2 Cell 3.

NWDE arranges for a utility locate near Bldg 5378 Metal Shed near R2. Additionally, the former below grade water manifold and pumps located at the R2's southwest corner are being evaluated by DBSI. The water main piping running east/west from the R1 to R3 needs verified as to if the piping is still bolted up but isolated with valves. If the piping has not been severed and capped, then the demolition work inside the vault prior to building the abutment will need to be amended. Also there are two valve cans at the same southwest corner that will be within the toe of the final design R2 cover. Last year DBSI Water Plant indicated that these existing valves will need can extensions so the valves can be accessed from the surface with a key wrench.

1200 - Lunch

1300 – DBSI locates utilities north of the metal shed Bldg 5378. These are in use runs of below ground high voltage power, fiber optic, FAA Non Directional Beacon and former aircraft NavAids. The utilities are north of the prescriptive excavation area and will be potholed by hand as required prior to demo and soil work.

1315 – The 290 excavator #1108 is moving from the Sewage Pump work site to Bldg 9149 Power Plant Shed. The toothed bucket and repaired thumb hydraulic circuit will continue being used this afternoon for pulling the concrete slab. The CMU and metal sided building was removed on 10/1/16.
The concrete slab is processed through the afternoon and hauled to the R2 Cell 3. Noted is that steel expanded metal mesh was used in the concrete slab as reinforcing grid.

Bldg 5341 R2 Chlorination demolition has been underway this afternoon. The CMU walls and concrete roof are nearly all down. This site has a split level floor with the lower subterranean level as a pump room. The slab floor and lower level have yet to be broken up. Debris is loaded into the A30 off road trucks and is being placed within the R2 Cell 3.

1600 – Bldg 9149 Power Plant Shed concrete slab is being loaded up and nearing completion. In the southeast exterior corner of the slab foundation is a recessed steel tank situated below a process pump. The tank is approximately 3' x 3' x 3.5' tall and dry inside, no apparent signs of heavy fuels. It is lifted out of the concrete surround and the bottom inspected for indications of past fluid leaks. The tank bottom is in satisfactory condition and the underlying soils not impacted by fuel. The mild steel tank will be staged as required for inspection and disposal.

Today's DU-9 truck load counts includes 1 treated soil and 8.5 demo debris loads to the R2 with an additional 2 load of steel to the Boneyard recycling staging area, one load of clean concrete to the Seaplane apron crusher stockpile.

1730 – End of work day.

Photographs:

Photo 01: View southwest- Bldg 503 Barracks Substation removed and loaded out.

Photo 02: View southwest- Bldg 5126 Sewage Pump Station demolition begins.

Photo 03: View northeast- Bldg 5126 Sewage Pump Station concrete sump.

Photo 04: View west- Bldg 5339 Water Treatment CMU walls and concrete roof demo overview.

Photo 05: View west- Bldg 5338 Transformer Vault removal overview.

Photo 06: View west- Bldg 9149 Power Plant Shed empty steel day tank removal.

Photo 07: View southeast- Bldg 5341 R2 Chlorination pre demo.

Table 1. Maectite and Treated Soil Total Estimates

Date	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
	Soils (DU9)	(~)	(~)	NWDE Walls (DU9)	Iniki Walls (DU9)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/10/16	29			0	0	1091	3	40	1386
10/11/16	58			0	0	1149	6	80	1466
10/12/16	112[3]			0	0	1261	12	154	1619
10/13/16	18			0	0	1279	1	25	1644
10/14/16				0	0				
10/15/16				0	0				
Total to Date	1199 soil gallons			80.5 gallons	140 gallons		122.5 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 10/12/16 -Typo 1081 gallons should read 1181 gallons.

DU 9 – Bldg 170, 180, 200, 300, 340, S464, 502, 503, 520, S1119, S1123, 2127, 2411, 3506, 3509, 3511, 3514, 3524, 3529, 4201, 4214, 5126, 5267, 5295, 5301, 5339, 5340, 5341, 5342, 5350, 5360, 5361, 5378, 9149, R2 sand filter tanks, Fire Hydrants and other ancillary structures.

Table 2. Clean Backfill Total Estimates

Date /Loads		DU9 Clean Backfill Totals	
		Excavated and Placed Today in DU9 (cyd)	
		Cargo Pier Source Area	Total to Date in DU9 (cyd)
10/10/16	0	0	240
10/11/16	0	0	240
10/12/16	0	0	240
10/13/16	0	0	240
10/14/16			
10/15/16			
Total to date- 16 loads			

Notes:
A.

Date /Loads		Clean Backfill for misc slabs removed on island	
		Excavated and Placed Today for slabs (cyd)	
		Cargo Pier Source Area	Total to Date for slabs (cyd)
10/10/16	0	0	480
10/11/16	0	0	480
10/12/16	0	0	480
10/13/16	0	0	480
10/14/16			
10/15/16			
Total to date- 32 loads			

Notes:
A. Slabs removed are being process for clean 3” minus.

DU 5 BUTTRESS IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/10/2016	0	0	0	0	0	0
10/11/2016	0	0	0	0	0	0
10/12/2016	0	0	0	0	0	0
10/13/2016	0	0	0	0	0	0
10/14/2016	0	0	0	0	0	0
10/15/2016	0	0	0	0	0	0
Load count per wall	0	0	33	41		
15cuyd estimate per wall	0	0	495	615		
2016 Total R2 combined Buttress clean import LOADS				74		
Loads x 15cuyd estimate				1110		

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads	Clean Wood Loads	~	Clean coral backfill for R2 Ramp
10/10/16	13	0	1.5	0		0
10/11/16	12	0	1	0		0
10/12/16	6	2	1	0		0
10/13/16	8.5	1	2	0		0
10/14/16						
10/15/16						
Season Total	98 loads	50 loads	33 loads	0 loads		0 loads

Table 4. Soil Sample Collection-

0 collection points / 0 Whirlpak samples collected today, 0 sample refused:

-	-	-
-	-	-

Notes: 1. MIS confirmation sampling @ bottom of excavation specified MIS. Other sample IDs are 5-point composite 0-2" at small plots.
2. P points 0-6" are a 5-point composite.

Table 5. Demolition of Structures-

DECISION UNIT 9 BUILDING PROGRESS - 10/13/16

DENOTES UPDATE FROM LAST WEEK

DEMOLITION				
Facility #	Facility Name	Asbestos Abatement Complete (date)	Demolition Complete (date)	Soil Excavation
170	Switch Station Electrical Feeder 1	9/10/2016	9/21/2016	Full dig 09/22/16
180	Electrical Building	9/9/2016	9/21/2016	Full dig 09/22/16
200	Switch Station	9/29/2016	10/11/2016	Full dig 10/11/16
300	Fuel Farm Transform Bank (Fuels Office)	9/15/2016	9/28/2016	Full dig 09/29/16
340	Carpentry Shop substation	9/19/2016		
S464	Fuel Oil Pumphouse	N/A	9/29/2016	Full dig 10/01/16
502	AT&T Shed	9/12/2016	10/7/2016	Full dig 10/08/16
503	Barracks Substation	N/A	10/13/2016	Full dig 10/13/16
520	Fire Dept. Storage	9/24/2016	10/6/2016	Full dig 10/06/16
S1119	Tug Pier Substation	N/A	9/21/2016	Full dig 09/22/16
S1123	Electric Distribution Building	N/A	9/21/2016	Full dig 09/22/16
2127	POL Office	9/15/2016	9/27/2016	Full dig 09/29/16
2411	Fuel Farm Lab	N/A	9/28/2016	Full dig 09/29/16
3506	Liquid Oxygen Storage	9/29/2016	10/10/2016	Full dig 10/10/16
3509	Oxy/Acetylene Storage	N/A	10/1/2016	Full dig 10/03/16
3511	Sk1 Warehouse Transformer (substation)	9/20/2016	10/1/2016	Full dig 10/03/16
3514	Security Bldg. Storage @TOC	9/14/2016		
3524	Steam heat bldg.	N/A	10/8/2016	Scrape 10/11/16
3529	Midway Laundry	N/A	10/11/2016	Scrape 10/11/16
4201	JP-5 Pumping Station	N/A	10/1/2016	Full dig 10/01/16
4214	Substation electrical feeder 4	N/A	10/11/2016	Scrape 10/11/16
5126	Sewage Pump station	9/27/2016	10/13/2016 pending sump	
5267	Sewage Pump Transformer	9/20/2016	10/4/2016	Full dig 10/04/16
5295	Hangar Aux. Generator Bldg.	9/26/2016	10/7/2016	Full dig 10/07/16
5301	Runway light controls	N/A	10/12/2016	Full dig 10/12/16
5339	Water treatment Bldg. @ R2	9/28/2016	10/13/2016	
5340	Substation	9/29/2016	10/11/2016	Full dig 10/12/16
5341	R2 Chlorinator Bldg	N/A		
5342	Telephone Switch Bldg.	9/13/2016	10/8/2016	Scrape 10/8/16
5350	Electrical Switch station	N/A	10/11/2016	Full dig 10/12/16
5360	Substation	9/20/2016	10/3/2016	Full dig 10/06/16
5361	Switch Station Electrical Feeder 9	9/16/2016	10/2/2016	Full dig 10/06/16
5378	Metal Shed near R2	N/A		
9149	Power Plant shed	N/A	10/1/2016 structure- 10/13/16 slab	
R2	Tanks on West side	N/A		

LEAD PAINT ABATE/MAECTITE/LEAD STOP					
Facility #	Facility Name	Complete (date)	Facility #	Facility Name	Complete (date)
140	Substation	9/19/2016	8105	R1 Concrete block/vault	10/5/2016
S228	High Voltage Bldg.	9/19/2016		Ave Maria	10/3/2016
309	Power Plant #3	9/27/2016		Cross	9/15/2016
347	Water System Bldg.	9/30/2016		Platforms (2) R3 S3126W/S3127E	9/30/2016
425	Receiver Building - Satellite area	Trade for 400		Manholes (43)	10/6/2016
426	Satellite TV	Trade for 400		3 red AST by generator building 309	9/26/2016
1124	Waste Storage Building	9/15/2016			
S1126	Harbor Office/Buddhist Temple	9/15/2016	OPTIONS		
3501	Main Freshwater Pump station	9/30/2016	144	Power Plant	Maectite only 9/14/16
5004	Water Storage bldg.	Not Applicable	S361	Pesticide Storage	9/28/2016
5150	Sewage Pump Station	10/4/2016	400	BEQ Transformer Bldg.	10/5/2016
8106	Freshwater Substation	10/4/2016		FAA Bldg near R2	10/7/2016

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Friday, October 14, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 14 mph, Temperature ~84F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Roger Baker	U.S. FWS Historical Archeologist oversight

Equipment:

Description	Model No.	Comments / Serial #	
Pickup Truck	F350 Service Truck	- miles	#3139
Flatbed Truck	Ford F450	- miles	#0576
Container Truck	Peterbuilt		
Skid Steer	Bobcat S185	- hrs	#BC7030
Tracked Skid Steer	Bobcat T750	- hrs	#BC2200
Mini-Excavator	CAT 308	- hrs	#EX1928
Excavator	Volvo EC290BLC	- hrs	#EX1006
Excavator	Volvo EC290BLC	- hrs	#EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	85 gallons	10/13/16
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will be on DU-9 area soil treatment and demolition of listed buildings.

0735 – The west side of the R2, Bldg 5341 R2 Chlorination foundation slab is half removed and resumes the process to break out. The small wrecking ball is in use and effectively fractures the lower cast cement section below grade. Then the rubble is lifted out, steel rebar separated and loaded in to the A30 Volvo for the shortest haul route to date into the R2.

0810 - Bldg 9149 Power Plant Shed picks up where it left off yesterday afternoon to begin treating the full prescribed soil plot to 1'bgs. Maectite® is calculated to the manufacturer's specified rate of .75 gallons per cubic yard of soil, applied evenly from the tote using the pneumatic double diaphragm pump and 1" conveyance hose. Immediately following, the straight edged 290 bucket begins to fold and mix the materials as supplemental hydrant water is added. The mixture of liquids and soil are combined mechanically to a uniform consistency prior to excavating and hauling to the R2 Cell 3. This sandy material placement in the R2 is intermixed with demo debris to continue the buildup of a void free lift within the cells.

0845 – Confirmation sampling for Bldg 503 Barracks Substation.

0945 – Bldg 5341 R2 Chlorination steel that has been piled up is being loaded and moved by truck to the Boneyard recycling staging pile. The work area for the building removal is clearing up and moving north to the two landmark red steel sand filter tanks. These are former filtration units for processing water that were abandon as the R2 was years ago.

1025 – DBSI Water Plant operators return information for the valve vault tie in to the southwest corner of the R2. The expected 8" untreated water main that runs from the R1 catchment tanks to the R3 water plant is parallel to the R2's south wall. The steel plated vault valves and pumps are still physically bolted up to the tee fittings and the water main. In the vault to be decommissioned prior to the final R2 cover, two wheeled raising stem valves are shut which effectively isolate the R2 from the water main, as indicated by DBSI plant operator. A design consideration is needed to determine if the valves shall remain in place and be blanked off, then buried; or if the valves should be removed and the water mainline tee should be blind flanged.
A second action item will be the nearby two valve cans exterior of the vault, south of the vault that are relative to isolating the mainline pipe. These valve cans accessibility needs retained, and a pvc pipe extension will need to orient vertically to surface up through the southern toe of the final R2 design.

The red sand filter tanks are being dismantled using the toothed bucket on the 290 excavator. The lower 4' of filtration sand is being poured out through the hatch by tipping the tank. Sand removed is placed into the R2 Cell 4. Once the red steel tanks are empty they are trucked to the recycling steel pile. By noon tank 1 of 2 has been moved to the Boneyard.

Bldg 9149 Power Plant Shed soil treatment is near complete for the plot area.

1200 – Lunch

1230 – The Volvo truck and excavator near the power plant are moving to the next site, Bldg 340 Carpentry Shop Substation. This CMU walled structure is landlocked between the west asphalt road, previously abated northern DU-6, eastern location of Cannon Bldg 354 and concrete utility to the south. The small building is brought straight down, processed and loaded out to the R2. By the end of the day the walls and simple concrete slab is removed leaving only the small footprint void.

1400 – At the R2 former red tanks in the northwest corner the steel loading continues for piping and breaking out former concrete features. This includes the velocity dissipation basin that served as a spillway for the sand filter overflow plumbing prior to gravity draining into the taxiway inlet waterway.

1430 – Set and layout footprint of S29 AST at DU-8 Tank Farm. This is the previously removed 2+ million gallon fuel tank removed prior to the Navy's departure. This previously bermed area at S29 will have 0-6" composite samples collected in the same manner as S28 and S30.

1530 – At the west exterior wall of the R2, the red sand filter tank removal area is being cleaned up and shade cloth repositioned atop the soil grade. Soil work in the R2 areas is anticipated to occur no later than the 2017 season.

1650 – Bldg 340 Carpentry Shop Substation as noted above is wrapping up as demo debris is loaded up into the off road trucks final load.

Today's DU-9 truck load counts includes 8 treated soil and 5 demo debris loads to the R2 with an additional 6 loads of steel to the Boneyard recycling staging area, four loads of clean concrete to the Seaplane apron crusher stockpile.

1730 – End of work day.

Photographs:

Photo 01: View west- Bldg 9149 Power Plant Shed Maectite® application.

Photo 02: View northeast- Bldg 5126 Sewage Pump Station steel plates at vault access opening.

Photo 03: View west- Removal of Bldg 5338 Transformer (left) and Bldg 5339 Water Treatment (right)

Photo 04: View northwest- Bldg 5303 R2 Sand Filter #2 of 2 being loaded for scrap steel.

Photo 05: View northwest- Hauling scrap steel sand filter tank past work area Bldg 9149.

Photo 06: View southeast- Bldg 5303 R2 Sand Filter (left) and Bldg 5341 Chlorination (right) removed.

Photo 07: View southeast- Bldg 340 Carpentry Shop Substation demo overview.

Photo 08: View north- R2 southwest vault area with water main valves (indicated) needing isolation.

Photo 09: R2 southwest vault area with water main valves needing isolation.

Table 1. Maectite and Treated Soil Total Estimates

Date	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
	Soils (DU9)	(~)	(~)	NWDE Walls (DU9)	Iniki Walls (DU9)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/10/16	29			0	0	1091	3	40	1386
10/11/16	58			0	0	1149	6	80	1466
10/12/16	112			0	0	1261	12	154	1619
10/13/16	18			0	0	1279	1	25	1644
10/14/16	81			0	0		8	111	1755
10/15/16				0	0				
Total to Date	1280 soil gallons			80.5 gallons	140 gallons		130.5 loads		

Notes: 1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.

DU 9 – Bldg 170, 180, 200, 300, 340, S464, 502, 503, 520, S1119, S1123, 2127, 2411, 3506, 3509, 3511, 3514, 3524, 3529, 4201, 4214, 5126, 5267, 5295, 5301, 5339, 5340, 5341, 5342, 5350, 5360, 5361, 5378, 9149, R2 sand filter tanks, Fire Hydrants and other ancillary structures.

Table 2. Clean Backfill Total Estimates

Date /Loads		DU9 Clean Backfill Totals	
		Excavated and Placed Today in DU9 (cyd) Cargo Pier Source Area	Total to Date in DU9 (cyd)
10/10/16	0	0	240
10/11/16	0	0	240
10/12/16	0	0	240
10/13/16	0	0	240
10/14/16	0	0	240
10/15/16			
Total to date- 16 loads			

Notes:
A.

Date /Loads		Clean Backfill for misc slabs removed on island	
		Excavated and Placed Today for slabs (cyd) Cargo Pier Source Area	Total to Date for slabs (cyd)
10/10/16	0	0	480
10/11/16	0	0	480
10/12/16	0	0	480
10/13/16	0	0	480
10/14/16	0	0	480
10/15/16			
Total to date- 32 loads			

Notes:
A. Slabs removed are being process for clean 3” minus.

DU 5 BUTTRESS IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/10/2016	0	0	0	0	0	0
10/11/2016	0	0	0	0	0	0
10/12/2016	0	0	0	0	0	0
10/13/2016	0	0	0	0	0	0
10/14/2016	0	0	0	0	0	0
10/15/2016	0	0	0	0	0	0
Load count per wall	0	0	33	41		
15cuyd estimate per wall	0	0	495	615		
2016 Total R2 combined Buttress clean import LOADS				74		
Loads x 15cuyd estimate				1110		

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads	Clean Wood Loads	~	Clean coral backfill for R2 Ramp
10/10/16	13	0	1.5	0		0
10/11/16	12	0	1	0		0
10/12/16	6	2	1	0		0
10/13/16	8.5	1	2	0		0
10/14/16	5	4	6	0		0
10/15/16						
Season Total	103 loads	54 loads	39 loads	0 loads		0 loads

Table 4. Soil Sample Collection-

2 collection points / 4 Whirlpak samples collected today, 0 sample refused:

503 P100 0-2"	503 P101 0-2"	-
503 P100 0-2" DUP	503 P101 0-2" DUP	-

Notes: 1. MIS confirmation sampling @ bottom of excavation specified MIS. Other sample IDs are 5-point composite 0-2" at small plots.
2. P points 0-6" are a 5-point composite.

Table 5. Demolition of Structures-

DECISION UNIT 9 BUILDING PROGRESS - 10/14/16

DENOTES UPDATE FROM LAST WEEK

DEMOLITION				
Facility #	Facility Name	Asbestos Abatement Complete (date)	Demolition Complete (date)	Soil Excavation
170	Switch Station Electrical Feeder 1	9/10/2016	9/21/2016	Full dig 09/22/16
180	Electrical Building	9/9/2016	9/21/2016	Full dig 09/22/16
200	Switch Station	9/29/2016	10/11/2016	Full dig 10/11/16
300	Fuel Farm Transform Bank (Fuels Office)	9/15/2016	9/28/2016	Full dig 09/29/16
340	Carpentry Shop substation	9/19/2016	10/14/2016	
S464	Fuel Oil Pumphouse	N/A	9/29/2016	Full dig 10/01/16
502	AT&T Shed	9/12/2016	10/7/2016	Full dig 10/08/16
503	Barracks Substation	N/A	10/13/2016	Full dig 10/13/16
520	Fire Dept. Storage	9/24/2016	10/6/2016	Full dig 10/06/16
S1119	Tug Pier Substation	N/A	9/21/2016	Full dig 09/22/16
S1123	Electric Distribution Building	N/A	9/21/2016	Full dig 09/22/16
2127	POL Office	9/15/2016	9/27/2016	Full dig 09/29/16
2411	Fuel Farm Lab	N/A	9/28/2016	Full dig 09/29/16
3506	Liquid Oxygen Storage	9/29/2016	10/10/2016	Full dig 10/10/16
3509	Oxy/Acetylene Storage	N/A	10/1/2016	Full dig 10/03/16
3511	Sk1 Warehouse Transformer (substation)	9/20/2016	10/1/2016	Full dig 10/03/16
3514	Security Bldg. Storage @TOC	9/14/2016		
3524	Steam heat bldg.	N/A	10/8/2016	Scrape 10/11/16
3529	Midway Laundry	N/A	10/11/2016	Scrape 10/11/16
4201	JP-5 Pumping Station	N/A	10/1/2016	Full dig 10/01/16
4214	Substation electrical feeder 4	N/A	10/11/2016	Scrape 10/11/16
5126	Sewage Pump station	9/27/2016	10/13/2016 pending sump	
5267	Sewage Pump Transformer	9/20/2016	10/4/2016	Full dig 10/04/16
5295	Hangar Aux. Generator Bldg.	9/26/2016	10/7/2016	Full dig 10/07/16
5301	Runway light controls	N/A	10/12/2016	Full dig 10/12/16
5339	Water treatment Bldg. @ R2	9/28/2016	10/13/2016	
5340	Substation	9/29/2016	10/11/2016	Full dig 10/12/16
5341	R2 Chlorinator Bldg	N/A	10/14/2016	
5342	Telephone Switch Bldg.	9/13/2016	10/8/2016	Scrape 10/8/16
5350	Electrical Switch station	N/A	10/11/2016	Full dig 10/12/16
5360	Substation	9/20/2016	10/3/2016	Full dig 10/06/16
5361	Switch Station Electrical Feeder 9	9/16/2016	10/2/2016	Full dig 10/06/16
5378	Metal Shed near R2	N/A		
9149	Power Plant shed	N/A	10/1/2016 structure- 10/13/16 slab	Full dig 10/14/16
R2	Tanks on West side	N/A	10/14/2016	

LEAD PAINT ABATE/MAECTITE/LEAD STOP					
Facility #	Facility Name	Complete (date)	Facility #	Facility Name	Complete (date)
140	Substation	9/19/2016	8105	R1 Concrete block/vault	10/5/2016
S228	High Voltage Bldg.	9/19/2016		Ave Maria	10/3/2016
309	Power Plant #3	9/27/2016		Cross	9/15/2016
347	Water System Bldg.	9/30/2016		Platforms (2) R3 S3126W/S3127E	9/30/2016
425	Receiver Building - Satellite area	Trade for 400		Manholes (43)	10/6/2016
426	Satellite TV	Trade for 400		3 red AST by generator building 309	9/26/2016
1124	Waste Storage Building	9/15/2016			
S1126	Harbor Office/Buddhist Temple	9/15/2016	OPTIONS		
3501	Main Freshwater Pump station	9/30/2016	144	Power Plant	Maectite only 9/14/16
5004	Water Storage bldg.	Not Applicable	S361	Pesticide Storage	9/28/2016
5150	Sewage Pump Station	10/4/2016	400	BEQ Transformer Bldg.	10/5/2016
8106	Freshwater Substation	10/4/2016		FAA Bldg near R2	10/7/2016

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Saturday, October 15, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 14 mph, Temperature ~84F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Roger Baker	U.S. FWS Historical Archeologist oversight

Equipment:

Description	Model No.	Comments / Serial #	
Pickup Truck	F350 Service Truck	- miles	#3139
Flatbed Truck	Ford F450	- miles	#0576
Container Truck	Peterbuilt		
Skid Steer	Bobcat S185	- hrs	#BC7030
Tracked Skid Steer	Bobcat T750	- hrs	#BC2200
Mini-Excavator	CAT 308	- hrs	#EX1928
Excavator	Volvo EC290BLC	- hrs	#EX1006
Excavator	Volvo EC290BLC	- hrs	#EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	90 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will be on DU-9 area soil treatment and demolition of listed buildings.

0730 - The R2 site work resumes for rough grading the treated soil placement loads within Cell 3 & 4. The Volvo 290 excavator is positioning materials in addition to tracking across the waste materials to make a void free lift.

Building excavations are being addressed for finishing work including hand picking any debris at the demo area and removing wire or cables. The cables are cut when present and loaded into the off road truck for tipping at the recycling stockpile for wire.

0800 – Confirmation samples for Bldg 9149 Power Plant Shed.

0830 – US FWS M.Amann and NWDE S.Wakefield make rounds to the 35 demo sites for punchlist items, wires, concrete footings and planning of backfill work with clean coral sand. The current intention is that concrete footings and stem walls that are shown since excavating will be demolished in the 2017 season. With this, the backfill task can be delayed until the 2017 season at select sites. This includes S464 Fuel Oil Pump House, Bldg 4201 JP-5 Pumping Station, Bldg 502 AT&T, Bldg 5295 Hanger Aux Generator, Bldg 5126 Sewage Pump Station and Bldg 5342 Telephone Exchange.

0930 – At Bldg S464 Fuel Oil Pump House the ridge post I-Beams are cleared around the base to be torched off flush at a minimum 2' below finished backfill grade.

1130 – Wrapping up the site inspections of the 35 demo structures. NWDE continues to go to each site and finish the fine clean-up work for each plot and work area.

Note: Today TOC has brought in a barge with their project rock and the G3 charter flight with a crew. The large rap will be unloaded at the Kahana Pier and placed near the Transmitter Bldg 5309. NWDE work areas are coordinated to not conflict with TOC hauling activities.

1200 – Lunch

1230 – Bldg 340 Carpentry Shop Substation is being cleaned up, then moving west to Bldg 3509 and Bldg 3511. Small rubble and conduits, wires and piping is loaded for appropriate staging of recyclable materials. The rubble demo debris will be hauled to the R2 Cell 4. Throughout the afternoon NWDE continues clearing the plots that will soon be backfilled.

1400 – The south side of the R2 where Bldg 5378 Metal Shed was located is being worked at removing the structure and concrete slab. This soil plot area will be handled no later than the 2017 season.

1445 – At the Boneyard the two red sand filter tanks are being process to manageable sizes. This steel is pulled apart using the two 290 Volvo excavators.

Confirmation sampling 0-2" and P1, P2 0-6" for Bldg 4214 Substation Electrical Feeder 4. Adjoining border bands of soil left due to time and utility locations are collected with a 0-6" 5pt composite for future lab result data.

DU-8 layout resumes for S29 AST.

1600 – NWDE is placing the MB crusher bucket back onto one of the Volvo 290 excavators. Downsizing of materials will resume next week for the Seaplane apron stockpile of concrete for final R2 cover.

Today's DU-9 truck load counts includes 0 treated soil and 3 demo debris loads to the R2 with an additional 2 loads of steel to the Boneyard recycling staging area, one load of clean concrete to the Seaplane apron crusher stockpile.

1730 – End of work day.

Photographs:

Photo 01: View northeast- Processing the R2 red steel sand filter tanks to a more manageable size.

Photo 02: View north- Bldg 5378 Metal Shed removal overview.

Photo 03: View northeast- Bldg 5378 Metal Shed removal overview.

Photo 04: View north- Bldg S464 I-Beam posts prepared for cutting.

Photo 05: View southeast- Bldg 9149 Power Plant Shed prepped for backfill.

Table 1. Maectite and Treated Soil Total Estimates

Date	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
	Soils (DU9)	(~)	(~)	NWDE Walls (DU9)	Iniki Walls (DU9)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/10/16	29			0	0	1091	3	40	1386
10/11/16	58			0	0	1149	6	80	1466
10/12/16	112			0	0	1261	12	154	1619
10/13/16	18			0	0	1279	1	25	1644
10/14/16	81			0	0	1360	8	111	1755
10/15/16	0			0	0	1360	0	0	1755
Total to Date	1280 soil gallons			80.5 gallons	140 gallons		130.5 loads		

Notes: 1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.

DU 9 – Bldg 170, 180, 200, 300, 340, S464, 502, 503, 520, S1119, S1123, 2127, 2411, 3506, 3509, 3511, 3514, 3524, 3529, 4201, 4214, 5126, 5267, 5295, 5301, 5339, 5340, 5341, 5342, 5350, 5360, 5361, 5378, 9149, R2 sand filter tanks, Fire Hydrants and other ancillary structures.

Table 2. Clean Backfill Total Estimates

Date /Loads		DU9 Clean Backfill Totals	
		Excavated and Placed Today in DU9 (cyd)	
		Cargo Pier Source Area	Total to Date in DU9 (cyd)
10/10/16	0	0	240
10/11/16	0	0	240
10/12/16	0	0	240
10/13/16	0	0	240
10/14/16	0	0	240
10/15/16	0	0	0
Total to date- 16 loads			

Notes:
A.

Date /Loads		Clean Backfill for misc slabs removed on island	
		Excavated and Placed Today for slabs (cyd)	
		Cargo Pier Source Area	Total to Date for slabs (cyd)
10/10/16	0	0	480
10/11/16	0	0	480
10/12/16	0	0	480
10/13/16	0	0	480
10/14/16	0	0	480
10/15/16	0	0	480
Total to date- 32 loads			

Notes:
A. Slabs removed are being process for clean 3” minus.

DU 5 BUTTRESS IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/10/2016	0	0	0	0	0	0
10/11/2016	0	0	0	0	0	0
10/12/2016	0	0	0	0	0	0
10/13/2016	0	0	0	0	0	0
10/14/2016	0	0	0	0	0	0
10/15/2016	0	0	0	0	0	0
Load count per wall	0	0	33	41		
15cuyd estimate per wall	0	0	495	615		
2016 Total R2 combined Buttress clean import LOADS				74		
Loads x 15cuyd estimate				1110		

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads	Clean Wood Loads	~	Clean coral backfill for R2 Ramp
10/10/16	13	0	1.5	0		0
10/11/16	12	0	1	0		0
10/12/16	6	2	1	0		0
10/13/16	8.5	1	2	0		0
10/14/16	5	4	6	0		0
10/15/16	3	1	2	0		0
Season Total	106 loads	55 loads	41 loads	0 loads		0 loads

Table 4. Soil Sample Collection-

6 collection points / 10 Whirlpak samples collected today, 0 sample refused:

9149 P100 0-2"	9149 P102 0-2"	4214 P1 0-6"
9149 P100 0-2" DUP	9149 P102 0-2" DUP	4214 P2 0-6"
9149 P101 0-2"	4212 P100 0-2"	-
9149 P101 0-2" DUP	4214 P100 0-2" DUP	-

Notes:
1. MIS confirmation sampling @ bottom of excavation specified MIS. Other sample IDs are 5-point composite 0-2" at small plots.
2. P points 0-6" are a 5-point composite.

Table 5. Demolition of Structures-

DECISION UNIT 9 BUILDING PROGRESS - 10/15/16

DENOTES UPDATE FROM LAST WEEK

DEMOLITION				
Facility #	Facility Name	Asbestos Abatement Complete (date)	Demolition Complete (date)	Soil Excavation
170	Switch Station Electrical Feeder 1	9/10/2016	9/21/2016	Full dig 09/22/16
180	Electrical Building	9/9/2016	9/21/2016	Full dig 09/22/16
200	Switch Station	9/29/2016	10/11/2016	Full dig 10/11/16
300	Fuel Farm Transform Bank (Fuels Office)	9/15/2016	9/28/2016	Full dig 09/29/16
340	Carpentry Shop substation	9/19/2016	10/14/2016	
S464	Fuel Oil Pumphouse	N/A	9/29/2016	Full dig 10/01/16
502	AT&T Shed	9/12/2016	10/7/2016	Full dig 10/08/16
503	Barracks Substation	N/A	10/13/2016	Full dig 10/13/16
520	Fire Dept. Storage	9/24/2016	10/6/2016	Full dig 10/06/16
S1119	Tug Pier Substation	N/A	9/21/2016	Full dig 09/22/16
S1123	Electric Distribution Building	N/A	9/21/2016	Full dig 09/22/16
2127	POL Office	9/15/2016	9/27/2016	Full dig 09/29/16
2411	Fuel Farm Lab	N/A	9/28/2016	Full dig 09/29/16
3506	Liquid Oxygen Storage	9/29/2016	10/10/2016	Full dig 10/10/16
3509	Oxy/Acetylene Storage	N/A	10/1/2016	Full dig 10/03/16
3511	Sk1 Warehouse Transformer (substation)	9/20/2016	10/1/2016	Full dig 10/03/16
3514	Security Bldg. Storage @TOC	9/14/2016		
3524	Steam heat bldg.	N/A	10/8/2016	Scrape 10/11/16
3529	Midway Laundry	N/A	10/11/2016	Scrape 10/11/16
4201	JP-5 Pumping Station	N/A	10/1/2016	Full dig 10/01/16
4214	Substation electrical feeder 4	N/A	10/11/2016	Scrape 10/11/16
5126	Sewage Pump station	9/27/2016	10/13/2016 pending sump	
5267	Sewage Pump Transformer	9/20/2016	10/4/2016	Full dig 10/04/16
5295	Hangar Aux. Generator Bldg.	9/26/2016	10/7/2016	Full dig 10/07/16
5301	Runway light controls	N/A	10/12/2016	Full dig 10/12/16
5339	Water treatment Bldg. @ R2	9/28/2016	10/13/2016	2017
5340	Substation	9/29/2016	10/11/2016	Full dig 10/12/16
5341	R2 Chlorinator Bldg	N/A	10/14/2016	2017
5342	Telephone Switch Bldg.	9/13/2016	10/8/2016	Scrape 10/8/16
5350	Electrical Switch station	N/A	10/11/2016	Full dig 10/12/16
5360	Substation	9/20/2016	10/3/2016	Full dig 10/06/16
5361	Switch Station Electrical Feeder 9	9/16/2016	10/2/2016	Full dig 10/06/16
5378	Metal Shed near R2	N/A	10/15/2016	2017
9149	Power Plant shed	N/A	10/1/2016 structure- 10/13/16 slab	Full dig 10/14/16
R2	Tanks on West side	N/A	10/14/2016	2017

LEAD PAINT ABATE/MAECTITE/LEAD STOP					
Facility #	Facility Name	Complete (date)	Facility #	Facility Name	Complete (date)
140	Substation	9/19/2016	8105	R1 Concrete block/vault	10/5/2016
S228	High Voltage Bldg.	9/19/2016		Ave Maria	10/3/2016
309	Power Plant #3	9/27/2016		Cross	9/15/2016
347	Water System Bldg.	9/30/2016		Platforms (2) R3 S3126W/S3127E	9/30/2016
425	Receiver Building - Satellite area	Trade for 400		Manholes (43)	10/6/2016
426	Satellite TV	Trade for 400		3 red AST by generator building 309	9/26/2016
1124	Waste Storage Building	9/15/2016			
S1126	Harbor Office/Buddhist Temple	9/15/2016	OPTIONS		
3501	Main Freshwater Pump station	9/30/2016	144	Power Plant	Maectite only 9/14/16
5004	Water Storage bldg.	Not Applicable	S361	Pesticide Storage	9/28/2016
5150	Sewage Pump Station	10/4/2016	400	BEQ Transformer Bldg.	10/5/2016
8106	Freshwater Substation	10/4/2016		FAA Bldg near R2	10/7/2016

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Sunday, October 16, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 9 mph, Temperature ~84F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	0
Jevon Stone	NWDE Operator	0
Ruth Inmon	NWDE Operator	0
Viavia Manuma	NWDE Laborer	0
Joel Smith	NWDE Laborer	0
Matt Manning	NWDE Operator	0

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #	
Pickup Truck	F350 Service Truck	- miles	#3139
Flatbed Truck	Ford F450	- miles	#0576
Container Truck	Peterbuilt		
Skid Steer	Bobcat S185	- hrs	#BC7030
Tracked Skid Steer	Bobcat T750	- hrs	#BC2200
Mini-Excavator	CAT 308	- hrs	#EX1928
Excavator	Volvo EC290BLC	- hrs	#EX1006
Excavator	Volvo EC290BLC	- hrs	#EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Tailgate safety meeting.

Today's focus is layout and collection of DU-8 additional soil sampling at the Fuel Farm. This includes; S29 AST previously removed by the Navy. ~ 800 foot above ground pipe run from the Fuel Pier to the manifold and roadway. DU-9 Painted bollards along roadway between Bldg 2411 POL Office and Bldg 300 Fuel Farm Transformer Bank. DU-9 sampling south of R3.
Pipe run composite points (3 wide) are spaced 100', one centered under pipes and one each side of piping at the 15' buffer.
Collect, document and update figures.

1000 – Brunch

1730 – End of work day.

Table 4. Soil Sample Collection-

37 collection points / 43 Whirlpak samples collected today, 0 sample refused: Season total = 193

S29 P1 0-6"	PIPE P5 0-6"	PIPE P19 0-6"
S29 P2 0-6"	PIPE P6 0-6"	PIPE P20 0-6"
S29 P3 0-6"	PIPE P7 0-6"	PIPE P21 0-6"
S29 P4 0-6"	PIPE P8 0-6"	PIPE P22 0-6"
S29 P5 0-6"	PIPE P9 0-6"	PIPE P23 0-6"
S29 P6 0-6"	PIPE P10 0-6"	PIPE P24 0-6"
S29 P7 0-6"	PIPE P11 0-6"	PIPE P24 0-6" DUP
S29 P8 0-6"	PIPE P12 0-6"	Bollard P1 MID 0-6"
S29 P8 0-6" DUP	PIPE P13 0-6"	Bollard P2 NEAR 0-6"
S29 P9 0-6"	PIPE P14 0-6"	3127W P7 0-6"
PIPE P1 0-6"	PIPE P15 0-6"	3127W P7 12-18"
PIPE P2 0-6"	PIPE P16 0-6"	3127W P7 24-30"
PIPE P3 0-6"	PIPE P17 0-6"	3127W P8 0-6"
PIPE P4 0-6"	PIPE P18 0-6"	3127W P8 12-18"
-	-	3127W P8 24-30"

Notes:
1. MIS confirmation sampling @ bottom of excavation specified MIS. Other sample IDs are 5-point composite 0-2" at small plots.
2. P points 0-6" are a 5-point composite.

Photo 01: View northeast- DU-8 Tank Farm manifold and pipe run (removed 2015 NWDE.)

Photo 02: View north, northeast- DU-8 Tank Farm S29 (removed by Navy.) Green is appx radius point.

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Monday, October 17, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 5 mph, Temperature ~83F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Roger Baker	U.S. FWS Historical Archeologist oversight

Equipment:

Description	Model No.	Comments / Serial #	
Pickup Truck	F350 Service Truck	- miles	#3139
Flatbed Truck	Ford F450	- miles	#0576
Container Truck	Peterbuilt		
Skid Steer	Bobcat S185	- hrs	#BC7030
Tracked Skid Steer	Bobcat T750	- hrs	#BC2200
Mini-Excavator	CAT 308	- hrs	#EX1928
Excavator	Volvo EC290BLC	- hrs	#EX1006
Excavator	Volvo EC290BLC	- hrs	#EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	185 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will be on DU-9 area soil treatment and demolition of listed buildings.

0730 – The excavator change-out is continuing to install the MB crusher bucket and prepare to resume downsizing stockpiles of clean concrete. By 9am the 290 Volvo is back to processing materials for the target 3" minus. For a short duration the other 290 excavator is sorting ahead of the crusher to push out blocks of concrete not suited for running. Throughout the day the skidsteer is in use to move materials as needed and picking steel out from the processed pipe.

0900 – Check with DBSI utilities for alternate locate to access Bldg 3514 Security Storage. The TOC residence previously known as the Internet Café limits access to the small structure for demo. Compounding the site is also nearly every utility oriented north/ south & east/west including a small potable water line, fire suppression line, 16" water main, electric house service, sewer and main hub distribution for fiber optic. Access is decided to be west of the residence. Hand pothole for utilities in the access route.

0930 – Bldg S464 Fuel Oil Pump House is being cleared off within the concrete footing. The three 10" I-Beam steel posts are being cut at 2' below target finished backfill grade.

1040 – Confirmation sampling at Bldg 340 Carpentry Shop Substation.
NWDE is completing the last few building sites using the saw, mini excavator and truck to remove wires, steel and conduit prior to backfilling. Small debris is also being hand-picked and moved to the R2.

1200 – Lunch

1230 – Add extension collar for the 24" dia vertical casing and cap with plate at Bldg 520 Fire Dept Storage.

1300 – Last details are gone over to access Bldg 3514 Security Storage relative to the in-use below ground utilities, low overhanging trees and residence roof extension. Moving in equipment to the small workspace to begin demolition of the CMU walls and wooden plywood roof.

1530 – The building and slab have been removed, loaded into the two A30 trucks and sent to the R2 Cell 4. Hand pick misc debris and mobilize out of the work area.

Bldg 3514 is the last structure to pull down. Begin changing tasks from demo to backfill which include decon of the Volvo trucks and excavator. Mobilize machines to the borrow source Cargo Pier area along with the tracked Bobcat skidsteer to begin backfilling the DU-9 sites. Starting at Bldg 2411 Fuel Farm Lab and working east along the roadway the sites will be filled to above finished grade to allow for settling and roughed out with the skidsteer bucket. As the afternoon wraps up eight loads are placed of clean coral sand.

1645 –The MB crusher bucket continues downsizing of materials at the Seaplane apron stockpile of concrete for final R2 cover.

Today's DU-9 truck load counts includes 0 treated soil and 3 demo debris loads to the R2 with an additional 1 load of steel to the Boneyard recycling staging area, 8 loads of clean coral sand backfill.

1730 – End of work day.

Photographs:

Photo 01: View northwest- Bldg 3514 Security Storage overview.

Photo 02: View northwest- Bldg 3514 Security Storage overview.

Photo 03: View north- Concrete processing resumes at the Seaplane apron.

Photo 04: View southwest- Bldg S464 Fuel Oil Pump House I-Beam posts cutting.

Photo 05: View southwest- Bldg S464 Fuel Oil Pump House with I-Beam posts removed.

Photo 06: View east- Clean coral backfill at former Bldg 300 Fuel Farm Transformer Bank.

Table 1. Maectite and Treated Soil Total Estimates

Date	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
	Soils (DU9)	(~)	(~)	NWDE Walls (DU9)	Iniki Walls (DU9)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/17/16	0			0	0	1360	0	0	1755
10/18/16				0	0				
10/19/16				0	0				
10/20/16				0	0				
10/21/16				0	0				
10/22/16				0	0				
Total to Date	1280 soil gallons			80.5 gallons	140 gallons		130.5 loads		

Notes: 1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.

DU 9 – Bldg 170, 180, 200, 300, 340, S464, 502, 503, 520, S1119, S1123, 2127, 2411, 3506, 3509, 3511, 3514, 3524, 3529, 4201, 4214, 5126, 5267, 5295, 5301, 5339, 5340, 5341, 5342, 5350, 5360, 5361, 5378, 9149, R2 sand filter tanks, Fire Hydrants and other ancillary structures.

Table 2. Clean Backfill Total Estimates

Date /Loads		DU9 Clean Backfill Totals	
		Excavated and Placed Today in DU9 (cyd) Cargo Pier Source Area	Total to Date in DU9 (cyd)
10/17/16	8	120	360
10/18/16			
10/19/16			
10/20/16			
10/21/16			
10/22/16			
Total to date- 24 loads			

Notes:
A.

Date /Loads		Clean Backfill for misc slabs removed on island	
		Excavated and Placed Today for slabs (cyd) Cargo Pier Source Area	Total to Date for slabs (cyd)
10/17/16	0	0	480
10/18/16			
10/19/16			
10/20/16			
10/21/16			
10/22/16			
Total to date- 32 loads			

Notes:
A. Slabs removed are being process for clean 3” minus.

DU 5 BUTTRESS IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/17/2016	0	0	0	0	0	0
10/18/2016	0	0	0	0	0	0
10/19/2016	0	0	0	0	0	0
10/20/2016	0	0	0	0	0	0
10/21/2016	0	0	0	0	0	0
10/22/2016	0	0	0	0	0	0
Load count per wall	0	0	33	41		
15cuyd estimate per wall	0	0	495	615		
2016 Total R2 combined Buttress clean import LOADS				74		
Loads x 15cuyd estimate				1110		

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads	Clean Wood Loads	~	Clean coral backfill for R2 Ramp
10/17/16	3	0	1	0		0
10/18/16						
10/19/16						
10/20/16						
10/21/16						
10/22/16						
Season Total	109 loads	55 loads	42 loads	0 loads		0 loads

Table 4. Soil Sample Collection-

6 collection points / 12 Whirlpak samples collected today, 0 sample refused: Season Total = 205 samples

340 P100 0-2"	5301 P100 0-2"	5301 P102 0-2"
340 P100 0-2" DUP	5301 P100 0-2" DUP	5301 P102 0-2" DUP
340 P101 0-2"	5301 P101 0-2"	5301 P103 0-2"
340 P101 0-2" DUP	5301 P101 0-2" DUP	5301 P103 0-2" DUP

Notes: 1. MIS confirmation sampling @ bottom of excavation specified MIS. Other sample IDs are 5-point composite 0-2" at small plots.
2. P points 0-6" are a 5-point composite.

Table 5. Demolition of Structures-

DECISION UNIT 9 BUILDING PROGRESS - 10/17/16

DENOTES UPDATE FROM LAST WEEK
2017 = Soil & Confirmation next season

DEMOLITION				
Facility #	Facility Name	Asbestos Abatement Complete (date)	Demolition Complete (date)	Soil Excavation
170	Switch Station Electrical Feeder 1	9/10/2016	9/21/2016	Full dig 09/22/16
180	Electrical Building	9/9/2016	9/21/2016	Full dig 09/22/16
200	Switch Station	9/29/2016	10/11/2016	Full dig 10/11/16
300	Fuel Farm Transform Bank (Fuels Office)	9/15/2016	9/28/2016	Full dig 09/29/16
340	Carpentry Shop substation	9/19/2016	10/14/2016	Full dig 10/15/16
S464	Fuel Oil Pumphouse	N/A	9/29/2016	Full dig 10/01/16
502	AT&T Shed	9/12/2016	10/7/2016	Full dig 10/08/16
503	Barracks Substation	N/A	10/13/2016	Full dig 10/13/16
520	Fire Dept. Storage	9/24/2016	10/6/2016	Full dig 10/06/16
S1119	Tug Pier Substation	N/A	9/21/2016	Full dig 09/22/16
S1123	Electric Distribution Building	N/A	9/21/2016	Full dig 09/22/16
2127	POL Office	9/15/2016	9/27/2016	Full dig 09/29/16
2411	Fuel Farm Lab	N/A	9/28/2016	Full dig 09/29/16
3506	Liquid Oxygen Storage	9/29/2016	10/10/2016	Full dig 10/10/16
3509	Oxy/Acetylene Storage	N/A	10/1/2016	Full dig 10/03/16
3511	Sk1 Warehouse Transformer (substation)	9/20/2016	10/1/2016	Full dig 10/03/16
3514	Security Bldg. Storage @TOC	9/14/2016	10/17/2016	2017
3524	Steam heat bldg.	N/A	10/8/2016	2017
3529	Midway Laundry	N/A	10/11/2016	2017
4201	JP-5 Pumping Station	N/A	10/1/2016	Full dig 10/01/16
4214	Substation electrical feeder 4	N/A	10/11/2016	Scrape 10/11/16
5126	Sewage Pump station	9/27/2016	10/13/2016 pending sump	2017
5267	Sewage Pump Transformer	9/20/2016	10/4/2016	Full dig 10/04/16
5295	Hangar Aux. Generator Bldg.	9/26/2016	10/7/2016	Full dig 10/07/16
5301	Runway light controls	N/A	10/12/2016	Full dig 10/12/16
5339	Water treatment Bldg. @ R2	9/28/2016	10/13/2016	2017
5340	Substation	9/29/2016	10/11/2016	Full dig 10/12/16
5341	R2 Chlorinator Bldg	N/A	10/14/2016	2017
5342	Telephone Switch Bldg.	9/13/2016	10/8/2016	2017
5350	Electrical Switch station	N/A	10/11/2016	Full dig 10/12/16
5360	Substation	9/20/2016	10/3/2016	Full dig 10/06/16
5361	Switch Station Electrical Feeder 9	9/16/2016	10/2/2016	Full dig 10/06/16
5378	Metal Shed near R2	N/A	10/15/2016	2017
9149	Power Plant shed	N/A	10/1/2016 structure- 10/13/16 slab	Full dig 10/14/16
R2	Tanks on West side	N/A	10/14/2016	2017

LEAD PAINT ABATE/MAECTITE/LEAD STOP					
Facility #	Facility Name	Complete (date)	Facility #	Facility Name	Complete (date)
140	Substation	9/19/2016	8105	R1 Concrete block/vault	10/5/2016
S228	High Voltage Bldg.	9/19/2016		Ave Maria	10/3/2016
309	Power Plant #3	9/27/2016		Cross	9/15/2016
347	Water System Bldg.	9/30/2016		Platforms (2) R3 S3126W/S3127E	9/30/2016
425	Receiver Building - Satellite area	Trade for 400		Manholes (43)	10/6/2016
426	Satellite TV	Trade for 400		3 red AST by generator building 309	9/26/2016
1124	Waste Storage Building	9/15/2016			
S1126	Harbor Office/Buddhist Temple	9/15/2016	OPTIONS		
3501	Main Freshwater Pump station	9/30/2016	144	Power Plant	Maectite only 9/14/16
5004	Water Storage bldg.	Not Applicable	S361	Pesticide Storage	9/28/2016
5150	Sewage Pump Station	10/4/2016	400	BEQ Transformer Bldg.	10/5/2016
8106	Freshwater Substation	10/4/2016		FAA Bldg near R2	10/7/2016

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Tue, October 18, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 12 mph, Temperature ~84F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Roger Baker	U.S. FWS Historical Archeologist oversight

Equipment:

Description	Model No.	Comments / Serial #	
Pickup Truck	F350 Service Truck	- miles	#3139
Flatbed Truck	Ford F450	- miles	#0576
Container Truck	Peterbuilt		
Skid Steer	Bobcat S185	- hrs	#BC7030
Tracked Skid Steer	Bobcat T750	- hrs	#BC2200
Mini-Excavator	CAT 308	- hrs	#EX1928
Excavator	Volvo EC290BLC	- hrs	#EX1006
Excavator	Volvo EC290BLC	- hrs	#EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	96 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will be on DU-9 area tasks for backfilling excavation areas.

0730 – Crushing concrete continues at the Seaplane apron with the 290 excavator and MB crusher bucket.

This morning backfilling the selected demolition and excavated sites will continue at the Fuel Farm, working west across the island. The clean coral sand is being loaded into the two A30 Volvo trucks from the approved Cargo Pier area.
A biological monitor is onsite to visually spot for sea life during equipment operation. Birds, Green Sea Turtles and Hawaiian Monk Seals are the primary animals of concern. The monitor will advise if animals are present and halt work as required.

Bldg 4213 Ave Maria, Bldg 4205, Bldg 4206, Bldg 4207 previously removed buildings proposed for soil sampling are checked for initial layout of points. Additional references are gathered from DBSI and US FWS maps.

At Bldg 520 Fire Dept Storage the previously discovered 23.5" vertical well casing is protected in place with a heavy wall corrugated pvc extension collar and ¼" steel plate that finish near grade. This will allow backfilling with clean sand around the collar. A secondary HDPE plug is within the collar to casing connection for keeping out debris.

1030 – At the Tank Farm import sand is being roughed in using the tracked skidsteer and mini excavator. Loads continue being hauled to various DU-9 excavated areas. The exclusions will be foundations or concrete footings that are planned to be removed next season; Bldg S464, 4201, 502, 5126, 5295, 5342.

1100 – Weekly conference call with Mainland and Hawaii project offices. See NWDE Midway Meeting Agenda for specific detail.

1200 – Lunch

1430 – Continue layout of Bldg 4213 Ave Maria former location. The site indicators after review are an overgrown road looping around Bldgs 4205, 4206 & 4207 and Naupaka shrubbery growth within the estimated footprints of the four removed buildings.

Through the afternoon clean coral sand continues to be loaded and hauled in the two Volvo off road trucks. The primary task is load placement and will be followed up with rough grading, additional fill if needed and then final grade.

The bucket crusher has maintained steady progress to downsize the concrete to 3" minus. Continue downsizing all day.

Today's DU-9 truck load counts includes 0 treated soil and 0 demo debris loads to the R2 with an additional 0 load of steel to the Boneyard recycling staging area, 45 loads of clean coral sand backfill.

1730 – End of work day.

Photographs:

Photo 01: View west- Loading clean coral sand at the Borrow Source.

Photo 02: View east- Bldg 2127 POL Office backfill overview.

Photo 03: View north- Concrete processing continues at the Seaplane apron.

Photo 04: View southeast- Bldg 5361 Switch Station Electrical Feeder 9 backfill overview.

Photo 05: View southeast- Bldg 502 Fire Dept Storage well collar, plate and inner plug.

Photo 06: View south- Clean coral backfill at former Bldg 2411 Fuel Farm Lab.

Table 1. Maectite and Treated Soil Total Estimates

Date	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
	Soils (DU9)	(~)	(~)	NWDE Walls (DU9)	Iniki Walls (DU9)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/17/16	0			0	0	1360	0	0	1755
10/18/16	0			0	0	1360	0	0	1755
10/19/16									
10/20/16									
10/21/16									
10/22/16									
Total to Date	1280 soil gallons			80.5 gallons	140 gallons		130.5 loads		

Notes: 1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.

DU 9 – Bldg 170, 180, 200, 300, 340, S464, 502, 503, 520, S1119, S1123, 2127, 2411, 3506, 3509, 3511, 3514, 3524, 3529, 4201, 4214, 5126, 5267, 5295, 5301, 5339, 5340, 5341, 5342, 5350, 5360, 5361, 5378, 9149, R2 sand filter tanks, Fire Hydrants and other ancillary structures.

Table 2. Clean Backfill Total Estimates

Date /Loads		DU9 Clean Backfill Totals	
		Excavated and Placed Today in DU9 (cyd) Cargo Pier Source Area	Total to Date in DU9 (cyd)
10/17/16	8	120	360
10/18/16	45	675	1035
10/19/16			
10/20/16			
10/21/16			
10/22/16			
Total to date- 69 loads			

Notes:
A.

Date /Loads		Clean Backfill for misc slabs removed on island	
		Excavated and Placed Today for slabs (cyd) Cargo Pier Source Area	Total to Date for slabs (cyd)
10/17/16	0	0	480
10/18/16	0	0	480
10/19/16			
10/20/16			
10/21/16			
10/22/16			
Total to date- 32 loads			

Notes:
A. Slabs removed are being process for clean 3” minus.

DU 5 BUTTRESS IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/17/2016	0	0	0	0	0	0
10/18/2016	0	0	0	0	0	0
10/19/2016	0	0	0	0	0	0
10/20/2016	0	0	0	0	0	0
10/21/2016	0	0	0	0	0	0
10/22/2016	0	0	0	0	0	0
Load count per wall	0	0	33	41		
15cuyd estimate per wall	0	0	495	615		
2016 Total R2 combined Buttress clean import LOADS				74		
Loads x 15cuyd estimate				1110		

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads	Clean Wood Loads	~	Clean coral backfill for R2 Ramp
10/17/16	3	0	1	0		0
10/18/16	0	0	0	0		0
10/19/16						
10/20/16						
10/21/16						
10/22/16						
Season Total	109 loads	55 loads	42 loads	0 loads		0 loads

Table 4. Soil Sample Collection-

0 collection points / 0 Whirlpak samples collected today, 0 sample refused: Season Total = 205 samples

-	-	-
-	-	-
-	-	-
-	-	-

Notes: 1. MIS confirmation sampling @ bottom of excavation specified MIS. Other sample IDs are 5-point composite 0-2" at small plots.
2. P points 0-6" are a 5-point composite.

Table 5. Demolition of Structures-

DECISION UNIT 9 BUILDING PROGRESS - 10/17/16

DENOTES UPDATE FROM LAST WEEK
2017 = Soil & Confirmation next season

DEMOLITION				
Facility #	Facility Name	Asbestos Abatement Complete (date)	Demolition Complete (date)	Soil Excavation
170	Switch Station Electrical Feeder 1	9/10/2016	9/21/2016	Full dig 09/22/16
180	Electrical Building	9/9/2016	9/21/2016	Full dig 09/22/16
200	Switch Station	9/29/2016	10/11/2016	Full dig 10/11/16
300	Fuel Farm Transform Bank (Fuels Office)	9/15/2016	9/28/2016	Full dig 09/29/16
340	Carpentry Shop substation	9/19/2016	10/14/2016	Full dig 10/15/16
S464	Fuel Oil Pumphouse	N/A	9/29/2016	Full dig 10/01/16
502	AT&T Shed	9/12/2016	10/7/2016	Full dig 10/08/16
503	Barracks Substation	N/A	10/13/2016	Full dig 10/13/16
520	Fire Dept. Storage	9/24/2016	10/6/2016	Full dig 10/06/16
S1119	Tug Pier Substation	N/A	9/21/2016	Full dig 09/22/16
S1123	Electric Distribution Building	N/A	9/21/2016	Full dig 09/22/16
2127	POL Office	9/15/2016	9/27/2016	Full dig 09/29/16
2411	Fuel Farm Lab	N/A	9/28/2016	Full dig 09/29/16
3506	Liquid Oxygen Storage	9/29/2016	10/10/2016	Full dig 10/10/16
3509	Oxy/Acetylene Storage	N/A	10/1/2016	Full dig 10/03/16
3511	Sk1 Warehouse Transformer (substation)	9/20/2016	10/1/2016	Full dig 10/03/16
3514	Security Bldg. Storage @TOC	9/14/2016	10/17/2016	2017
3524	Steam heat bldg.	N/A	10/8/2016	2017
3529	Midway Laundry	N/A	10/11/2016	2017
4201	JP-5 Pumping Station	N/A	10/1/2016	Full dig 10/01/16
4214	Substation electrical feeder 4	N/A	10/11/2016	Scrape 10/11/16
5126	Sewage Pump station	9/27/2016	10/13/2016 pending sump	2017
5267	Sewage Pump Transformer	9/20/2016	10/4/2016	Full dig 10/04/16
5295	Hangar Aux. Generator Bldg.	9/26/2016	10/7/2016	Full dig 10/07/16
5301	Runway light controls	N/A	10/12/2016	Full dig 10/12/16
5339	Water treatment Bldg. @ R2	9/28/2016	10/13/2016	2017
5340	Substation	9/29/2016	10/11/2016	Full dig 10/12/16
5341	R2 Chlorinator Bldg	N/A	10/14/2016	2017
5342	Telephone Switch Bldg.	9/13/2016	10/8/2016	2017
5350	Electrical Switch station	N/A	10/11/2016	Full dig 10/12/16
5360	Substation	9/20/2016	10/3/2016	Full dig 10/06/16
5361	Switch Station Electrical Feeder 9	9/16/2016	10/2/2016	Full dig 10/06/16
5378	Metal Shed near R2	N/A	10/15/2016	2017
9149	Power Plant shed	N/A	10/1/2016 structure- 10/13/16 slab	Full dig 10/14/16
R2	Tanks on West side	N/A	10/14/2016	2017

LEAD PAINT ABATE/MAECTITE/LEAD STOP					
Facility #	Facility Name	Complete (date)	Facility #	Facility Name	Complete (date)
140	Substation	9/19/2016	8105	R1 Concrete block/vault	10/5/2016
S228	High Voltage Bldg.	9/19/2016		Ave Maria	10/3/2016
309	Power Plant #3	9/27/2016		Cross	9/15/2016
347	Water System Bldg.	9/30/2016		Platforms (2) R3 S3126W/S3127E	9/30/2016
425	Receiver Building - Satellite area	Trade for 400		Manholes (43)	10/6/2016
426	Satellite TV	Trade for 400		3 red AST by generator building 309	9/26/2016
1124	Waste Storage Building	9/15/2016			
S1126	Harbor Office/Buddhist Temple	9/15/2016	OPTIONS		
3501	Main Freshwater Pump station	9/30/2016	144	Power Plant	Maectite only 9/14/16
5004	Water Storage bldg.	Not Applicable	S361	Pesticide Storage	9/28/2016
5150	Sewage Pump Station	10/4/2016	400	BEQ Transformer Bldg.	10/5/2016
8106	Freshwater Substation	10/4/2016		FAA Bldg near R2	10/7/2016

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Wednesday, October 19, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 12 mph, Temperature ~84F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #	
Pickup Truck	F350 Service Truck	- miles	#3139
Flatbed Truck	Ford F450	- miles	#0576
Container Truck	Peterbuilt		
Skid Steer	Bobcat S185	- hrs	#BC7030
Tracked Skid Steer	Bobcat T750	- hrs	#BC2200
Mini-Excavator	CAT 308	- hrs	#EX1928
Excavator	Volvo EC290BLC	- hrs	#EX1006
Excavator	Volvo EC290BLC	- hrs	#EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	94 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will be covering the R2 today and downsizing concrete.

0730 – The R2 interim cover of shade cloth will be set today over Cell 3 and Cell 4. Cooler weather is expected for best working conditions to place approximately 9/10th of an acre of shade cloth on top of the treated waste material.

Previously used shade cloth that has been folded and stored at the NAF Staging area on pallets is being moved with the F450 flatbed to the R2. The sections of cloth are unfolded and positioned to overlap at the edges. The overlap is weighed down with the 5-year black sandbags and the bags are also placed within the panel field. Sandbags are the same ones that were picked up and palletized at the beginning of the season.

At the R2 southeast corner, the east and south wall of Cell 3 will have the tented material placed to span the lowest elevation area at the wall. The materials are spiked at the toe and sandbagged, then the loose end positioned on top and over the CMU wall. This wall has the carpet strips on the top horizontal edge to reduce chaffing of the shade cloth. External of the R2 wall the loose end of the cloth is anchored with rope and sandbags in the same manner that was done in past years successfully.

At the Seaplane apron the Volvo 290 excavator is continuing to process concrete rubble down to a 3” minus size that will be stockpiled for the final R2 cap.

0800 – At the request of US FWS, continue layout of references for soil sampling at Bldg 4213 Ave Maria, Bldg 4205 Housing 4-Plex, Bldg 4206 Housing 4-Plex, Bldg 4207 Housing 4-Plex. These buildings were previously removed by the Navy including concrete slabs and footings. With the growth of grasses and shrubs obscuring previous features, the available maps and identification of buried short sidewalk sections along with adjacent buildings assist to establish the former footprints and target sample points.

1200 – Lunch

1230 – The interim cover of shade cloth placement continues throughout the afternoon with the entire NWDE crew, minus one operator who continues downsizing concrete with the crusher bucket.

Approximately 1.5 rolls of shade cloth are unrolled & positioned as the folded stacks of cloth are used up.

Hand soil borings at Bldg 4213 Ave Maria.

Today’s DU-9 truck load counts is zero for all. Backfilling DU-9 excavation areas will resume this week now that the R2 has reached approximately 75% completed.

1730 – End of work day.

Photographs:

Photo 01: View east- R2 Cell 3 progress to place the interim shade cloth cover.

Photo 02: View south- R2 Cell 3 progress to tent up the walls and placement of sandbags.

Photo 03: View west- Mid day progress continuing from Cell 3 towards the west across Cell 4.

Photo 04: File photo of Bldg 4213 Ave Maria.

Table 1. Maectite and Treated Soil Total Estimates

Date	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
	Soils (DU9)	(~)	(~)	NWDE Walls (DU9)	Iniki Walls (DU9)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/17/16	0			0	0	1360	0	0	1755
10/18/16	0			0	0	1360	0	0	1755
10/19/16	0			0	0	1360	0	0	1755
10/20/16									
10/21/16									
10/22/16									
Total to Date	1280 soil gallons			80.5 gallons	140 gallons		130.5 loads		

Notes: 1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.

DU 9 – Bldg 170, 180, 200, 300, 340, S464, 502, 503, 520, S1119, S1123, 2127, 2411, 3506, 3509, 3511, 3514, 3524, 3529, 4201, 4214, 5126, 5267, 5295, 5301, 5339, 5340, 5341, 5342, 5350, 5360, 5361, 5378, 9149, R2 sand filter tanks, Fire Hydrants and other ancillary structures.

Table 2. Clean Backfill Total Estimates

Date /Loads		DU9 Clean Backfill Totals	
		Excavated and Placed Today in DU9 (cyd)	
		Cargo Pier Source Area	Total to Date in DU9 (cyd)
10/17/16	8	120	360
10/18/16	45	675	1035
10/19/16	0	0	1035
10/20/16			
10/21/16			
10/22/16			
Total to date- 69 loads			

Notes:
A.

Date /Loads		Clean Backfill for misc slabs removed on island	
		Excavated and Placed Today for slabs (cyd)	
		Cargo Pier Source Area	Total to Date for slabs (cyd)
10/17/16	0	0	480
10/18/16	0	0	480
10/19/16	0	0	480
10/20/16			
10/21/16			
10/22/16			
Total to date- 32 loads			

Notes:
A. Slabs removed are being process for clean 3” minus.

DU 5 BUTTRESS IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/17/2016	0	0	0	0	0	0
10/18/2016	0	0	0	0	0	0
10/19/2016	0	0	0	0	0	0
10/20/2016	0	0	0	0	0	0
10/21/2016	0	0	0	0	0	0
10/22/2016	0	0	0	0	0	0
Load count per wall	0	0	33	41		
15cuyd estimate per wall	0	0	495	615		
2016 Total R2 combined Buttress clean import LOADS				74		
Loads x 15cuyd estimate				1110		

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads	Clean Wood Loads	~	Clean coral backfill for R2 Ramp
10/17/16	3	0	1	0		0
10/18/16	0	0	0	0		0
10/19/16	0	0	0	0		0
10/20/16						
10/21/16						
10/22/16						
Season Total	109 loads	55 loads	42 loads	0 loads		0 loads

Table 4. Soil Sample Collection-

6 collection points / 21 Whirlpak samples collected today, 0 sample refused: Season Total = 226 samples

4213 P1 0-6"	4213 P3 12-18"	4213 P4 24-30"
4213 P1 12-18"	4213 P3 24-30"	4213 P5 0-6"
4213 P1 24-30"	4213 P3 0-6" DUP	4213 P5 12-18"
4213 P2 0-6"	4213 P3 12-18" DUP	4213 P5 24-30"
4213 P2 12-18"	4213 P3 24-30" DUP	4213 P6 0-6"
4213 P2 24-30"	4213 P4 0-6"	4213 P6 12-18"
4213 P3 0-6"	4213 P4 12-18"	4213 P6 24-30"

Notes: 1. MIS confirmation sampling @ bottom of excavation specified MIS. Other sample IDs are 5-point composite 0-2" at small plots.
2. P points 0-6" are a 5-point composite.

Table 5. Demolition of Structures-

DECISION UNIT 9 BUILDING PROGRESS - 10/17/16

DENOTES UPDATE FROM LAST WEEK
2017 = Soil & Confirmation next season

DEMOLITION				
Facility #	Facility Name	Asbestos Abatement Complete (date)	Demolition Complete (date)	Soil Excavation
170	Switch Station Electrical Feeder 1	9/10/2016	9/21/2016	Full dig 09/22/16
180	Electrical Building	9/9/2016	9/21/2016	Full dig 09/22/16
200	Switch Station	9/29/2016	10/11/2016	Full dig 10/11/16
300	Fuel Farm Transform Bank (Fuels Office)	9/15/2016	9/28/2016	Full dig 09/29/16
340	Carpentry Shop substation	9/19/2016	10/14/2016	Full dig 10/15/16
S464	Fuel Oil Pumphouse	N/A	9/29/2016	Full dig 10/01/16
502	AT&T Shed	9/12/2016	10/7/2016	Full dig 10/08/16
503	Barracks Substation	N/A	10/13/2016	Full dig 10/13/16
520	Fire Dept. Storage	9/24/2016	10/6/2016	Full dig 10/06/16
S1119	Tug Pier Substation	N/A	9/21/2016	Full dig 09/22/16
S1123	Electric Distribution Building	N/A	9/21/2016	Full dig 09/22/16
2127	POL Office	9/15/2016	9/27/2016	Full dig 09/29/16
2411	Fuel Farm Lab	N/A	9/28/2016	Full dig 09/29/16
3506	Liquid Oxygen Storage	9/29/2016	10/10/2016	Full dig 10/10/16
3509	Oxy/Acetylene Storage	N/A	10/1/2016	Full dig 10/03/16
3511	Sk1 Warehouse Transformer (substation)	9/20/2016	10/1/2016	Full dig 10/03/16
3514	Security Bldg. Storage @TOC	9/14/2016	10/17/2016	2017
3524	Steam heat bldg.	N/A	10/8/2016	2017
3529	Midway Laundry	N/A	10/11/2016	2017
4201	JP-5 Pumping Station	N/A	10/1/2016	Full dig 10/01/16
4214	Substation electrical feeder 4	N/A	10/11/2016	Scrape 10/11/16
5126	Sewage Pump station	9/27/2016	10/13/2016 pending sump	2017
5267	Sewage Pump Transformer	9/20/2016	10/4/2016	Full dig 10/04/16
5295	Hangar Aux. Generator Bldg.	9/26/2016	10/7/2016	Full dig 10/07/16
5301	Runway light controls	N/A	10/12/2016	Full dig 10/12/16
5339	Water treatment Bldg. @ R2	9/28/2016	10/13/2016	2017
5340	Substation	9/29/2016	10/11/2016	Full dig 10/12/16
5341	R2 Chlorinator Bldg	N/A	10/14/2016	2017
5342	Telephone Switch Bldg.	9/13/2016	10/8/2016	2017
5350	Electrical Switch station	N/A	10/11/2016	Full dig 10/12/16
5360	Substation	9/20/2016	10/3/2016	Full dig 10/06/16
5361	Switch Station Electrical Feeder 9	9/16/2016	10/2/2016	Full dig 10/06/16
5378	Metal Shed near R2	N/A	10/15/2016	2017
9149	Power Plant shed	N/A	10/1/2016 structure- 10/13/16 slab	Full dig 10/14/16
R2	Tanks on West side	N/A	10/14/2016	2017

LEAD PAINT ABATE/MAECTITE/LEAD STOP					
Facility #	Facility Name	Complete (date)	Facility #	Facility Name	Complete (date)
140	Substation	9/19/2016	8105	R1 Concrete block/vault	10/5/2016
S228	High Voltage Bldg.	9/19/2016		Ave Maria	10/3/2016
309	Power Plant #3	9/27/2016		Cross	9/15/2016
347	Water System Bldg.	9/30/2016		Platforms (2) R3 S3126W/S3127E	9/30/2016
425	Receiver Building - Satellite area	Trade for 400		Manholes (43)	10/6/2016
426	Satellite TV	Trade for 400		3 red AST by generator building 309	9/26/2016
1124	Waste Storage Building	9/15/2016			
S1126	Harbor Office/Buddhist Temple	9/15/2016	OPTIONS		
3501	Main Freshwater Pump station	9/30/2016	144	Power Plant	Maectite only 9/14/16
5004	Water Storage bldg.	Not Applicable	S361	Pesticide Storage	9/28/2016
5150	Sewage Pump Station	10/4/2016	400	BEQ Transformer Bldg.	10/5/2016
8106	Freshwater Substation	10/4/2016		FAA Bldg near R2	10/7/2016

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Thursday, October 20, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 13 mph, Temperature ~83F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #	
Pickup Truck	F350 Service Truck	- miles	#3139
Flatbed Truck	Ford F450	- miles	#0576
Container Truck	Peterbuilt		
Skid Steer	Bobcat S185	- hrs	#BC7030
Tracked Skid Steer	Bobcat T750	- hrs	#BC2200
Mini-Excavator	CAT 308	- hrs	#EX1928
Excavator	Volvo EC290BLC	- hrs	#EX1006
Excavator	Volvo EC290BLC	- hrs	#EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	166 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will work at backfilling excavation areas and downsizing concrete.

0730 – Concrete processing will continue today at the Seaplane apron using the 290 Volvo with MB crusher.

Backfilling this season's excavation sites continues by loading clean coral sand from the approved cargo pier borrow source area. A biological monitor is onsite to visually spot for sea life during equipment operation. The monitor will advise if animals are present and halt work as required. Sand is loaded into the two alternating A30 Volvo trucks and hauled to the selected former building sites. Multiple loads are placed and the tracked skidsteer will follow later today to grade out the new sand.

Rain early this morning (0.01") has finally increased the static water level at the taxiway inlet drain pond and around the airport. The storm was minimal but enough to work with for verifying flow. The Rainstore^3 taxiway piping inlet and outlet valves have remained closed since installation was completed and the initial priming of the cells was performed. Measure TD and static of the three inspection ports for the cells.
South - 5.92' static TOC (priming water.) TD is 9.43'.
Middle – 5.91' static TOC (priming water.) TD is 9.50'
North – 5.95' static TOC (priming water.) TD is 9.41'

0755 - Open the influent sliding gate valve. The static water level in the ports raises. Open the effluent sliding gate valve to the south near the runway. The inspection ports static level continues to raise as the runway shoulder drains which tie into the pipe to the point of discharge equalize. The static max height reached is 4.50' from top of casing. The water has risen 1.42' due to the reserves at the runway shoulder. Water is noted to be flowing (backwards) to equalize in the taxiway inlet pond too.
Inspection of the southern point of discharge at the beach south of the R2 verify the known condition that the beach sand has mounded to isolate the effluent pipe. Before noon, the Henderson Field airport manager and DBSI are able to perform routine maintenance to open up the sanded area and allow the taxiway drain to flow to the original point of discharge.
The taxiway valves will remain open and satisfactory flow of the system is apparent. Static levels from top of casing after equilibrium are:
South - 6.23' static TOC.
Middle – 6.22' static TOC
North – 6.20' static TOC

0900 – Soil sampling details for end of the season collection points, supply prep and paperwork.

1200 – Lunch

1230 – Backfill work will continue through the afternoon across the demo and soil treatment areas. The exclusions will be foundations or concrete footings that are planned to be removed next season; Bldg S464, 4201, 502, 5126, 5295, 5342.
Downsizing concrete for recycling into the final R2 erosion layer is ongoing at the Seaplane apron.

Meeting on year end sampling with M.Amann US FWS and S.Wakefield NWDE. Discuss progress and goals to finish out the Decision Units' needs.

1300 – Resume sampling at former Bldg 4205 Housing 4-Plex that was removed previously by the Navy.

Today's DU-9 truck load counts is zero for all except backfilling DU-9 excavation areas with 34 loads.

1730 – End of work day.

Photographs:

Photo 01: View north- Loading out clean coral sand for backfilling DU-9 excavated areas.

Photo 02: View south- Former Bldg 5301 Runway Light Controls backfill progress. One of many.

Photo 03: View southwest- Overview of ongoing concrete downsizing.

Photo 04: View west- Taxiway inlet and valve (L.) View south – Taxiway effluent prior to O&M (R.)

Table 1. Maectite and Treated Soil Total Estimates

Date	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
	Soils (DU9)	(~)	(~)	NWDE Walls (DU9)	Iniki Walls (DU9)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/17/16	0			0	0	1360	0	0	1755
10/18/16	0			0	0	1360	0	0	1755
10/19/16	0			0	0	1360	0	0	1755
10/20/16	0			0	0	1360	0	0	1755
10/21/16									
10/22/16									
Total to Date	1280 soil gallons			80.5 gallons	140 gallons		130.5 loads		

Notes: 1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.

DU 9 – Bldg 170, 180, 200, 300, 340, S464, 502, 503, 520, S1119, S1123, 2127, 2411, 3506, 3509, 3511, 3514, 3524, 3529, 4201, 4214, 5126, 5267, 5295, 5301, 5339, 5340, 5341, 5342, 5350, 5360, 5361, 5378, 9149, R2 sand filter tanks, Fire Hydrants and other ancillary structures.

Table 2. Clean Backfill Total Estimates

Date /Loads		DU9 Clean Backfill Totals	
		Excavated and Placed Today in DU9 (cyd)	
		Cargo Pier Source Area	Total to Date in DU9 (cyd)
10/17/16	8	120	360
10/18/16	45	675	1035
10/19/16	0	0	1035
10/20/16	32	480	1515
10/21/16			
10/22/16			
Total to date- 101 loads			

Notes:
A.

Date /Loads		Clean Backfill for misc slabs removed on island	
		Excavated and Placed Today for slabs (cyd)	
		Cargo Pier Source Area	Total to Date for slabs (cyd)
10/17/16	0	0	480
10/18/16	0	0	480
10/19/16	0	0	480
10/20/16	2	0	510
10/21/16			
10/22/16			
Total to date- 34 loads			

Notes:
A. Slabs removed are being process for clean 3” minus.

DU 5 BUTTRESS IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/17/2016	0	0	0	0	0	0
10/18/2016	0	0	0	0	0	0
10/19/2016	0	0	0	0	0	0
10/20/2016	0	0	0	0	0	0
10/21/2016	0	0	0	0	0	0
10/22/2016	0	0	0	0	0	0
Load count per wall	0	0	33	41		
15cuyd estimate per wall	0	0	495	615		
2016 Total R2 combined Buttress clean import LOADS				74		
Loads x 15cuyd estimate				1110		

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads	Clean Wood Loads	~	Clean coral backfill for R2 Ramp
10/17/16	3	0	1	0		0
10/18/16	0	0	0	0		0
10/19/16	0	0	0	0		0
10/20/16	0	0	0	0		0
10/21/16						
10/22/16						
Season Total	109 loads	55 loads	42 loads	0 loads		0 loads

Table 4. Soil Sample Collection-

4 collection points / 13 Whirlpak samples collected today, 0 sample refused: Season Total = 239 samples

4205 P1 0-6"	4205 P2 0-6"	4205 P3 12-18"
4205 P1 12-18"	4205 P2 12-18"	4205 P3 24-30"
4205 P1 24-30"	4205 P2 24-30"	4205 P4 0-6"
4205 P1 30-36"	4205 P3 0-6"	4205 P4 12-18"
-	-	4205 P4 24-30"
-	-	-
-	-	-

Notes: 1. MIS confirmation sampling @ bottom of excavation specified MIS. Other sample IDs are 5-point composite 0-2" at small plots.
2. P points 0-6" are a 5-point composite.

Table 5. Demolition of Structures-

DECISION UNIT 9 BUILDING PROGRESS - 10/17/16

DENOTES UPDATE FROM LAST WEEK
2017 = Soil & Confirmation next season

DEMOLITION				
Facility #	Facility Name	Asbestos Abatement Complete (date)	Demolition Complete (date)	Soil Excavation
170	Switch Station Electrical Feeder 1	9/10/2016	9/21/2016	Full dig 09/22/16
180	Electrical Building	9/9/2016	9/21/2016	Full dig 09/22/16
200	Switch Station	9/29/2016	10/11/2016	Full dig 10/11/16
300	Fuel Farm Transform Bank (Fuels Office)	9/15/2016	9/28/2016	Full dig 09/29/16
340	Carpentry Shop substation	9/19/2016	10/14/2016	Full dig 10/15/16
S464	Fuel Oil Pumphouse	N/A	9/29/2016	Full dig 10/01/16
502	AT&T Shed	9/12/2016	10/7/2016	Full dig 10/08/16
503	Barracks Substation	N/A	10/13/2016	Full dig 10/13/16
520	Fire Dept. Storage	9/24/2016	10/6/2016	Full dig 10/06/16
S1119	Tug Pier Substation	N/A	9/21/2016	Full dig 09/22/16
S1123	Electric Distribution Building	N/A	9/21/2016	Full dig 09/22/16
2127	POL Office	9/15/2016	9/27/2016	Full dig 09/29/16
2411	Fuel Farm Lab	N/A	9/28/2016	Full dig 09/29/16
3506	Liquid Oxygen Storage	9/29/2016	10/10/2016	Full dig 10/10/16
3509	Oxy/Acetylene Storage	N/A	10/1/2016	Full dig 10/03/16
3511	Sk1 Warehouse Transformer (substation)	9/20/2016	10/1/2016	Full dig 10/03/16
3514	Security Bldg. Storage @TOC	9/14/2016	10/17/2016	2017
3524	Steam heat bldg.	N/A	10/8/2016	2017
3529	Midway Laundry	N/A	10/11/2016	2017
4201	JP-5 Pumping Station	N/A	10/1/2016	Full dig 10/01/16
4214	Substation electrical feeder 4	N/A	10/11/2016	Scrape 10/11/16
5126	Sewage Pump station	9/27/2016	10/13/2016 pending sump	2017
5267	Sewage Pump Transformer	9/20/2016	10/4/2016	Full dig 10/04/16
5295	Hangar Aux. Generator Bldg.	9/26/2016	10/7/2016	Full dig 10/07/16
5301	Runway light controls	N/A	10/12/2016	Full dig 10/12/16
5339	Water treatment Bldg. @ R2	9/28/2016	10/13/2016	2017
5340	Substation	9/29/2016	10/11/2016	Full dig 10/12/16
5341	R2 Chlorinator Bldg	N/A	10/14/2016	2017
5342	Telephone Switch Bldg.	9/13/2016	10/8/2016	2017
5350	Electrical Switch station	N/A	10/11/2016	Full dig 10/12/16
5360	Substation	9/20/2016	10/3/2016	Full dig 10/06/16
5361	Switch Station Electrical Feeder 9	9/16/2016	10/2/2016	Full dig 10/06/16
5378	Metal Shed near R2	N/A	10/15/2016	2017
9149	Power Plant shed	N/A	10/1/2016 structure- 10/13/16 slab	Full dig 10/14/16
R2	Tanks on West side	N/A	10/14/2016	2017

LEAD PAINT ABATE/MAECTITE/LEAD STOP					
Facility #	Facility Name	Complete (date)	Facility #	Facility Name	Complete (date)
140	Substation	9/19/2016	8105	R1 Concrete block/vault	10/5/2016
S228	High Voltage Bldg.	9/19/2016		Ave Maria	10/3/2016
309	Power Plant #3	9/27/2016		Cross	9/15/2016
347	Water System Bldg.	9/30/2016		Platforms (2) R3 S3126W/S3127E	9/30/2016
425	Receiver Building - Satellite area	Trade for 400		Manholes (43)	10/6/2016
426	Satellite TV	Trade for 400		3 red AST by generator building 309	9/26/2016
1124	Waste Storage Building	9/15/2016			
S1126	Harbor Office/Buddhist Temple	9/15/2016	OPTIONS		
3501	Main Freshwater Pump station	9/30/2016	144	Power Plant	Maectite only 9/14/16
5004	Water Storage bldg.	Not Applicable	S361	Pesticide Storage	9/28/2016
5150	Sewage Pump Station	10/4/2016	400	BEQ Transformer Bldg.	10/5/2016
8106	Freshwater Substation	10/4/2016		FAA Bldg near R2	10/7/2016

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Friday, October 21, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 12 mph, Temperature ~83F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #	
Pickup Truck	F350 Service Truck	- miles	#3139
Flatbed Truck	Ford F450	- miles	#0576
Container Truck	Peterbuilt		
Skid Steer	Bobcat S185	- hrs	#BC7030
Tracked Skid Steer	Bobcat T750	- hrs	#BC2200
Mini-Excavator	CAT 308	- hrs	#EX1928
Excavator	Volvo EC290BLC	- hrs	#EX1006
Excavator	Volvo EC290BLC	- hrs	#EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4245
Front End Loader	Cat 950	Partial shift	

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	173 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will work at soil treatment, backfilling excavation areas and downsizing concrete.

0725 – Concrete processing will continue today at the Seaplane apron using the 290 Volvo with MB crusher.

Bldg 5303 R2 is set to have soil treatment work performed at the two remaining plots at the exterior of the east and west walls. Each plot has been defined by past sampling data and previously covered in shade cloth around existing structures – Bldg 5339 Water Treatment, Bldg 5338 Transformer, Bldg 5341 R2 Chlorination & the two red sand filter vessels.
Plots are measured and staked to indicate the 30' and 45' buffer areas and required length. Reference drawing- Building #5303 Sample Locations, Decision Unit 5, Figure 13, the 30' buffer is Maectite® treated to a depth of 0.5', amended with hydrant water and mixed using the straight edged bucket of the mini excavator. This half foot of treated soil (55.5cuyds) will then remain in place and be covered with shade cloth as a demarcation layer. Effectively this treat and leave in place 30' buffer will be under the toe of the final R2 abutment and reduces the volume of soil exported to the R2.
The 30' to 45' buffer x specified length is being treated to the target 1.0' depth, mixed and excavated out into the off road truck. This treated soil (55.5cuyds) is placed into the R2 Cell 4.

The clean coral ramp into the west side of the R2 is covering a portion of the NW soil plot described above. This plot to leave in place for treatment in the 2017 season is 15' x 50 x 1' and 30' x 50' x 0.5' for 27.8cuyds each. Total soil treatment that remains under the ramp to be addressed in 2017 is 55.6cuyds.

1000 – Continue 2016 soil sampling work for DU-9.

NWDE is arranging to rent the on island 950 Cat loader from DBSI. This will be used to condense the processed concrete stockpiles at the Seaplane apron.

1200 – Lunch

1230 – Resume 2016 soil sampling work at former Bldg 4206 Housing 4-Plex previously removed by the Navy. These Housing 4-Plex areas are being sampled this season as requested by the US FWS.
Concrete downsizing to 3" minus has continued throughout the day.

NWDE this afternoon will be moving to treat the R2 east soil plot near the Taxiway drain vault, former Bldg 5339 Water Treatment and Bldg 5338 Transformer. This plot will also include a treat and leave in place section. 45 cuyds are treated and hauled to the R2 in the 1' depth marked area. The 0.5' treat and leave in place section is also 45 cuyds.

1515 – Begin collection of confirmation samples at the west plot of Bldg 5303 R2. This area is slated to begin stockpiling abutment clean coral sand up to the concrete wall of the R2 in preparation for year 2017's toe and final cover.

1600 – NWDE prepares to resume hauling clean coral sand from the approved borrow sources area and stockpiling at the R2 exterior walls. A usual the biological monitor is onsite to visually spot for sea life during equipment operation. The monitor will advise if animals are present and halt work as required. Sand is loaded into the two alternating A30 Volvo trucks and hauled to be placed at the R2 abutment.

Today's DU-9 truck load counts is zero for all except 6 treated soil loads to the R2 and abutment stockpiling DU-5 with 8 loads.

1730 – End of work day.

Photographs:

Photo 01: View north- Former Bldg 5341 Chlorination soil plot with progress of demarcation layer.

Photo 02: View south- Former Bldg 5341 Chlorination soil plot overview.

Photo 03: View north- Former Bldg 5339 Water Treatment & Bldg 5338 Transformer plot overview.

Photo 04: View south- Stockpiling clean coral sand for R2 buttress.

Table 1. Maectite and Treated Soil Total Estimates

Date	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
	Soils (DU9)	Soils (DU5)	(~)	NWDE Walls (DU9)	Iniki Walls (DU9)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/17/16	0			0	0	1360	0	0	1755
10/18/16	0			0	0	1360	0	0	1755
10/19/16	0			0	0	1360	0	0	1755
10/20/16	0			0	0	1360	0	0	1755
10/21/16	0	154		0	0	1514	6	211	1966 [3]
10/22/16									
Total to Date	1280 soil gallons	154 soil gallons[3]		80.5 gallons	140 gallons		136.5 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. Hauled to R2 includes 100.5 cuyd R2 NW plot soil treated and left in place. DU5 soils gallons minus 44.5 gallons backs out the west plot left in place. Subtract 32.5 gallons for east plot left in place

DU 9 – Bldg 170, 180, 200, 300, 340, S464, 502, 503, 520, S1119, S1123, 2127, 2411, 3506, 3509, 3511, 3514, 3524, 3529, 4201, 4214, 5126, 5267, 5295, 5301, 5338, 5339, 5340, 5341, 5342, 5350, 5360, 5361, 5378, 9149, R2 sand filter tanks, Fire Hydrants and other ancillary structures.

Table 2. Clean Backfill Total Estimates

Date /Loads		DU9 Clean Backfill Totals	
		Excavated and Placed Today in DU9 (cyd)	
		Cargo Pier Source Area	Total to Date in DU9 (cyd)
10/17/16	8	120	360
10/18/16	45	675	1035
10/19/16	0	0	1035
10/20/16	32	480	1515
10/21/16	0	0	1515
10/22/16			
Total to date- 101 loads			

Notes:
A.

Date /Loads		Clean Backfill for misc slabs removed on island	
		Excavated and Placed Today for slabs (cyd)	
		Cargo Pier Source Area	Total to Date for slabs (cyd)
10/17/16	0	0	480
10/18/16	0	0	480
10/19/16	0	0	480
10/20/16	2	0	510
10/21/16	0	0	510
10/22/16			
Total to date- 34 loads			

Notes:
A. Slabs removed are being process for clean 3" minus.

DU 5 BUTTRESS IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/17/2016	0	0	0	0	0	0
10/18/2016	0	0	0	0	0	0
10/19/2016	0	0	0	0	0	0
10/20/2016	0	0	0	0	0	0
10/21/2016	0	0	8	0	8	120
10/22/2016	0	0	0	0	0	0
Load count per wall	0	0	41	41		
15cuyd estimate per wall	0	0	615	615		
2016 Total R2 combined Buttress clean import LOADS				82		
Loads x 15cuyd estimate				1230		

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads	Clean Wood Loads	~	Clean coral backfill for R2 Ramp
10/17/16	3	0	1	0		0
10/18/16	0	0	0	0		0
10/19/16	0	0	0	0		0
10/20/16	0	0	0	0		0
10/21/16	0	0	0	0		0
10/22/16						
Season Total	109 loads	55 loads	42 loads	0 loads		0 loads

Table 4. Soil Sample Collection-

9 collection points / 23 Whirlpak samples collected today, 0 sample refused: Season Total = 262 samples

4206 P1 0-6"	4206 P3 24-30"	5303 NW A 0-2" DUP
4206 P1 12-18"	4206 P4 0-6"	5303 NW B 0-2"
4206 P1 24-30"	4206 P4 12-18"	5303 NW B 0-2" DUP
4206 P2 0-6"	4206 P4 24-30"	5303 NW C 0-2"
4206 P2 12-18"	4207 P1 0-6"	5303 NW C 0-2" DUP
4206 P2 24-30"	4207 P1 12-18"	5303 NW D 0-2"
4206 P3 0-6"	4207 P1 24-30"	5303 NW D 0-2" DUP
4206 P3 12-18"	5303 NW A 0-2"	-

Notes: 1. MIS confirmation sampling @ bottom of excavation specified MIS. Other sample IDs are 5-point composite 0-2" at small plots.
2. P points 0-6" are a 5-point composite.

Table 5. Demolition of Structures-

DECISION UNIT 9 BUILDING PROGRESS - 10/17/16

DENOTES UPDATE FROM LAST WEEK
2017 = Soil & Confirmation next season

DEMOLITION				
Facility #	Facility Name	Asbestos Abatement Complete (date)	Demolition Complete (date)	Soil Excavation
170	Switch Station Electrical Feeder 1	9/10/2016	9/21/2016	Full dig 09/22/16
180	Electrical Building	9/9/2016	9/21/2016	Full dig 09/22/16
200	Switch Station	9/29/2016	10/11/2016	Full dig 10/11/16
300	Fuel Farm Transform Bank (Fuels Office)	9/15/2016	9/28/2016	Full dig 09/29/16
340	Carpentry Shop substation	9/19/2016	10/14/2016	Full dig 10/15/16
S464	Fuel Oil Pumphouse	N/A	9/29/2016	Full dig 10/01/16
502	AT&T Shed	9/12/2016	10/7/2016	Full dig 10/08/16
503	Barracks Substation	N/A	10/13/2016	Full dig 10/13/16
520	Fire Dept. Storage	9/24/2016	10/6/2016	Full dig 10/06/16
S1119	Tug Pier Substation	N/A	9/21/2016	Full dig 09/22/16
S1123	Electric Distribution Building	N/A	9/21/2016	Full dig 09/22/16
2127	POL Office	9/15/2016	9/27/2016	Full dig 09/29/16
2411	Fuel Farm Lab	N/A	9/28/2016	Full dig 09/29/16
3506	Liquid Oxygen Storage	9/29/2016	10/10/2016	Full dig 10/10/16
3509	Oxy/Acetylene Storage	N/A	10/1/2016	Full dig 10/03/16
3511	Sk1 Warehouse Transformer (substation)	9/20/2016	10/1/2016	Full dig 10/03/16
3514	Security Bldg. Storage @TOC	9/14/2016	10/17/2016	2017
3524	Steam heat bldg.	N/A	10/8/2016	2017
3529	Midway Laundry	N/A	10/11/2016	2017
4201	JP-5 Pumping Station	N/A	10/1/2016	Full dig 10/01/16
4214	Substation electrical feeder 4	N/A	10/11/2016	Scrape 10/11/16
5126	Sewage Pump station	9/27/2016	10/13/2016 pending sump	2017
5267	Sewage Pump Transformer	9/20/2016	10/4/2016	Full dig 10/04/16
5295	Hangar Aux. Generator Bldg.	9/26/2016	10/7/2016	Full dig 10/07/16
5301	Runway light controls	N/A	10/12/2016	Full dig 10/12/16
5339	Water treatment Bldg. @ R2	9/28/2016	10/13/2016	2017
5340	Substation	9/29/2016	10/11/2016	Full dig 10/12/16
5341	R2 Chlorinator Bldg	N/A	10/14/2016	2017
5342	Telephone Switch Bldg.	9/13/2016	10/8/2016	2017
5350	Electrical Switch station	N/A	10/11/2016	Full dig 10/12/16
5360	Substation	9/20/2016	10/3/2016	Full dig 10/06/16
5361	Switch Station Electrical Feeder 9	9/16/2016	10/2/2016	Full dig 10/06/16
5378	Metal Shed near R2	N/A	10/15/2016	2017
9149	Power Plant shed	N/A	10/1/2016 structure- 10/13/16 slab	Full dig 10/14/16
R2	Tanks on West side	N/A	10/14/2016	2017

LEAD PAINT ABATE/MAECTITE/LEAD STOP					
Facility #	Facility Name	Complete (date)	Facility #	Facility Name	Complete (date)
140	Substation	9/19/2016	8105	R1 Concrete block/vault	10/5/2016
S228	High Voltage Bldg.	9/19/2016		Ave Maria	10/3/2016
309	Power Plant #3	9/27/2016		Cross	9/15/2016
347	Water System Bldg.	9/30/2016		Platforms (2) R3 S3126W/S3127E	9/30/2016
425	Receiver Building - Satellite area	Trade for 400		Manholes (43)	10/6/2016
426	Satellite TV	Trade for 400		3 red AST by generator building 309	9/26/2016
1124	Waste Storage Building	9/15/2016			
S1126	Harbor Office/Buddhist Temple	9/15/2016	OPTIONS		
3501	Main Freshwater Pump station	9/30/2016	144	Power Plant	Maectite only 9/14/16
5004	Water Storage bldg.	Not Applicable	S361	Pesticide Storage	9/28/2016
5150	Sewage Pump Station	10/4/2016	400	BEQ Transformer Bldg.	10/5/2016
8106	Freshwater Substation	10/4/2016		FAA Bldg near R2	10/7/2016

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Saturday, October 22, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 9 mph, Temperature ~82F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jevon Stone	NWDE Operator	10
Ruth Inmon	NWDE Operator	10
Viavia Manuma	NWDE Laborer	10
Joel Smith	NWDE Laborer	10
Matt Manning	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #	
Pickup Truck	F350 Service Truck	- miles	#3139
Flatbed Truck	Ford F450	- miles	#0576
Container Truck	Peterbuilt		
Skid Steer	Bobcat S185	- hrs	#BC7030
Tracked Skid Steer	Bobcat T750	- hrs	#BC2200
Mini-Excavator	CAT 308	- hrs	#EX1928
Excavator	Volvo EC290BLC	- hrs	#EX1006
Excavator	Volvo EC290BLC	- hrs	#EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4245
Front End Loader	Cat 950	Partial shift	

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	70 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will work covering the R2, stockpiling sand at the R2 exterior and downsizing concrete.

0730 – Ongoing work to keep running concrete through the MB crusher bucket at the Seaplane apron. Though the day the DBSI Cat 950 loader is in use to move materials and tighten up the footprint of the piles in the work area. The larger concrete that will require the UP-40 to pre size is being moved to a common area while the smaller rubble is made available to the crusher.

NWDE workers are covering the last sections of the R2 Cell 3 and Cell 4. This shade cloth is weighted down as in prior years with the black 5-year sandbags. As the morning goes on the treated soil for this season is blanketed and secured beneath the cloth.

Collect confirmation sampling for the R2 east excavation areas in the sampling plan layout area.

0900 – Resume sampling the last few points at former Bldg 4207 Housing 4-Plex.

1200 – Lunch

1230 – Begin again to haul clean coral sand from the cargo pier area and stockpiling at the R2 exterior walls. The biological monitor is onsite to visually spot for sea life during equipment operation. The monitor will advise if animals are present and halt work as required. Sand is loaded into the two alternating A30 Volvo trucks and hauled to be placed at the R2 abutment. Truck trips are steadily repetitive across the island with loads being positioned at the recently treated soil plots at the east and west sides of the R2.

Soil sampling at DU-8 Tank Farm for additional delineation of select P points for S28 & S30.

Today's DU-9 truck load counts is zero for all except abutment stockpiling DU-5 with 32 loads of clean coral sand.

1730 – End of work day.

Photographs:

Photo 01: View west- Progress to finalize the seasonal interim R2 Cell 3 & 4 cover.

Photo 02: View south- Confining the concrete pile at the Seaplane apron crushing area.

Photo 03: View north- Overview of concrete processing area.

Photo 04: View northeast- Overview of concrete processing area.

Photo 05: View northeast- Overview of concrete processing area 3” minus.

Photo 06: View northeast- Overview of concrete processing area 3” minus.

Photo 07: View east- Loading clean coral sand for stockpiling the R2 exterior buttress.

Table 1. Maectite and Treated Soil Total Estimates

Date	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
	Soils (DU9)	Soils (DU5)	(~)	NWDE Walls (DU9)	Iniki Walls (DU9)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/17/16	0			0	0	1360	0	0	1755
10/18/16	0			0	0	1360	0	0	1755
10/19/16	0			0	0	1360	0	0	1755
10/20/16	0			0	0	1360	0	0	1755
10/21/16	0	154		0	0	1514	6	211	1966 [3]
10/22/16	0	0		0	0	1514	0	0	1966 [3]
Total to Date	1280 soil gallons	154 soil gallons[3]		80.5 gallons	140 gallons		136.5 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. Hauled to R2 includes 100.5 cuyd R2 NW plot soil treated and left in place. DU5 soils gallons minus 44.5 gallons backs out the west plot left in place. Subtract 32.5 gallons for east plot left in place

DU 9 – Bldg 170, 180, 200, 300, 340, S464, 502, 503, 520, S1119, S1123, 2127, 2411, 3506, 3509, 3511, 3514, 3524, 3529, 4201, 4214, 5126, 5267, 5295, 5301, 5338, 5339, 5340, 5341, 5342, 5350, 5360, 5361, 5378, 9149, R2 sand filter tanks, Fire Hydrants and other ancillary structures.

Table 2. Clean Backfill Total Estimates

Date /Loads		DU9 Clean Backfill Totals	
		Excavated and Placed Today in DU9 (cyd)	
		Cargo Pier Source Area	Total to Date in DU9 (cyd)
10/17/16	8	120	360
10/18/16	45	675	1035
10/19/16	0	0	1035
10/20/16	32	480	1515
10/21/16	0	0	1515
10/22/16	0	0	1515
Total to date- 101 loads			

Notes:
A.

Date /Loads		Clean Backfill for misc slabs removed on island	
		Excavated and Placed Today for slabs (cyd)	
		Cargo Pier Source Area	Total to Date for slabs (cyd)
10/17/16	0	0	480
10/18/16	0	0	480
10/19/16	0	0	480
10/20/16	2	0	510
10/21/16	0	0	510
10/22/16	0	0	510
Total to date- 34 loads			

Notes:
A. Slabs removed are being process for clean 3" minus.

DU 5 BUTTRESS IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/17/2016	0	0	0	0	0	0
10/18/2016	0	0	0	0	0	0
10/19/2016	0	0	0	0	0	0
10/20/2016	0	0	0	0	0	0
10/21/2016	0	0	8	0	8	120
10/22/2016	0	0	16	16	32	480
Load count per wall	0	0	57	57		
15cuyd estimate per wall	0	0	855	855		
2016 Total R2 combined Buttress clean import LOADS				114		
Loads x 15cuyd estimate				1710		

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads	Clean Wood Loads	~	Clean coral backfill for R2 Ramp
10/17/16	3	0	1	0		0
10/18/16	0	0	0	0		0
10/19/16	0	0	0	0		0
10/20/16	0	0	0	0		0
10/21/16	0	0	0	0		0
10/22/16	0	0	0	0		0
Season Total	109 loads	55 loads	42 loads	0 loads		0 loads

Table 4. Soil Sample Collection-

13 collection points / 26 Whirlpak samples collected today, 0 sample refused: Season Total = 288 samples

4207 P2 0-6"	4207 P3 24-30" DUP	5303 E C 0-2"
4207 P2 12-18"	4207 P4 0-6"	5303 E C 0-2" DUP
4207 P2 24-30"	4207 P4 12-18"	5303 E D 0-2"
4207 P3 0-6"	4207 P4 24-30"	5303 E D 0-2" DUP
4207 P3 12-18"	5303 E A 0-2"	S28 P12 0-6"
4207 P3 24-30"	5303 E A 0-2" DUP	S28 P13 0-6"
4207 P3 0-6" DUP	5303 E B 0-2"	S28 P14 0-6"
4207 P3 12-18" DUP	5303 E B 0-2" DUP	S30 P11 0-6"
S30 P12 0-6"	S30 P13 0-6"	-

Notes: 1. MIS confirmation sampling @ bottom of excavation specified MIS. Other sample IDs are 5-point composite 0-2" at small plots.
2. P points 0-6" are a 5-point composite.

Table 5. Demolition of Structures-

DECISION UNIT 9 BUILDING PROGRESS - 10/17/16

DENOTES UPDATE FROM LAST WEEK
2017 = Soil & Confirmation next season

DEMOLITION				
Facility #	Facility Name	Asbestos Abatement Complete (date)	Demolition Complete (date)	Soil Excavation
170	Switch Station Electrical Feeder 1	9/10/2016	9/21/2016	Full dig 09/22/16
180	Electrical Building	9/9/2016	9/21/2016	Full dig 09/22/16
200	Switch Station	9/29/2016	10/11/2016	Full dig 10/11/16
300	Fuel Farm Transform Bank (Fuels Office)	9/15/2016	9/28/2016	Full dig 09/29/16
340	Carpentry Shop substation	9/19/2016	10/14/2016	Full dig 10/15/16
S464	Fuel Oil Pumphouse	N/A	9/29/2016	Full dig 10/01/16
502	AT&T Shed	9/12/2016	10/7/2016	Full dig 10/08/16
503	Barracks Substation	N/A	10/13/2016	Full dig 10/13/16
520	Fire Dept. Storage	9/24/2016	10/6/2016	Full dig 10/06/16
S1119	Tug Pier Substation	N/A	9/21/2016	Full dig 09/22/16
S1123	Electric Distribution Building	N/A	9/21/2016	Full dig 09/22/16
2127	POL Office	9/15/2016	9/27/2016	Full dig 09/29/16
2411	Fuel Farm Lab	N/A	9/28/2016	Full dig 09/29/16
3506	Liquid Oxygen Storage	9/29/2016	10/10/2016	Full dig 10/10/16
3509	Oxy/Acetylene Storage	N/A	10/1/2016	Full dig 10/03/16
3511	Sk1 Warehouse Transformer (substation)	9/20/2016	10/1/2016	Full dig 10/03/16
3514	Security Bldg. Storage @TOC	9/14/2016	10/17/2016	2017
3524	Steam heat bldg.	N/A	10/8/2016	2017
3529	Midway Laundry	N/A	10/11/2016	2017
4201	JP-5 Pumping Station	N/A	10/1/2016	Full dig 10/01/16
4214	Substation electrical feeder 4	N/A	10/11/2016	Scrape 10/11/16
5126	Sewage Pump station	9/27/2016	10/13/2016 pending sump	2017
5267	Sewage Pump Transformer	9/20/2016	10/4/2016	Full dig 10/04/16
5295	Hangar Aux. Generator Bldg.	9/26/2016	10/7/2016	Full dig 10/07/16
5301	Runway light controls	N/A	10/12/2016	Full dig 10/12/16
5339	Water treatment Bldg. @ R2	9/28/2016	10/13/2016	2017
5340	Substation	9/29/2016	10/11/2016	Full dig 10/12/16
5341	R2 Chlorinator Bldg	N/A	10/14/2016	2017
5342	Telephone Switch Bldg.	9/13/2016	10/8/2016	2017
5350	Electrical Switch station	N/A	10/11/2016	Full dig 10/12/16
5360	Substation	9/20/2016	10/3/2016	Full dig 10/06/16
5361	Switch Station Electrical Feeder 9	9/16/2016	10/2/2016	Full dig 10/06/16
5378	Metal Shed near R2	N/A	10/15/2016	2017
9149	Power Plant shed	N/A	10/1/2016 structure- 10/13/16 slab	Full dig 10/14/16
R2	Tanks on West side	N/A	10/14/2016	2017

LEAD PAINT ABATE/MAECTITE/LEAD STOP					
Facility #	Facility Name	Complete (date)	Facility #	Facility Name	Complete (date)
140	Substation	9/19/2016	8105	R1 Concrete block/vault	10/5/2016
S228	High Voltage Bldg.	9/19/2016		Ave Maria	10/3/2016
309	Power Plant #3	9/27/2016		Cross	9/15/2016
347	Water System Bldg.	9/30/2016		Platforms (2) R3 S3126W/S3127E	9/30/2016
425	Receiver Building - Satellite area	Trade for 400		Manholes (43)	10/6/2016
426	Satellite TV	Trade for 400		3 red AST by generator building 309	9/26/2016
1124	Waste Storage Building	9/15/2016			
S1126	Harbor Office/Buddhist Temple	9/15/2016	OPTIONS		
3501	Main Freshwater Pump station	9/30/2016	144	Power Plant	Maectite only 9/14/16
5004	Water Storage bldg.	Not Applicable	S361	Pesticide Storage	9/28/2016
5150	Sewage Pump Station	10/4/2016	400	BEQ Transformer Bldg.	10/5/2016
8106	Freshwater Substation	10/4/2016		FAA Bldg near R2	10/7/2016

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Sunday, October 23, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 12 mph, Temperature ~83F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	9
Jevon Stone	NWDE Operator	9
Ruth Inmon	NWDE Operator	9
Viavia Manuma	NWDE Laborer	9
Joel Smith	NWDE Laborer	9
Matt Manning	NWDE Operator	9

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #	
Pickup Truck	F350 Service Truck	- miles	#3139
Flatbed Truck	Ford F450	- miles	#0576
Container Truck	Peterbuilt		
Skid Steer	Bobcat S185	- hrs	#BC7030
Tracked Skid Steer	Bobcat T750	- hrs	#BC2200
Mini-Excavator	CAT 308	- hrs	#EX1928
Excavator	Volvo EC290BLC	- hrs	#EX1006
Excavator	Volvo EC290BLC	- hrs	#EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles	#4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

NWDE will finalize the R2, stockpiling sand at the R2 exterior and downsizing concrete.

0730 – The Seaplane apron concrete processing area will have the small sized materials crushed to 3" minus and then do a final push up of the piles. During the morning the east side of the work area that was mostly this season's slab 219 brought in is run through the MB crusher bucket.

Punch list items are in the works as the season approaches the final days. Small tasks at a few former building sites are being completed. Materials are also staged in the shipping containers in preparation for closing out the year on Monday.

Today's busiest activity remains hauling clean coral sand from the approved Cargo Pier source and placing materials at the east and west walls. This is the continuation to stockpile buttress sand that will be key to the final design R2 cover. The biological monitor is onsite to visually spot for sea life during equipment operation. The monitor will advise if animals are present and halt work as required.

0800 – Continue sampling for the remaining points to collect at DU-8 and DU-9.

0930 – Brunch

1000 – Concrete crushing is steadily gaining to finish out the small piles and condense the footprint area.

1100 – Clean coral sand has been steadily moved to the R2 this morning.

1500 – Bldg 5342 Telephone Exchange pull vault is being finalized for the season to prevent birds from entering. This is where the multi cable runs entered the racks for distribution to the switchboards. The large diameter wires are removed and the sump is filled with clean coral sand.

NWDE begins to shut down for field operations and the focus will turn to O&M, preparing equipment for storage and containerizing materials, tool and general debris at the NAF Staging area.

Today's DU-9 truck load counts is zero for all except abutment stockpiling DU-5 with 36 loads of clean coral sand and DU-9 with one load of sand.

1730 – End of work day.

Photographs:

Photo 01: View west- Finalize the seasonal interim R2 Cell 3 & 4 cover.

Photo 02: View southeast- Final orientation of the concrete pile at the Seaplane apron crushing area.

Photo 03: View north- Yesterday's clean import sand to the NE corner, Bldg 5341 & red tanks.

Photo 04: View east- Yesterday's clean import sand to the NE corner, Bldg 5341 & red tanks.

Photo 06: View southwest- Overview of the R2 ramp closed up for the season.

Photo 07: View east- Interim cover secured over the R2 Cell 3 and 4.

Table 1. Maectite and Treated Soil Total Estimates

Date	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
	Soils (DU9)	Soils (DU5)	(~)	NWDE Walls (DU9)	Iniki Walls (DU9)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/17/16	0			0	0	1360	0	0	1755
10/18/16	0			0	0	1360	0	0	1755
10/19/16	0			0	0	1360	0	0	1755
10/20/16	0			0	0	1360	0	0	1755
10/21/16	0	154		0	0	1514	6	211	1966 [3]
10/22/16	0	0		0	0	1514	0	0	1966 [3]
10/23/16	0	0		0	0	1514	0	0	1966 [3]
Total to Date	1280 soil gallons	154 soil gallons[3]		80.5 gallons	140 gallons		136.5 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. Hauled to R2 includes 100.5 cuyd R2 NW plot soil treated and left in place. DU5 soils gallons minus 44.5 gallons backs out the west plot left in place. Subtract 32.5 gallons for east plot left in place

DU 9 – Bldg 170, 180, 200, 300, 340, S464, 502, 503, 520, S1119, S1123, 2127, 2411, 3506, 3509, 3511, 3514, 3524, 3529, 4201, 4214, 5126, 5267, 5295, 5301, 5338, 5339, 5340, 5341, 5342, 5350, 5360, 5361, 5378, 9149, R2 sand filter tanks, Fire Hydrants and other ancillary structures.

Table 2. Clean Backfill Total Estimates

Date /Loads		DU9 Clean Backfill Totals	
		Excavated and Placed Today in DU9 (cyd)	
		Cargo Pier Source Area	Total to Date in DU9 (cyd)
10/17/16	8	120	360
10/18/16	45	675	1035
10/19/16	0	0	1035
10/20/16	32	480	1515
10/21/16	0	0	1515
10/22/16	0	0	1515
10/23/16	1	15	1530
Total to date- 102 loads			

Notes:
A.

Date /Loads		Clean Backfill for misc slabs removed on island	
		Excavated and Placed Today for slabs (cyd)	
		Cargo Pier Source Area	Total to Date for slabs (cyd)
10/17/16	0	0	480
10/18/16	0	0	480
10/19/16	0	0	480
10/20/16	2	0	510
10/21/16	0	0	510
10/22/16	0	0	510
10/23/16	0	0	510
Total to date- 34 loads			

Notes:
A. Slabs removed are being process for clean 3” minus.

DU 5 BUTTRESS IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/17/2016	0	0	0	0	0	0
10/18/2016	0	0	0	0	0	0
10/19/2016	0	0	0	0	0	0
10/20/2016	0	0	0	0	0	0
10/21/2016	0	0	8	0	8	120
10/22/2016	0	0	16	16	32	480
10/23/2016	0	0	18	18	36	540
Load count per wall	0	0	75	75		
15cuyd estimate per wall	0	0	1125	1125		
2016 Total R2 combined Buttress clean import LOADS				150		
Loads x 15cuyd estimate				2250		

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads	Clean Wood Loads	~	Clean coral backfill for R2 Ramp
10/17/16	3	0	1	0		0
10/18/16	0	0	0	0		0
10/19/16	0	0	0	0		0
10/20/16	0	0	0	0		0
10/21/16	0	0	0	0		0
10/22/16	0	0	0	0		0
10/23/16	0	0	0	0		0
Season Total	109 loads	55 loads	42 loads	0 loads		0 loads

Table 4. Soil Sample Collection-

11 collection points / 22 Whirlpak samples collected today, 0 sample refused: Season Total = 311 samples

S30 P14 0-6"	5304 WT P2 24-30"	3126E P8 12-18"
S30 P15 0-6"	5305 WT P1 0-6"	3126E P8 24-30"
S30 P16 0-6"	5305 WT P1 12-18"	3126E P6 0-6"
5304 WT P1 0-6"	5305 WT P1 24-30"	3126E P6 12-18"
5304 WT P1 12-18"	3126E P7 0-6"	3126E P6 12-18"
5304 WT P1 24-30"	3126E P7 12-18"	R2 Cell 3 0-6"
5304 WT P2 0-6"	3126E P7 24-30"	R2 Cell 4 0-6"
5304 WT P2 12-18"	3126E P8 0-6"	-

Notes: 1. MIS confirmation sampling @ bottom of excavation specified MIS. Other sample IDs are 5-point composite 0-2" at small plots.
2. P points 0-6" are a 5-point composite.

Table 5. Demolition of Structures-

DECISION UNIT 9 BUILDING PROGRESS - 10/17/16

DENOTES UPDATE FROM LAST WEEK
2017 = Soil & Confirmation next season

DEMOLITION				
Facility #	Facility Name	Asbestos Abatement Complete (date)	Demolition Complete (date)	Soil Excavation
170	Switch Station Electrical Feeder 1	9/10/2016	9/21/2016	Full dig 09/22/16
180	Electrical Building	9/9/2016	9/21/2016	Full dig 09/22/16
200	Switch Station	9/29/2016	10/11/2016	Full dig 10/11/16
300	Fuel Farm Transform Bank (Fuels Office)	9/15/2016	9/28/2016	Full dig 09/29/16
340	Carpentry Shop substation	9/19/2016	10/14/2016	Full dig 10/15/16
S464	Fuel Oil Pumphouse	N/A	9/29/2016	Full dig 10/01/16
502	AT&T Shed	9/12/2016	10/7/2016	Full dig 10/08/16
503	Barracks Substation	N/A	10/13/2016	Full dig 10/13/16
520	Fire Dept. Storage	9/24/2016	10/6/2016	Full dig 10/06/16
S1119	Tug Pier Substation	N/A	9/21/2016	Full dig 09/22/16
S1123	Electric Distribution Building	N/A	9/21/2016	Full dig 09/22/16
2127	POL Office	9/15/2016	9/27/2016	Full dig 09/29/16
2411	Fuel Farm Lab	N/A	9/28/2016	Full dig 09/29/16
3506	Liquid Oxygen Storage	9/29/2016	10/10/2016	Full dig 10/10/16
3509	Oxy/Acetylene Storage	N/A	10/1/2016	Full dig 10/03/16
3511	Sk1 Warehouse Transformer (substation)	9/20/2016	10/1/2016	Full dig 10/03/16
3514	Security Bldg. Storage @TOC	9/14/2016	10/17/2016	2017
3524	Steam heat bldg.	N/A	10/8/2016	2017
3529	Midway Laundry	N/A	10/11/2016	2017
4201	JP-5 Pumping Station	N/A	10/1/2016	Full dig 10/01/16
4214	Substation electrical feeder 4	N/A	10/11/2016	Scrape 10/11/16
5126	Sewage Pump station	9/27/2016	10/13/2016 pending sump	2017
5267	Sewage Pump Transformer	9/20/2016	10/4/2016	Full dig 10/04/16
5295	Hangar Aux. Generator Bldg.	9/26/2016	10/7/2016	Full dig 10/07/16
5301	Runway light controls	N/A	10/12/2016	Full dig 10/12/16
5339	Water treatment Bldg. @ R2	9/28/2016	10/13/2016	2017
5340	Substation	9/29/2016	10/11/2016	Full dig 10/12/16
5341	R2 Chlorinator Bldg	N/A	10/14/2016	2017
5342	Telephone Switch Bldg.	9/13/2016	10/8/2016	2017
5350	Electrical Switch station	N/A	10/11/2016	Full dig 10/12/16
5360	Substation	9/20/2016	10/3/2016	Full dig 10/06/16
5361	Switch Station Electrical Feeder 9	9/16/2016	10/2/2016	Full dig 10/06/16
5378	Metal Shed near R2	N/A	10/15/2016	2017
9149	Power Plant shed	N/A	10/1/2016 structure- 10/13/16 slab	Full dig 10/14/16
R2	Tanks on West side	N/A	10/14/2016	2017

LEAD PAINT ABATE/MAECTITE/LEAD STOP					
Facility #	Facility Name	Complete (date)	Facility #	Facility Name	Complete (date)
140	Substation	9/19/2016	8105	R1 Concrete block/vault	10/5/2016
S228	High Voltage Bldg.	9/19/2016		Ave Maria	10/3/2016
309	Power Plant #3	9/27/2016		Cross	9/15/2016
347	Water System Bldg.	9/30/2016		Platforms (2) R3 S3126W/S3127E	9/30/2016
425	Receiver Building - Satellite area	Trade for 400		Manholes (43)	10/6/2016
426	Satellite TV	Trade for 400		3 red AST by generator building 309	9/26/2016
1124	Waste Storage Building	9/15/2016			
S1126	Harbor Office/Buddhist Temple	9/15/2016	OPTIONS		
3501	Main Freshwater Pump station	9/30/2016	144	Power Plant	Maectite only 9/14/16
5004	Water Storage bldg.	Not Applicable	S361	Pesticide Storage	9/28/2016
5150	Sewage Pump Station	10/4/2016	400	BEQ Transformer Bldg.	10/5/2016
8106	Freshwater Substation	10/4/2016		FAA Bldg near R2	10/7/2016

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Tueday, October 25, 2016
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 8 mph, Temperature ~81F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	
Everett White	NWDE Supervisor	
Jevon Stone	NWDE Operator	
Ruth Inmon	NWDE Operator	
Viavia Manuma	NWDE Laborer	
Joel Smith	NWDE Laborer	
Matt Manning	NWDE Operator	

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	- miles #3139
Flatbed Truck	Ford F450	- miles #0576
Container Truck	Peterbuilt	
Skid Steer	Bobcat S185	- hrs #BC7030
Tracked Skid Steer	Bobcat T750	- hrs #BC2200
Mini-Excavator	CAT 308	- hrs #EX1928
Excavator	Volvo EC290BLC	- hrs #EX1006
Excavator	Volvo EC290BLC	- hrs #EX1108
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4148
Off road Dump Truck	Volvo A30D	- hrs/ - miles #4245

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE conducts safety meeting.

Punch list of items this morning in preparation to depart the site. The charter flight Cinco Air is inbound from Honolulu for round trip travel.

Collect base aggregate material from DU-8 S28 and S30 AST for lab analysis.

0900 – Assemble at Charlie Barracks.

1030 – Depart Henderson Field PMDY bound for HNL. E.White and J.Stone NWDE are figuratively stranded until the next flight in two weeks, November 8th.

The joint team work of Northwest Demolition, Iniki Enterprise and U.S. Fish and Wildlife have brought about a successful 2016 season.

Photographs:

Photo 01: View southeast- Sunrise over the R2 Taxiway Rainstore[3] ports and stockpiled coral sand.

Photo 02: View north- The SW corner R2 valve vault piping to be addressed prior to 2017 abutment work.

Photo 03: View southeast- Partial view of shipping containers at the NAF Staging area.

Photo 04: View west- Cinco Air charter flight to depart Midway Atoll.

Photo 05: Black footed, Laysan and short-tailed Albatross benefit from LBP abatement work.

Table 1. Maectite and Treated Soil Total Estimates

Date	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
	Soils (DU9)	Soils (DU5)	(~)	NWDE Walls (DU9)	Iniki Walls (DU9)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/24/16	0	0		0	0	1514	0	0	1966 [3]
10/25/16	0	0		0	0	1514	0	0	1966 [3]
Total to Date	1280 soil gallons	154 soil gallons[3]		80.5 gallons	140 gallons		136.5 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. Hauled to R2 includes 100.5 cuyd R2 NW plot soil treated and left in place. DU5 soils gallons minus 44.5 gallons backs out the west plot left in place. Subtract 32.5 gallons for east plot left in place

DU 9 – Bldg 170, 180, 200, 300, 340, S464, 502, 503, 520, S1119, S1123, 2127, 2411, 3506, 3509, 3511, 3514, 3524, 3529, 4201, 4214, 5126, 5267, 5295, 5301, 5338, 5339, 5340, 5341, 5342, 5350, 5360, 5361, 5378, 9149, R2 sand filter tanks, Fire Hydrants and other ancillary structures.

Table 2. Clean Backfill Total Estimates

Date /Loads		DU9 Clean Backfill Totals	
		Excavated and Placed Today in DU9 (cyd)	
		Cargo Pier Source Area	Total to Date in DU9 (cyd)
10/24/16	0	0	1530
10/25/16	0	0	1530
Total to date- 102 loads			

Notes:
A.

Date /Loads		Clean Backfill for misc slabs removed on island	
		Excavated and Placed Today for slabs (cyd)	
		Cargo Pier Source Area	Total to Date for slabs (cyd)
10/24/16	0	0	510
10/25/16	0	0	510
Total to date- 34 loads			

Notes:
A. Slabs removed are being process for clean 3” minus.

DU 5 BUTTRESS IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/24/2016	0	0	0	0	0	0
10/25/2016	0	0	0	0	0	0
Load count per wall	0	0	75	75		
15cuyd estimate per wall	0	0	1125	1125		
2016 Total R2 combined Buttress clean import LOADS				150		
Loads x 15cuyd estimate				2250		

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads	Clean Wood Loads	~	Clean coral backfill for R2 Ramp
10/24/16	0	0	0	0		0
10/25/16	0	0	0	0		0
Season Total	109 loads	55 loads	42 loads	0 loads		0 loads

Table 4. Soil Sample Collection-

0 collection points / 0 Whirlpak samples collected today, 0 sample refused: Season Total = 311 samples

S28 Base 0-6”	-	-
S30 Base 0-6”	-	-
-	-	-

Notes: 1. MIS confirmation sampling @ bottom of excavation specified MIS. Other sample IDs are 5-point composite 0-2” at small plots.
2. P points 0-6” are a 5-point composite.

Table 5. Demolition of Structures-

DECISION UNIT 9 BUILDING PROGRESS - 10/17/16

DENOTES UPDATE FROM LAST WEEK
2017 = Soil & Confirmation next season

DEMOLITION				
Facility #	Facility Name	Asbestos Abatement Complete (date)	Demolition Complete (date)	Soil Excavation
170	Switch Station Electrical Feeder 1	9/10/2016	9/21/2016	Full dig 09/22/16
180	Electrical Building	9/9/2016	9/21/2016	Full dig 09/22/16
200	Switch Station	9/29/2016	10/11/2016	Full dig 10/11/16
300	Fuel Farm Transform Bank (Fuels Office)	9/15/2016	9/28/2016	Full dig 09/29/16
340	Carpentry Shop substation	9/19/2016	10/14/2016	Full dig 10/15/16
S464	Fuel Oil Pumphouse	N/A	9/29/2016	Full dig 10/01/16
502	AT&T Shed	9/12/2016	10/7/2016	Full dig 10/08/16
503	Barracks Substation	N/A	10/13/2016	Full dig 10/13/16
520	Fire Dept. Storage	9/24/2016	10/6/2016	Full dig 10/06/16
S1119	Tug Pier Substation	N/A	9/21/2016	Full dig 09/22/16
S1123	Electric Distribution Building	N/A	9/21/2016	Full dig 09/22/16
2127	POL Office	9/15/2016	9/27/2016	Full dig 09/29/16
2411	Fuel Farm Lab	N/A	9/28/2016	Full dig 09/29/16
3506	Liquid Oxygen Storage	9/29/2016	10/10/2016	Full dig 10/10/16
3509	Oxy/Acetylene Storage	N/A	10/1/2016	Full dig 10/03/16
3511	Sk1 Warehouse Transformer (substation)	9/20/2016	10/1/2016	Full dig 10/03/16
3514	Security Bldg. Storage @TOC	9/14/2016	10/17/2016	2017
3524	Steam heat bldg.	N/A	10/8/2016	2017
3529	Midway Laundry	N/A	10/11/2016	2017
4201	JP-5 Pumping Station	N/A	10/1/2016	Full dig 10/01/16
4214	Substation electrical feeder 4	N/A	10/11/2016	Scrape 10/11/16
5126	Sewage Pump station	9/27/2016	10/13/2016 pending sump	2017
5267	Sewage Pump Transformer	9/20/2016	10/4/2016	Full dig 10/04/16
5295	Hangar Aux. Generator Bldg.	9/26/2016	10/7/2016	Full dig 10/07/16
5301	Runway light controls	N/A	10/12/2016	Full dig 10/12/16
5339	Water treatment Bldg. @ R2	9/28/2016	10/13/2016	2017
5340	Substation	9/29/2016	10/11/2016	Full dig 10/12/16
5341	R2 Chlorinator Bldg	N/A	10/14/2016	2017
5342	Telephone Switch Bldg.	9/13/2016	10/8/2016	2017
5350	Electrical Switch station	N/A	10/11/2016	Full dig 10/12/16
5360	Substation	9/20/2016	10/3/2016	Full dig 10/06/16
5361	Switch Station Electrical Feeder 9	9/16/2016	10/2/2016	Full dig 10/06/16
5378	Metal Shed near R2	N/A	10/15/2016	2017
9149	Power Plant shed	N/A	10/1/2016 structure- 10/13/16 slab	Full dig 10/14/16
R2	Tanks on West side	N/A	10/14/2016	2017

LEAD PAINT ABATE/MAECTITE/LEAD STOP					
Facility #	Facility Name	Complete (date)	Facility #	Facility Name	Complete (date)
140	Substation	9/19/2016	8105	R1 Concrete block/vault	10/5/2016
S228	High Voltage Bldg.	9/19/2016		Ave Maria	10/3/2016
309	Power Plant #3	9/27/2016		Cross	9/15/2016
347	Water System Bldg.	9/30/2016		Platforms (2) R3 S3126W/S3127E	9/30/2016
425	Receiver Building - Satellite area	Trade for 400		Manholes (43)	10/6/2016
426	Satellite TV	Trade for 400		3 red AST by generator building 309	9/26/2016
1124	Waste Storage Building	9/15/2016			
S1126	Harbor Office/Buddhist Temple	9/15/2016	OPTIONS		
3501	Main Freshwater Pump station	9/30/2016	144	Power Plant	Maectite only 9/14/16
5004	Water Storage bldg.	Not Applicable	S361	Pesticide Storage	9/28/2016
5150	Sewage Pump Station	10/4/2016	400	BEQ Transformer Bldg.	10/5/2016
8106	Freshwater Substation	10/4/2016		FAA Bldg near R2	10/7/2016

APPENDIX B

SELECT SITE PHOTOGRAPHS AND SITE PHOTOGRAPH SUMMARY DVD

Photo 01: View northwest – Bldg 170 Switch Station Electrical Feeder 1, ACM abated.

Photo 02: View northwest – Bldg 170 Switch Station Electrical Feeder 1 demo and backfill complete.

Photo 03: View northeast – Bldg 180 Electrical, circa 2012 prior to ACM abatement.

Photo 04: View north – Bldg 180 Electrical demo and backfill complete.

Photo 05: View southeast – Bldg 200 Switch Station, ACM abated.

Photo 06: View southeast – Bldg 200 Switch Station demo and backfill complete.

Photo 07: View southwest – Bldg 300 Fuel Farm Transformer Bank, circa 2012 prior to ACM abatement.

Photo 08: View southwest – Bldg 300 Fuel Farm Transformer Bank demo and backfill complete.

Photo 09: View southeast – Bldg 340 Carpentry Shop Substation, ACM abated

Photo 10: View southeast – Bldg 340 Carpentry Shop Substation demo and backfill complete.

Photo 11: View south – Bldg S464 Fuel Oil Pump House.

Photo 12: View south – Bldg S464 Fuel Oil Pump House demo. Pending footing removal and backfill.

Photo 13: View south – Bldg 502 AT&T, ACM abated.

Photo 14: View southeast – Bldg 502 AT&T demo. Pending footing removal and backfill.

Photo 15: View east – Bldg 503 Barracks Substation.

Photo 16: View west – Bldg 503 Barracks Substation demo and backfill complete.

Photo 17: View east – Bldg S-1119 Tug Pier Substation.

Photo 18: View north – Bldg S-1119 Tug Pier Substation demo and backfill complete.

Photo 19: View northwest – Bldg S-1123 Electric Distribution Building (right), circa 2012.

Photo 20: View north – Bldg S-1123 Electric Distribution Building demo and backfill complete.

Photo 21: View east – Bldg 2127 POL Office, interior ACM abated.

Photo 22: View north – Bldg 2127 POL Office demo and backfill complete. Pending demo and backfill at S-269.

Photo 23: View east – Bldg 2411 Fuel Farm Lab.

Photo 24: View southeast – Bldg 2411 Fuel Farm Lab demo and backfill complete.

Photo 25: View southeast – Bldg 3506 Liquid Oxygen Storage (right), circa 2012.

Photo 26: View southeast – Bldg 3506 Liquid Oxygen Storage demo and backfill complete.

Photo 27: View southeast – Bldg 3509 Oxy/Acetylene Storage.

Photo 28: View southeast – Bldg 3509 Oxy/Acetylene Storage demo and backfill complete.

Photo 29: View northwest – Bldg 3511 Sk1 Warehouse Transformer, ACM abated.

Photo 30: View southwest – Bldg 3511 Sk1 Warehouse Transformer demo and backfill complete.

Photo 31: View south – Bldg 3514 Security Storage, ACM abated.

Photo 32: View southwest – Bldg 3514 Security Storage demo and staked corners. Pending excavation and backfill.

Photo 33: View west – Bldg 3524 Steam Heat.

Photo 34: View south – Bldg 3524 Steam Heat demo and staked corners. Pending excavation and backfill.

Photo 35: View southeast – Bldg 3529 New Midway Laundry.

Photo 36: View southeast – Bldg 3529 New Midway Laundry demo and staked corners. Pending excavation and backfill.

Photo 37: View northwest – Bldg 4201 JP-5 Pumping Station.

Photo 38: View northwest – Bldg 4201 JP-5 Pumping Station demo. Pending footing removal and backfill.

Photo 39: View southeast – Bldg 4214 Substation electrical feeder 4.

Photo 40: View northeast – Bldg 4214 Substation electrical feeder 4 demo and backfill complete.

Photo 41: View southwest – Bldg 5126 Sewage Pump station, ACM abated.

Photo 42: View southwest – Bldg 5126 Sewage Pump station demo. Pending footing, soil and backfill work.

Photo 43: View northeast – Bldg 5267 Sewage Pump Transformer, ACM abated.

Photo 44: View northeast – Bldg 5267 Sewage Pump Transformer demo and backfill complete.

Photo 45: View southeast – Bldg 5295 Hangar Aux. Generator, ACM steel siding abated.

Photo 46: View north – Bldg 5295 Hangar Aux. Generator demo. Pending footing removal and backfill.

Photo 47: View east – Bldg 5301 Runway light controls.

Photo 48: View south – Bldg 5301 Runway light controls demo and backfill complete.

Photo 49: View west – Bldg 5338 Electric Transformer.

Photo 50: View north – Bldg 5338 Electric Transformer demo and backfill complete.

Photo 51: View north – Bldg 5339 Water treatment, ACM abated.

Photo 52: View north – Bldg 5339 Water treatment demo and backfill complete.

Photo 53: View south – Bldg 5340 Substation, ACM abated.

Photo 54: View west – Bldg 5340 Substation demo and backfill complete.

Photo 55: View east – Bldg 5341 R2 Chlorinator (right)

Photo 56: View north – Bldg 5341 R2 Chlorinator demo and backfill complete. (Red Tanks photo #69 & #70)

Photo 57: View southwest – Bldg 5342 Telephone Switch during ACM abatement.

Photo 58: View southwest – Bldg 5342 Telephone Switch demo and staked corners. Pending footings and backfill.

Photo 59: View northeast – Bldg 5350 Electrical Switch station.

Photo 60: View northwest – Bldg 5350 demo and backfill complete.

Photo 61: View east – Bldg 5360 Substation, circa 2012. Prior to ACM abatement.

Photo 62: View southeast – Bldg 5360 demo and backfill complete.

Photo 63: View southeast – Bldg 5361 Switch Station Electrical Feeder 9, ACM abated.

Photo 64: View southeast – Bldg 5361 Switch Station Electrical Feeder 9 demo and backfill complete.

Photo 65: View north – Bldg 5378 Metal Generator Shed.

Photo 66: View north – Bldg 5378 Metal Generator Shed demo and staked corners. Pending soil work.

Photo 67: View southeast – Bldg 9149 Power Plant Shed.

Photo 68: View north – Bldg 9149 Power Plant Shed demo and backfill complete.

Photo 69: View southwest –R2 Sand Filter Tanks.

Photo 70: View southeast – R2 Sand Filter Tanks demo and backfill complete with addition stockpiling sand.

Photo 71: View southwest –Bldg 309 Power Plant prior to LBP abatement.

Photo 72: View southwest – Bldg 309 Power Plant after LBP abatement and LeadStop® application.

Photo 73: View northwest –Bldg 8106 Freshwater Substation LBP abatement work.

Photo 74: View northwest – Bldg 8106 Freshwater Substation after LBP abatement and LeadStop® application.

Photo 75: View southeast –Bldg 5150 Sewage Pump Station prior to LBP abatement work.

Photo 76: View southeast – Bldg Bldg 5150 Sewage Pump Station after LBP abatement and LeadStop® application.

Photo 77: View northeast –Bldg 347 Water Plant LBP abatement work.

Photo 78: View northeast – Bldg 347 Water Plant after LBP abatement and LeadStop® application.

Photo 79: View northeast –Bldg 3501 Main Freshwater Pump Station LBP abatement work.

Photo 80: View southeast – Bldg 3501 Main Freshwater Pump Station after LBP abatement and LeadStop® application.

Photo 81: View east –Bldg 140 Radionuclide.

Photo 82: View southwest – Bldg 140 Radionuclide after LBP abatement and LeadStop® application.

Photo 83: View northwest –Bldg 1126 Harbor Office LBP abatement.

Photo 84: View northeast – Bldg 1126 Harbor Office after LBP abatement and LeadStop® application.

Photo 85: View north –Bldg 1124 Haz Waste Storage LBP abatement.

Photo 86: View north – Bldg 1124 Haz Waste Storage after LBP abatement and LeadStop® application.

Photo 87: View north –Bldg S-361 Pesticide Storage prior to LBP abatement.

Photo 88: View northeast – Bldg S-361 Pesticide Storage after LBP abatement and progress of LeadStop® application.

Photo 89: View southeast –Ave Maria memorial for Bldg 4213 prior to LBP abatement, circa 2012.

Photo 90: View southeast – Ave Maria memorial for Bldg 4213 after LBP abatement and LeadStop® application.

APPENDIX C

INIKI ACM MONITORING REPORTS

HAWAII ANALYTICAL LABORATORY, LLC

3615 Harding Avenue, Suite 308
Honolulu, HI 96816
Ph: 808-735-0422 - Fax: 808-735-0047
www.analyzehawaii.com

☐ New client?

Report To*	Gary Lewis/Edwin Boyette
Company	Iniki Enterprises
Address*	1040 Sand Island Parkway, #100 Honolulu, HI 96819
Phone / Cell No.*	
Report results to	Gary@inikihawaii.com
Email / Fax	Edwin@inikihawaii.com

Invoice To*	Cheryl Ford
Company	Iniki Enterprises LTD
Address*	
Phone / Cell No.*	
Purchase Order No.	
Email Invoice To	accounting@inikihawaii.com

Need Results By*:

- ☑ 5 Working Days (WD)
- ☐ 4 WD
- ☐ 3 WD
- ☐ 2 WD
- ☐ 24 hours
- ☐ 6 hours or less
- ☐ 4 hours or less
- ☐ 1-2 hours

Site/Project Name: Midway Atoll

Client Project No.:

Verbal results? ☐

Sampled By:

Special Instructions:

PLM POSITIVE STOP Instructions:
☐ + stop / SAMPLE
☐ + stop / LAYER

Lab Report No.: 20167131

	Sample Identification / Description* (Maxmium of 30 Characters)	Date Sampled* (mm/dd/yy)	Collection Medium	Sample Area / Air Volume	Analysis Requested*	Method Reference	***Lab Sample(s) No.:***
1	Asb-9-9-1 Larry Vaa	09/9/16	Air	1,500	PCM		201639706
2	Asb-9-9-2 Lauren Lewis	09/9/16		1,500			201639707
3	Asb-9-10-1 Larry Vaa	09/10/16		1050			201639708
4	Asb-9-12-1 Larry Vaa	09/12/16		450			201639709
5	Asb-9-12-2 Delson Smith	09/12/16		937			201639710
6	Asb-9-13-1 Phillip Kneubuhl	09/13/16		1162			201639711
7	Asb-9-13-2 Phillip Kneubuhl	09/13/16		187			201639712
8	Asb-9-14-1 Kawena Kaawa	09/14/16		525			201639713
9	Asb-9-14-2 Kawena Kaawa	09/14/16		750			201639714
10	Asb-9-15-1 Phillip Kneubuhl	09/15/16		862			201639715
11	Asb-9-15-2 Lauren Lewis	09/15/16		525			201639716
12	Asb-9-16-1 Delson Smith	09/16/16		525			201639717

Relinquished By (Print and Sign)	Date/Time	Received By (Print and Sign)	Date/Time
Edwin Boyette	Oct 20, 2016	Rachel Rueli	10-21-16A10:51 RCVD
Edwin Boyette			

*Sample description can be paint chips, concrete, specific sample collection location, etc...
If matrix is 'soil', please specify if it is a FOREIGN SOIL SAMPLE (outside Hawaii) in the comment section.
All samples submitted are subject to Hawaii Analytical Laboratory terms and conditions.
*Required fields, failure to complete these fields may result in a delay in your samples being processed.

☐ via HAC ☐ via USPS ☐ via drop box ☐ via FedEx

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HAWAII ANALYTICAL LABORATORY, LLC

3615 Harding Avenue, Suite 308
Honolulu, HI 96816
Ph: 808-735-0422 - Fax: 808-735-0047
www.analyzehawaii.com

☐ New client?

Report To*	Gary Lewis/Edwin Boyette
Company	Iniki Enterprises
Address*	1040 Sand Island Parkway, #100
	Honolulu, HI 96819
Phone / Cell No.*	
Report results to	Gary@inikihawaii.com
Email / Fax	Edwin@inikihawaii.com

Invoice To*	Cheryl Ford
Company	Iniki Enterprises LTD
Address*	
Phone / Cell No.*	
Purchase Order No.	
Email Invoice To	accounting@inikihawaii.com

Need Results By*:

- ☑ 5 Working Days (WD)
- ☐ 4 WD
- ☐ 3 WD
- ☐ 2 WD
- ☐ 24 hours
- ☐ 6 hours or less
- ☐ 4 hours or less
- ☐ 1-2 hours

Site/Project Name: Midway Atoll

Client Project No.:

Verbal results? ☐

Sampled By:

Special Instructions:

PLM POSITIVE STOP Instructions:
☐ + stop / SAMPLE
☐ + stop / LAYER

Lab Report No.: 2016 7131

	Sample Identification / Description* (Maxmium of 30 Characters)	Date Sampled* (mm/dd/yy)	Collection Medium	Sample Area / Air Volume	Analysis Requested*	Method Reference	***Lab Sample(s) No.:***
1	Asb-9-19-1 Delson Smith	09/19/16	Air	600	PCM		201639718
2	Asb-9-19-2 Phillip Kneubuhl	09/19/16		750			201639719
3	Asb 920-1 Lauren Lewis	09/20/16		1,200			201639720
4	Asb-9-22-1 Delson Smith	09/22/16		375			201639721
5	Asb-9-22-2 Kawena Kaawa	09/22/16		375			201639722
6	Asb-9-23-1 Delson Smith	09/23/16		525			~~201639723~~
7	Asb-9-23-2 Delson Smith	09/23/16		412			201639724
8	Asb-9-23-3 Phillip Kneubuhl	09/23/16		375			201639725
9	Asb-9-24-1 Kawena Kaawa	09/24/16		1,425			201639726
10	Asb-9-26-1 Delson Smith	09/26/16		675			201639727
11	Asb-9-27-1 Larry Vaa	09/27/16		1423			201639728
12	Asb-9-28-1 Delson Smith	09/28/16		523			201639729

Relinquished By (Print and Sign)	Date/Time	Received By (Print and Sign)	Date/Time
Edwin Boyette	Oct 20, 2016	Rachel Rueli	10-21-16 A10:51 RCVD
Edwin Boyette			

*Sample description can be paint chips, concrete, specific sample collection location, etc...
If matrix is 'soil', please specify if it is a FOREIGN SOIL SAMPLE (outside Hawaii) in the comment section.
All samples submitted are subject to Hawaii Analytical Laboratory terms and conditions.
*Required fields, failure to complete these fields may result in a delay in your samples being processed.

☐ via HAC ☐ via USPS ☐ via drop box ☐ via FedEx

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3615 Harding Avenue, Suite 308
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Ph: 808-735-0422 - Fax: 808-735-0047
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☐ New client?

Report To*	Gary Lewis/Edwin Boyette
Company	Iniki Enterprises
Address*	1040 Sand Island Parkway, #100 Honolulu, HI 96819
Phone / Cell No.*	
Report results to	Gary@inikihawaii.com
Email / Fax	Edwin@inikihawaii.com

Invoice To*	Cheryl Ford
Company	Iniki Enterprises LTD
Address*	
Phone / Cell No.*	
Purchase Order No.	
Email Invoice To	accounting@inikihawaii.com

Need Results By*:

- ☑ 5 Working Days (WD)
- ☐ 4 WD
- ☐ 3 WD
- ☐ 2 WD
- ☐ 24 hours
- ☐ 6 hours or less
- ☐ 4 hours or less
- ☐ 1-2 hours

Site/Project Name: Midway Atoll

Client Project No.:

Verbal results? ☐

Sampled By:

Special Instructions:

PLM POSITIVE STOP Instructions:
- ☐ + stop / SAMPLE
- ☐ + stop / LAYER

Lab Report No.: 2016 7131

	Sample Identification / Description* (Maxmium of 30 Characters)	Date Sampled* (mm/dd/yy)	Collection Medium	Sample Area / Air Volume	Analysis Requested*	Method Reference	***Lab Sample(s) No.:***
1	Asb929-1 Lauren Lewis	09/29/16	Air	225	PCM		201639730
2	Asb-9-29-2 Lauren Lewis	09/29/16	Air	300	↓		201639731
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

Relinquished By (Print and Sign)	Date/Time	Received By (Print and Sign)	Date/Time
Edwin Boyette	Oct 20, 2016	Rachel Rueli	10-21-16 A10:51 RCVD

*Sample description can be paint chips, concrete, specific sample collection location, etc...
If matrix is 'soil', please specify if it is a FOREIGN SOIL SAMPLE (outside Hawaii) in the comment section.
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☐ via HAC ☐ via USPS ☐ via drop box ☐ via FedEx

Page: _____ of _____

Sample #	Date	Worker	Location	Start	Stop	Minutes	Flow LPM	Volume
Asb-9-9-1	9-Sep-16	Larry Vaa	Bldg. 180	7:00	17:00	600	2.5	1500
Asb-9-9-2	9-Sep-16	Lauren Lewis	B170	7:00	17:00	600	2.5	1500
Asb-9-10-1	10-Sep-16	Larry Vaa	502	9:00	16:00	420	2.5	1050
Asb-9-12-1	12-Sep-16	Larry Vaa	502	8:00	11:00	180	2.5	450
Asb-9-12-2	12-Sep-16	Delson Smith	B5342	11:15	17:30	375	2.5	937.5
Asb-9-13-1	13-Sep-16	Philip Kneubuhl	B5342	8:15	16:00	465	2.5	1162.5
Asb-9-13-2	13-Sep-16	Philip Kneubuhl	3514	16:15	17:30	75	2.5	187.5
Asb-9-14-1	14-Sep-16	Kawena Kaawa	3514	8:30	12:00	210	2.5	525
Asb-9-14-2	14-Sep-16	Kawena Kaawa	2127	12:30	17:30	300	2.5	750
Asb-9-15-1	15-Sep-16	Philip Kneubuhl	B300	8:00	13:45	345	2.5	862.5
Asb-9-15-2	15-Sep-16	Lauren Lewis	B5361	14:00	17:30	210	2.5	525
Asb-9-16-1	15-Sep-16	Delson Smith	B5361	14:00	17:30	210	2.5	525
Asb-9-19-1	19-Sep-16	Delson Smith	340	8:00	12:00	240	2.5	600
Asb-9-19-2	19-Sep-16	Philip Kneubuhl	3511	12:30	17:30	300	2.5	750
Asb-9-20-1	20-Sep-16	Lauren Lewis	B5360	8:00	16:00	480	2.5	1200
Asb-9-22-1	22-Sep-16	Delson Smith	520	15:00	17:30	150	2.5	375
Asb-9-22-2	22-Sep-16	Kawena Kaawa	520	15:00	17:30	150	2.5	375
Asb-9-23-1	23-Sep-16	Delson Smith	520	8:00	11:30	210	2.5	525
Asb-9-23-2	23-Sep-16	Delson Smith	5295	14:45	17:30	165	2.5	412.5
Asb-9-23-3	23-Sep-16	Philip Kneubuhl	520	12:00	14:30	150	2.5	375
Asb-9-24-1	24-Sep-16	Kawena Kaawa	5295	8:00	17:30	570	2.5	1425
Asb-9-26-1	26-Sep-16	Delson Smith	5126	13:00	17:30	270	2.5	675
Asb-9-27-1	27-Sep-16	Larry Vaa	5339	8:00	17:30	570	2.5	1425
Asb-9-28-1	28-Sep-16	Delson Smith	5340	8:00	11:30	210	2.5	525
Asb-9-29-1	29-Sep-16	Lauren Lewis	Bldg.200	7:30	9:00	90	2.5	225
Asb-9-29-2	29-Sep-16	Lauren Lewis	3506	9:30	11:30	120	2.5	300

Hawaii Analytical Laboratory
ANALYTICAL REPORT

Thursday, October 27, 2016

Mr. Gary Lewis
Iniki Enterprises, Ltd.
1040 Sand Island Parkway #100
Honolulu HI 96819

Phone Number: (808) 478-7683
Facsimile:
Email: gary@inikihawaii.com

Lab Job No: 20167131
Date Submitted: 10/21/2016
Your Project: Midway Atoll

Fiber Count Determination

NIOSH Method 7400

Sample No.	Your Sample description	Total Fibers	Total Fields	Air Vol. (L)	Fibers / mm2	Results	Units	Date Analyzed
201639706	**Asb-9-9-1 Larry Vaa 9/9/2016**	0.5	100	1500	0.6	< 0.0018	f/cc	10/25/2016
Comments								
201639707	**Asb-9-9-2 Lauren Lewis 9/9/2016**	0	100	1500	0.0	< 0.0018	f/cc	10/25/2016
Comments								
201639708	**Asb-9-10-1 Larry Vaa 9/10/2016**			1050			f/cc	10/25/2016
Comments	Uncountable, >50% of the filter area is covered with particulate debris.							
201639709	**Asb-9-12-1 Larry Vaa 9/12/2016**	2.5	100	450	3.2	< 0.006	f/cc	10/25/2016
Comments								
201639710	**Asb-9-12-2 Delson Smith 9/12/2016**	13.5	100	937	17.2	0.0071	f/cc	10/25/2016
Comments								
201639711	**Asb-9-13-1 Phillip Kneubuhl 9/13/2016**	35	100	1162	44.6	0.015	f/cc	10/25/2016
Comments								
201639712	**Asb-9-13-2 Phillip Kneubuhl 9/13/2016**	4.5	100	187	5.7	< 0.014	f/cc	10/25/2016
Comments								

Mr. Gary Lewis
Iniki Enterprises, Ltd.
1040 Sand Island Parkway #100
Honolulu HI 96819

Phone Number: (808) 478-7683
Facsimile:
Email: gary@inikihawaii.com

Lab Job No: 20167131
Date Submitted: 10/21/2016
Your Project: Midway Atoll

Fiber Count Determination

NIOSH Method 7400

Sample No.	Your Sample description	Total Fibers	Total Fields	Air Vol. (L)	Fibers / mm2	Results	Units	Date Analyzed
201639713	**Asb-9-14-1 Kawena Kaawa 9/14/2016**	3.5	100	525	4.5	< 0.0051	f/cc	10/25/2016
Comments								
201639714	**Asb-9-14-2 Kawena Kaawa 9/14/2016**	8	100	750	10.2	0.0052	f/cc	10/25/2016
Comments								
201639715	**Asb-9-15-1 Phillip Kneubuhl 9/15/2016**	0.5	100	862	0.6	< 0.0031	f/cc	10/25/2016
Comments								
201639716	**Asb-9-15-2 Lauren Lewis 9/15/2016**	30.5	100	525	38.9	0.029	f/cc	10/25/2016
Comments								
201639717	**Asb-9-16-1 Delson Smith 9/16/2016**	0.5	100	525	0.6	< 0.0051	f/cc	10/25/2016
Comments								
201639718	**Asb-9-19-1 Delson Smith 9/19/2016**	5.5	100	600	7.0	0.0045	f/cc	10/25/2016
Comments								
201639719	**Asb-9-19-2 Phillip Kneubuhl 9/19/2016**	4	100	750	5.1	< 0.0036	f/cc	10/25/2016
Comments								
201639720	**Asb-9-20-1 Lauren Lewis 9/20/2016**	2	100	1200	2.5	< 0.0022	f/cc	10/25/2016
Comments								
201639721	**Asb-9-22-1 Delson Smith 9/22/2016**	0	100	375	0.0	< 0.0072	f/cc	10/25/2016
Comments								
201639722	**Asb-9-22-2 Kawena Kaawa 9/22/2016**	3	100	375	3.8	< 0.0072	f/cc	10/25/2016
Comments								

Mr. Gary Lewis
Iniki Enterprises, Ltd.
1040 Sand Island Parkway #100
Honolulu HI 96819

Phone Number: (808) 478-7683
Facsimile:
Email: gary@inikihawaii.com

Lab Job No: 20167131
Date Submitted: 10/21/2016
Your Project: Midway Atoll

Fiber Count Determination

NIOSH Method 7400

Sample No.	Your Sample description	Total Fibers	Total Fields	Air Vol. (L)	Fibers / mm2	Results	Units	Date Analyzed
201639723	**Asb-9-23-1 Delson Smith 9/23/2016**	1	100	525	1.3	< 0.0051	f/cc	10/25/2016
Comments								
201639724	**Asb-9-23-2 Delson Smith 9/23/2016**	0	100	412	0.0	< 0.0065	f/cc	10/25/2016
Comments								
201639725	**Asb-9-23-3 Phillip Kneubuhl 9/23/2016**	1.5	100	375	1.9	< 0.0072	f/cc	10/25/2016
Comments								
201639726	**Asb-9-24-1 Kawena Kaawa 9/24/2016**	4.5	100	1425	5.7	< 0.0019	f/cc	10/25/2016
Comments								
201639727	**Asb-9-26-1 Delson Smith 9/26/2016**	1	100	675	1.3	< 0.004	f/cc	10/25/2016
Comments								
201639728	**Asb-9-27-1 Larry Vaa 9/27/2016**	2.5	100	1425	3.2	< 0.0019	f/cc	10/25/2016
Comments								
201639729	**Asb-9-28-1 Delson Smith 9/28/2016**	1.5	100	525	1.9	< 0.0051	f/cc	10/25/2016
Comments								
201639730	**Asb-9-29-1 Lauren Lewis 9/29/2016**	5.5	100	225	7.0	0.012	f/cc	10/25/2016
Comments								
201639731	**Asb-9-29-2 Lauren Lewis 9/29/2016**			300			f/cc	10/25/2016
Comments	Uncountable, >50% of the filter area is covered with particulate debris.							

Mr. Gary Lewis
Iniki Enterprises, Ltd.
1040 Sand Island Parkway #100
Honolulu HI 96819

Phone Number: (808) 478-7683
Facsimile:
Email: gary@inikihawaii.com

Lab Job No: 20167131
Date Submitted: 10/21/2016
Your Project: Midway Atoll

General Comments
The air filter analyses subject of this Analytical Report were conducted in general accordance with the procedures outlined in the National Institute of Occupational Safety and Health's "Asbestos and Other Fibers by PCM" Method 7400, Issue 2, Aug 1994. Note that although this method is primarily used for estimating airborne asbestos concentrations, PCM does not differentiate between asbestos and other fibers. Any airborne fiber may interfere since all particles meeting the counting criteria are counted. Chain-like particles may appear fibrous. High levels of non-fibrous dust particles may obscure fibers in the field of view and increase sample bias. Transmission Electron Microscopy (TEM) Method 7402 should be employed for assistance in the identification of individual fibers. Fibers less than 0.25 micrometers in diameter may not be detected by this method. NIOSH 7400 recommends 2 field blanks or 10% of the sample set, whichever is greater. Results have not been corrected for field blank determinations unless noted in remarks. This report is not to be duplicated except in full without the expressed written permission of Hawaii Analytical Laboratory. Hawaii Analytical Laboratory intra-lab CV for the fiber density range of [5-20] is 0.143; [>20-50] is 0.082; [>50-100] is 0.080 and [>100] is 0.089. Hawaii Analytical Laboratory inter-lab CV for the fiber density range of [5-20] is 0.136; [>20-50] is 0.111; [>50-100] is 0.103 and [>100] is 0.117. The reporting limit for this method is based on 7 fibers / mm2 filter area. TWA values have been calculated based on information supplied by the client that the laboratory has not independently verified. Unless otherwise indicated the sample condition at the time of receipt was acceptable. This report should not be construed as an endorsement for a product or a service by the AIHA LAP, LLC or any affiliated organizations.

Symbols Definitions
Uncountable = Not analyzed due to severe interference from "debris" and / or sample particulate "overloading", although an attempt was made.
< This testing result is less than the numerical value listed.

Jennifer Hsu Liao
Laboratory Manager

APPENDIX D

INIKI LBP MONITORING REPORTS

HAWAII ANALYTICAL LABORATORY, LLC

3615 Harding Avenue, Suite 308
Honolulu, HI 96816
Ph: 808-735-0422 - Fax: 808-735-0047
www.analyzehawaii.com

☐ New client?

Report To*	Gary Lewis/Edwin Boyette
Company	Iniki Enterprises
Address*	1040 Sand Island Parkway, #100 Honolulu, HI 96819
Phone / Cell No.*	
Report results to	Gary@inikihawaii.com
Email / Fax	Edwin@inikihawaii.com

Invoice To*	Cheryl Ford
Company	Iniki Enterprises LTD
Address*	
Phone / Cell No.*	
Purchase Order No.	
Email Invoice To	accounting@inikihawaii.com

Need Results By*:

- ☑ 5 Working Days (WD)
- ☐ 4 WD
- ☐ 3 WD
- ☐ 2 WD
- ☐ 24 hours
- ☐ 6 hours or less
- ☐ 4 hours or less
- ☐ 1-2 hours

Site/Project Name: Midway Atoll

Client Project No.:

Verbal results? ☐

Sampled By:

Special Instructions:

PLM POSITIVE STOP Instructions:
- ☐ + stop / SAMPLE
- ☐ + stop / LAYER

Lab Report No.: 20167132

	Sample Identification / Description* (Maxmium of 30 Characters)	Date Sampled* (mm/dd/yy)	Collection Medium	Sample Area / Air Volume	Analysis Requested*	Method Reference	Lab Sample(s) No.:
1	PB-9-10-1 Keala Lewis	09/10/16	Air	1,080	Lead Air		201639732
2	PB-9-10-2 Ulrich Naki	09/10/16		840			201639733
3	PB-9-12-1 Keala Lewis	09/12/16		1,080			201639734
4	PB-9-12-2 Ulrich Naki	09/12/16		1,080			201639735
5	PB-9-13-1 Ulrich Naki	09/13/16		~~360~~ 360			201639736
6	PB-9-13-2 Keala Lewis	09/13/16		~~420~~ 420			201639737
7	PB-9-14-1 Ulrich Naki	09/14/16		~~360 180~~ 360			201639738
8	PB-9-15-1 Ulrich Naki	09/15/16		~~360~~ 720			201639739
9	PB-9-16-1 Keala Lewis	09/16/16		~~570~~ 1,140			201639740
10	PB-9-16-2 Ulrich Naki	09/16/16		1,140			201639741
11	PB-9-22-1 Keala Lewis	09/22/1		1,080			201639742
12	PB-9-23-1 Amber Lewis	09/23/1		1,080			201639743

Relinquished By (Print and Sign)	Date/Time	Received By (Print and Sign)	Date/Time
Edwin G. Boyette	Oct 20, 2016	Rachel Rueli	10-21-16 A10:52 RCVD

*Sample description can be paint chips, concrete, specific sample collection location, etc...
If matrix is 'soil', please specify if it is a FOREIGN SOIL SAMPLE (outside Hawaii) in the comment section.
All samples submitted are subject to Hawaii Analytical Laboratory terms and conditions.
*Required fields, failure to complete these fields may result in a delay in your samples being processed.

☐ via HAC ☐ via USPS ☐ via drop box ☐ via FedEx

Page: _____ of _____

HAWAII ANALYTICAL LABORATORY, LLC

3615 Harding Avenue, Suite 308
Honolulu, HI 96816
Ph: 808-735-0422 - Fax: 808-735-0047
www.analyzehawaii.com

☐ New client?

Report To*	Gary Lewis/Edwin Boyette
Company	Iniki Enterprises
Address*	1040 Sand Island Parkway, #100 Honolulu, HI 96819
Phone / Cell No.*	
Report results to	Gary@inikihawaii.com
Email / Fax	Edwin@inikihawaii.com

Invoice To*	Cheryl Ford
Company	Iniki Enterprises LTD
Address*	
Phone / Cell No.*	
Purchase Order No.	
Email Invoice To	accounting@inikihawaii.com

Need Results By*:

- ☑ 5 Working Days (WD)
- ☐ 4 WD
- ☐ 3 WD
- ☐ 2 WD
- ☐ 24 hours
- ☐ 6 hours or less
- ☐ 4 hours or less
- ☐ 1-2 hours

Site/Project Name: Midway Atoll

Client Project No.:

Verbal results? ☐

Sampled By:

Special Instructions:

PLM POSITIVE STOP Instructions:
☐ + stop / SAMPLE
☐ + stop / LAYER

Lab Report No.: 2016 7132

	Sample Identification / Description* (Maxmium of 30 Characters)	Date Sampled* (mm/dd/yy)	Collection Medium	Sample Area / Air Volume	Analysis Requested*	Method Reference	Lab Sample(s) No.:
1	PB-9-24-1 Keala Lewis	09/24/16	Air	1,140	Lead Air		201639744
2	PB-9-27-1 Keala Lewis	09/27/16		1,080			201639745
3	PB-9-28-1 Keala Lewis	09/28/16		420			201639746
4	PB-9-30-1 Larry Vaa	09/30/16		480			201639747
5	PB-10-2-1 Phillip Kneubuhl	10/2/1		1,140			201639748
6	PB-10-3-1 Evan Esposito	10/3/1		1,140			201639749
7	PB-10-4-1 Larry Vaa	10/4/1		1,140			201639750
8							
9							
10							
11							
12							

Relinquished By (Print and Sign)	Date/Time	Received By (Print and Sign)	Date/Time
Edwin G. Boyette	Oct 20, 2016	Rachel Rueli	10-21-16 A10:52 RCVD

*Sample description can be paint chips, concrete, specific sample collection location, etc...
If matrix is 'soil', please specify if it is a FOREIGN SOIL SAMPLE (outside Hawaii) in the comment section.
All samples submitted are subject to Hawaii Analytical Laboratory terms and conditions.
*Required fields, failure to complete these fields may result in a delay in your samples being processed.

☐ via HAC ☐ via USPS ☐ via drop box ☐ via FedEx

Page: _____ of _____

Sample #	Date	Worker	Location	Start	Stop	Minutes	Flow LPM	Volume
PB-9-10-1	10-Sep-16	Keala Lewis	S1126	8:30	17:30	540	2	1080
PB-9-10-2	10-Sep-16	Ulrich Naki	1124	9:00	16:00	420	2	840
PB-9-12-1	12-Sep-16	Keala Lewis	S1126	8:30	17:30	540	2	1080
PB-9-12-2	12-Sep-16	Ulrich Naki	1124	8:30	17:30	540	2	1080
PB-9-13-1	13-Sep-16	Ulrich Naki	S1126	8:30	11:30	180	2	360
PB-9-13-2	13-Sep-16	Keala Lewis	Cross	14:00	17:30	210	2	420
PB-9-14-1	14-Sep-16	Ulrich Naki	1124	8:30	11:30	180	2	360
PB-9-15-1	15-Sep-16	Ulrich Naki	S1126	8:00	14:00	360	2	720
PB-9-16-1	16-Sep-16	Keala Lewis	S228	8:00	17:30	570	2	1140
PB-9-16-2	16-Sep-16	Ulrich Naki	140	8:00	17:30	570	2	1140
PB-9-22-1	22-Sep-16	Keala Lewis	B309	8:30	17:30	540	2	1080
PB-9-23-1	23-Sep-16	Amber Lewis	B309	8:30	17:30	540	2	1080
PB-9-24-1	24-Sep-16	Keala Lewis	Water Plant 347 & 3501	8:00	17:30	570	2	1140
PB-9-27-1	27-Sep-16	Keala Lewis	Water Plant 347 & 3501	8:00	17:00	540	2	1080
PB-9-28-1	28-Sep-16	Keala Lewis	Water	8:00	11:30	210	2	420
PB-9-30-1	30-Sep-16	Larry Vaa	B360	12:30	16:30	240	2	480
PB-10-2-1	2-Oct-16	Phillip Knuuebuhl	FAA Building	8:00	17:30	570	2	1140
PB-10-3-1	3-Oct-16	Evan Esposito	5150	8:00	17:30	570	2	1140
PB-10-4-1	4-Oct-16	Larry Vaa	400	8:00	17:30	570	2	1140

Hawaii Analytical Laboratory
ANALYTICAL REPORT

Thursday, October 27, 2016

Mr. Gary Lewis
Iniki Enterprises, Ltd.
1040 Sand Island Parkway #100
Honolulu HI 96819

Phone Number: (808) 478-7683
Facsimile:
Email: gary@inikihawaii.com

Lab Job No: 20167132
Date Submitted: 10/21/2016
Your Project: Midway Atoll

Lead, total (air filters)

NIOSH Method: 7082m LEAD by FAAS

Sample No.	Your Sample Description	Results	Units	Date Analyzed
201639732 Comments	**PB-9-10-1 Keala Lewis 9/10/2016**	< 4.6	ug/m3	10/24/2016
201639733 Comments	**PB-9-10-2 Ulrich Naki 9/10/2016**	< 6	ug/m3	10/24/2016
201639734 Comments	**PB-9-12-1 Keala Lewis 9/12/2016**	< 4.6	ug/m3	10/24/2016
201639735 Comments	**PB-9-12-2 Ulrich Naki 9/12/2016**	< 4.6	ug/m3	10/24/2016
201639736 Comments	**PB-9-13-1 Ulrich Naki 9/13/2016**	< 14	ug/m3	10/24/2016
201639737 Comments	**PB-9-13-2 Keala Lewis 9/13/2016**	< 12	ug/m3	10/24/2016
201639738 Comments	**PB-9-14-1 Ulrich Naki 9/14/2016**	< 14	ug/m3	10/24/2016
201639739 Comments	**PB-9-15-1 Ulrich Naki 9/15/2016**	< 6.9	ug/m3	10/24/2016

Mr. Gary Lewis
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Phone Number: (808) 478-7683
Facsimile:
Email: gary@inikihawaii.com

Lab Job No: 20167132
Date Submitted: 10/21/2016
Your Project: Midway Atoll

Lead, total (air filters)

NIOSH Method: 7082m LEAD by FAAS

Sample No.	Your Sample Description	Results	Units	Date Analyzed
201639740 Comments	**PB-9-16-1 Keala Lewis 9/16/2016**	< 4.4	ug/m3	10/24/2016
201639741 Comments	**PB-9-16-2 Ulrich Naki 9/16/2016**	< 4.4	ug/m3	10/24/2016
201639742 Comments	**PB-9-22-1 Keala Lewis 9/22/2016**	< 4.6	ug/m3	10/24/2016
201639743 Comments	**PB-9-23-1 Amber Lewis 9/23/2016**	< 4.6	ug/m3	10/24/2016
201639744 Comments	**PB-9-24-1 Keala Lewis 9/24/2016**	< 4.4	ug/m3	10/24/2016
201639745 Comments	**PB-9-27-1 Keala Lewis 9/27/2016**	< 4.6	ug/m3	10/24/2016
201639746 Comments	**PB-9-28-1 Keala Lewis 9/28/2016**	< 12	ug/m3	10/24/2016
201639747 Comments	**PB-9-30-1 Larry Vaa 9/30/2016**	< 10	ug/m3	10/24/2016
201639748 Comments	**PB-10-2-1 Phillip Kneubuhl 10/2/2016**	< 4.4	ug/m3	10/24/2016
201639749 Comments	**PB-10-3-1 Evan Esposito 10/3/2016**	< 4.4	ug/m3	10/24/2016
201639750 Comments	**PB-10-4-1 Larry Vaa 10/4/2016**	< 4.4	ug/m3	10/24/2016

Mr. Gary Lewis
Iniki Enterprises, Ltd.
1040 Sand Island Parkway #100
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Phone Number: (808) 478-7683
Facsimile:
Email: gary@inikihawaii.com

Lab Job No: 20167132
Date Submitted: 10/21/2016
Your Project: Midway Atoll

All Quality Control data are acceptable unless otherwise noted.
MRL for lead air is 5ug.
MRL for lead wipe is 10ug.
MRL for lead paint or soil is 40 mg/kg for a 0.25g sample.

General Comments
The sample[s] analysis subject of this analytical report were conducted in general accordance with the procedures associated with the "analytical method" referenced above. Modifications to this methodology may have been made based upon the analyst's professional judgment and / or sample matrix effects encountered. The analysis of sample relates only to the sample analyzed, and may or may not be representative of the original source of the material submitted for our analysis. All analysts participate in interlaboratory quality control testing to continuously document profiency. This report is not to be duplicated except in full without the expressed written permission of Hawaii Analytical Laboratory. This report should not be construed as an endorsement for a product or a service by the AIHA LAP, LLC or any affiliated organizations. Sample and associated sampling / collection data is reported as provided by client. TWA values have been calculated based on information supplied by the client that the laboratory has not independently verified. Results have not been corrected for blank determinations unless noted in remarks. Unless otherwise indicated the sample condition at the time of receipt was acceptable.

Results and Symbols Definitions
> This testing result is greater than the numerical value listed.
< This testing result is less than the numerical value listed.
# = Analytical methods marked with an "#" are not within our AIHA LAP, LLC Scope of Accreditation.
MRL = Method Reporting Limit.

Jennifer Hsu Liao
Laboratory Manager

APPENDIX E

ANALYTICAL REPORTS AND QUALITY ASSURANCE REPORTS

APPENDIX E

CHEMICAL ANALYTICAL DATA AND QA/QC REVIEW

Data quality for field sampling methods was based on measurement quality criteria listed in the Work Plan and were checked using analytical results of field duplicate samples. For chemical analyses, established precision and accuracy protocols, combined with those outlined in the Quality Assurance Project Plan (QAPP) suffice for analytical data quality. The laboratory's QA manager was responsible for maintaining the method-defined and QAPP-defined quality assurance/quality control (QA/QC) criteria.

Samples

All samples obtained for chemical analysis were transferred into clean sample containers. Soil samples were collected in plastic Whirl-Pak® bags. Whirl-Pak® bags are equipped with a built-in wire for self-closing and they include a puncture-proof tab. The bags are also designed with a built in write-on strip for labeling purposes. In addition, pre-printed labels were used for sample identification.

Sufficient sample volume was obtained for the laboratory to complete the method-specific quality control (QC) analyses. Possession of the samples was documented by the chain-of-custody. The chain-of-custody forms were signed and dated in the appropriate places by parties involved with a transfer of custody. Each container was labeled by the field technician to avoid the possibility of misidentification. Each sample label contained the project name, project number, field sample identification, and sample date and sample time.

Upon receipt at the analytical laboratory, each sample was logged into tracking system. Each sample was assigned a unique laboratory identification number used by the laboratory for analysis assignment, sample tracking and data reporting. Upon receipt of the samples at the laboratory, the following procedures were followed. The custody seals were broken, the chain-of-custody form was signed by the laboratory personnel, and the conditions of the samples were recorded on the form. The original chain-of-custody form remained with the laboratory and copies were returned to the relinquishing party.

Field Quality Control

Field quality control measures included the collection of duplicate as well as documentation of field measurements and observations and field instrument calibration.

Field Duplicate Samples

Field duplicate samples were collected at a minimum frequency of 1 for every 20 samples (5 percent) per sampling event. In total, four duplicates were collected during the field activities.

Duplicate samples were collected to assess matrix homogeneity, sampling procedures and laboratory analytical consistency. The field duplicates were analyzed by the same analytical methods used for primary samples. Relative percent differences (RPDs) for field duplicates were calculated to assess the data precision and accuracy and potential variability caused by sample handling. Tables 5 and 6 summarize the RPDs. The RPDs between the primary and field duplicate soil samples range from zero percent to 117 percent. Field duplicate precision is normally considered acceptable when the RPD is less than 35 percent. While some of the RPDs were above these criteria, this is not unexpected because of the potential for a "nugget effect" when sampling soils contaminated with lead based paint. In addition higher RPDs are normally seen when evaluating lower detected concentrations.

The primary source of lead in the soils at Midway is associated with flaking lead based paint. As such, samples in close proximity (duplicates) may have higher RPDs due to the presence/absence of paint chips in a sample.

Documentation of Field Activities

Daily field activities, including observations, measurement data, and variations in field procedures were recorded on appropriate field forms. The original field forms are maintained in the Geosyntec office files. Copies of the completed forms were maintained in a binder and sequentially numbered field file for reference during field activities. Indelible ink was used for all documentation. Photographic documentation of field activities was performed as appropriate. The FWS was provided with copies of each daily field report and the photographic log.

Laboratory Quality Assurance

Analytical methods that were used for this project included total lead by EPA Method 6020 and multiple extraction procedure for lead.

Laboratory Quality Control

The laboratory maintains an internal quality assurance program as documented in its laboratory quality assurance manual. The laboratory uses a combination of blanks, surrogate recoveries, duplicates, matrix spike recoveries, matrix spike duplicate recoveries, blank spike recoveries and blank spike duplicate recoveries to evaluate the analytical results. The laboratory also uses data quality goals for individual chemicals or groups of chemicals based on the long-term performance of the test methods. The project team reviewed each analytical data packet and completed a QA/QC checklist for each

analytical data packet. Overall, the data were of usable quality and no quality control issues were identified. A copy of the data review checklist is included in this Appendix.

Data Quality Review

In order to apply only the requisite data qualifiers, TestAmerica Analytical Report 580-63706-1 was reviewed based on EPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, September 2016 (OLEM 9355.0-133, EPA 540-R-2016-001), as well as by the pertinent methods referenced by the data package and professional and technical judgment.

Three hundred and thirteen samples were analyzed for total lead using EPA method 6010C, the analyses were conducted in twenty sample preparation batches. (A batch is not more than 20 samples extracted/prepared at one time with the appropriate laboratory QC samples. The samples must also be extracted together; with a 24 hour period). Total lead was detected at estimated concentrations, greater than the method detection limit (MDL) and less than the reporting limit (RL), in eight of the twenty method blanks. Every client sample that was prepared in a batch that had method blank contamination was flagged by the laboratory with a B to indicate blank contamination but not every sample result flagged with a B is affected. The lab, however, does have to indicate all of the samples in the batch with the "failing" QC sample with a "B" flag per certification and good laboratory practices requirements. The method blank detections result in nine client samples being U qualified as not detected at the RL and the remaining B flags can be removed from the data set for reporting purposes.

Twenty laboratory control samples (LCS) and laboratory control sample duplicates (LCSD) were analyzed by the laboratory all 20 LCS/LCSD recoveries were within the method and laboratory specified acceptance criteria. Additionally, the relative percent differences (RPDs) between the LCS and LCSD for every LCS/LCSD pair were within the method and laboratory specified acceptance criteria. None of the data flagged by the laboratory were associated with LCS/LCSD results.

Of the eighteen client sample set specific matrix spike (MS)/matrix spike duplicate (MSD) pairs analyzed, seven results exceeded the laboratory acceptance criteria. The laboratory data were flagged accordingly with F1 and F2 flags. These flags were valid and would be replaced with J qualification of the affected compound in the sample used for the MS/MSD pair. The MS/MSD exceedances result in one client sample being J qualified as estimated, one client sample being J- qualified as estimated with a low bias and three client samples being J+ qualified as estimated with a high bias. The data are usable within the limitation of the qualifications and the bias should be noted.

Eighteen client sample set specific laboratory duplicates were analyzed using the same parent samples as the MS/MSDs analyses. Three laboratory duplicate RPDs were high and outside of the method and laboratory specified acceptance criteria and were flagged

by the laboratory with F3. These flags do not indicate that the data are unusable but indicate that the sample results should be considered estimated.

Eighty-seven field duplicates were collected with the sample set. Twelve field duplicate pair RPDs exceeded the project specified RPD of 35%. The client calculates the field duplicate RPDs and the field duplicate RPD exceedances are not flagged in the laboratory report. The field duplicate RPD exceedances would result in twenty-four samples being J qualified as estimated.

While there are numerous laboratory flags reported with the client samples the vast majority of the laboratory flags are either J flags indicating that the sample result is an estimated value less than the RL but greater than the MDL or B flags indicating that the compound was found in both the blank and the sample. With the exception of the nine samples that contain both the J and B flags, these laboratory flags do not indicate quality control issues and do not result in data qualification. Based on this review we find that 100 % of the data are usable for meeting the project objectives although some limitations apply based on QC exceedances described above.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-63706-1
Client Project/Site: PNG0515 - Midway

For:
Geosyntec Consultants, Inc.
621 Morrison Street
Suite 600
Portland, Oregon 97205

Attn: Joey Hickey

Authorized for release by:
11/15/2016 2:56:53 PM

Robert Greer, Project Manager II
(253)922-2310
robert.greer@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Definitions 5
Client Sample Results 6
QC Sample Results 319
Chronicle 335
Certification Summary 388
Sample Summary 389
Chain of Custody 395
Receipt Checklists 408

Job ID: 580-63706-1

Laboratory: TestAmerica Seattle

Narrative

Job Narrative
580-63706-1

Comments
No additional comments.

Receipt
The samples were received on 10/28/2016 9:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 14.2º C, 15.0º C and 16.2º C.

Receipt Exceptions

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): 3126E P6 24-30" (580-63706-309). The container labels list 3126E P6 24-30" while the COC lists 3126E P6 12-18". The COC listed the depth as 24-30' so it was assumed the sample label was correct and the COC was in error.

Sample #147 on the COC had a incorrect sample ID. ID listed on COC is 4212 P 100 0-2" but it should be 4214 P100 0-2" as per client.

The following sample was improperly preserved: Trip Blank (580-63706-313). The container is for a lab-generated trip blank and the preservative used is not compatible with the analytes requested.

Metals
Method(s) 6010C: The matrix spike duplicate (MSD) in preparation batch 580-231635 and analytical batch 580-231747 recovered outside control limits for lead. The %RPD was outside control limits. Spike recovery for the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) were within control limits. Failed spike recovery for the MSD was due to non-homogenious sample matrix.

Method(s) 6010C: The method blank for preparation batch 580-231788 and analytical batch 580-232060 had a detection above the method detection limit but below 1/2 the reporting limit. The values should be considered as estimates, and have been flagged “J”. The associated sample results have been flagged “B”.

Method(s) 6010C: The matrix spike (MS) and matrix spike duplicate (MSD) in preparation batch 580-231788 and analytical batch 580-232060 recovered outside control limits for lead. Spike recovery for the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) were within control limits. Failed spike recovery for the MS and MSD was due to high lead content in the parent sample.

Method(s) 6010C: The %RPD for laboratory duplicate in preparation batch 580-231788 and analytical batch 580-232060 was outside control limits due to non-homogenous sample matrix.

Method(s) 6010C: The matrix spike (MS) and matrix spike duplicate (MSD) in preparation batch 580-231792 and analytical batch 580-232060 recovered outside control limits for lead. Spike recovery for the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) were within control limits. Failed spike recovery for the MS and MSD was due to non-homogenous sample matrix.

Method(s) 6010C: The %RPD for laboratory duplicate in preparation batch 580-231792 and analytical batch 580-232060 was outside control limits due to non-homogenous sample matrix.

Method(s) 6010C: The method blank for preparation batch 580-231882 and analytical batch 580-232060 had a detection above the method detection limit but below 1/2 the reporting limit. The values should be considered as estimates, and have been flagged “J”. The associated sample results have been flagged “B”.

Method(s) 6010C: The matrix spike (MS) and matrix spike duplicate (MSD) in preparation batch 580-231964 and analytical batch 580-232116 recovered outside control limits for lead. Spike recovery for the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) were within control limits. Failed spike recovery for the MS and MSD was due to high lead content in the parent sample.

Job ID: 580-63706-1 (Continued)

Laboratory: TestAmerica Seattle (Continued)

Method(s) 6010C: The method blank for preparation batch 580-231978 and analytical batch 580-232158 had a detection above the method detection limit but below 1/2 the reporting limit. The values should be considered as estimates, and have been flagged “J”. The associated sample results have been flagged “B”.

Method(s) 6010C: The method blank for preparation batch 580-232014 and analytical batch 580-232158 had a detection above the method detection limit but below 1/2 the reporting limit. The values should be considered as estimates, and have been flagged “J”. The associated sample results have been flagged “B”.

Method(s) 6010C: The method blank for preparation batch 580-232102 and analytical batch 580-232294 had a detection above the method detection limit but below 1/2 the reporting limit. The values should be considered as estimates, and have been flagged “J”. The associated sample results have been flagged “B”.

Method(s) 6010C: The matrix spike duplicate (MSD) in preparation batch 580-232102 and analytical batch 580-232294 recovered outside control limits for lead. Spike recovery for the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) were within control limits. Failed spike recovery for the MSD was due to non-homogenious sample matrix.

Method(s) 6010C: The %RPD for laboratory duplicate in preparation batch 580-232102 and analytical batch 580-232294 was outside control limits due to non-homogenous sample matrix.

Method(s) 6010C: The method blank for preparation batch 580-232117 and analytical batch 580-232294 had a detection above the method detection limit but below 1/2 the reporting limit. The values should be considered as estimates, and have been flagged “J”. The associated sample results have been flagged “B”.

Method(s) 6010C: The method blank for preparation batch 580-232129 and analytical batch 580-232283 had a detection above the method detection limit but below 1/2 the reporting limit. The values should be considered as estimates, and have been flagged “J”. The associated sample results have been flagged “B”.

Method(s) 6010C: The matrix spike (MS) in preparation batch 580-232136 and analytical batch 580-232283 recovered outside control limits for lead. Spike recovery for the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) were within control limits. Failed spike recovery for the MS was due to non-homogenious sample matrix.

Method(s) 6010C: The matrix spike (MS) in preparation batch 580-232173 and analytical batch 580-232365 recovered outside control limits for lead. Spike recovery for the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) were within control limits. Failed spike recovery for the MS was due to non-homogenious sample matrix.

Method(s) 6010C: The %RPD for laboratory duplicate in preparation batch 580-232173 and analytical batch 580-232365 was outside control limits due to non-homogenous sample matrix.

Method(s) 6010C: The method blank for preparation batch 580-232180 and analytical batch 580-232365 had a detection above the method detection limit but below 1/2 the reporting limit. The values should be considered as estimates, and have been flagged “J”. The associated sample results have been flagged “B”.

No additional analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Qualifiers

Metals

Qualifier	Qualifier Description
F3	Duplicate RPD exceeds the control limit
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S1123 P100 0-2"

Lab Sample ID: 580-63706-1

Date Collected: 09/23/16 13:10

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.1	F1 F2	1.4	0.088	mg/Kg		11/04/16 14:37	11/04/16 23:34	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S1123 P100 0-2" DUP

Lab Sample ID: 580-63706-2

Date Collected: 09/23/16 13:10

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.2		1.4	0.088	mg/Kg		11/04/16 14:37	11/05/16 00:05	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S1123 P101 0-2"

Lab Sample ID: 580-63706-3

Date Collected: 09/23/16 13:15

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.9		1.3	0.086	mg/Kg		11/04/16 14:37	11/05/16 00:09	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S1123 P101 0-2" DUP

Lab Sample ID: 580-63706-4

Date Collected: 09/23/16 13:15
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.2		1.4	0.087	mg/Kg		11/04/16 14:37	11/05/16 00:13	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S1119 P100 0-2"

Lab Sample ID: 580-63706-5
Date Collected: 09/23/16 14:30
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.7		1.3	0.086	mg/Kg		11/04/16 14:37	11/05/16 00:16	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S1119 P100 0-2" DUP

Lab Sample ID: 580-63706-6

Date Collected: 09/23/16 14:30
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.0		1.4	0.087	mg/Kg		11/04/16 14:37	11/05/16 00:20	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S1119 P101 0-2"

Lab Sample ID: 580-63706-7

Date Collected: 09/23/16 14:36
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	18		1.4	0.087	mg/Kg		11/04/16 14:37	11/05/16 00:33	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S1119 P101 0-2" DUP

Lab Sample ID: 580-63706-8

Date Collected: 09/23/16 14:36
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	18		1.3	0.085	mg/Kg		11/04/16 14:37	11/05/16 00:37	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 180 P100 0-2"

Lab Sample ID: 580-63706-9

Date Collected: 09/23/16 15:10
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	11		1.4	0.089	mg/Kg		11/04/16 14:37	11/05/16 00:41	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 180 P100 0-2" DUP

Lab Sample ID: 580-63706-10

Date Collected: 09/23/16 15:10
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.7		1.3	0.084	mg/Kg		11/04/16 14:37	11/05/16 00:44	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 180 P101 0-2"

Lab Sample ID: 580-63706-11

Date Collected: 09/23/16 15:17

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.23	J	1.5	0.093	mg/Kg		11/04/16 14:37	11/05/16 00:48	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 180 P101 0-2" DUP

Lab Sample ID: 580-63706-12

Date Collected: 09/23/16 15:17

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.27	J	1.4	0.093	mg/Kg		11/04/16 14:37	11/05/16 00:52	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 170 P100 0-2"

Lab Sample ID: 580-63706-13

Date Collected: 09/23/16 15:55
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	30		1.5	0.094	mg/Kg		11/04/16 14:37	11/05/16 00:56	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 170 P100 0-2" DUP

Lab Sample ID: 580-63706-14

Date Collected: 09/23/16 15:55
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	31		1.3	0.085	mg/Kg		11/05/16 14:54	11/08/16 19:29	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 170 P101 0-2"

Lab Sample ID: 580-63706-15

Date Collected: 09/23/16 16:01
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.9		1.3	0.082	mg/Kg		11/05/16 13:26	11/08/16 21:26	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 170 P101 0-2" DUP

Lab Sample ID: 580-63706-16

Date Collected: 09/23/16 16:01
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.9		1.3	0.085	mg/Kg		11/05/16 13:26	11/08/16 21:54	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 2127 P100 0-2"

Lab Sample ID: 580-63706-17

Date Collected: 10/04/16 14:04
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	41		1.3	0.086	mg/Kg		11/05/16 14:54	11/08/16 19:58	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 2127 P100 0-2" DUP

Lab Sample ID: 580-63706-18

Date Collected: 10/04/16 14:04

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	55	B	1.4	0.089	mg/Kg		11/07/16 14:44	11/09/16 18:14	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 2127 P101 0-2"

Lab Sample ID: 580-63706-19

Date Collected: 10/04/16 14:10

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	71	B	1.3	0.084	mg/Kg		11/07/16 14:44	11/09/16 18:18	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 2127 P101 0-2" DUP

Lab Sample ID: 580-63706-20

Date Collected: 10/04/16 14:10

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	39		1.3	0.086	mg/Kg		11/05/16 14:54	11/08/16 20:02	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 2127 P102 0-2"

Lab Sample ID: 580-63706-21

Date Collected: 10/04/16 14:18

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4.5		1.2	0.078	mg/Kg		11/05/16 14:54	11/08/16 20:05	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 2127 P102 0-2" DUP

Lab Sample ID: 580-63706-22

Date Collected: 10/04/16 14:18
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.6	B	1.3	0.082	mg/Kg		11/07/16 14:44	11/09/16 18:22	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 300 P100 0-2"

Lab Sample ID: 580-63706-23

Date Collected: 10/04/16 14:46

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	37		1.3	0.084	mg/Kg		11/05/16 13:26	11/08/16 21:58	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 300 P100 0-2" DUP

Lab Sample ID: 580-63706-24

Date Collected: 10/04/16 14:46
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	27	B	1.3	0.086	mg/Kg		11/07/16 14:44	11/09/16 18:25	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 300 P101 0-2"

Lab Sample ID: 580-63706-25

Date Collected: 10/04/16 14:59

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	16		1.3	0.082	mg/Kg		11/05/16 13:26	11/08/16 22:01	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 300 P101 0-2" DUP

Lab Sample ID: 580-63706-26

Date Collected: 10/04/16 14:59

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	14	B	1.4	0.089	mg/Kg		11/07/16 14:44	11/09/16 18:29	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S464 P100 0-2"

Lab Sample ID: 580-63706-27

Date Collected: 10/04/16 15:40
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	37		1.3	0.082	mg/Kg		11/05/16 14:54	11/08/16 20:09	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S464 P100 0-2" DUP

Lab Sample ID: 580-63706-28

Date Collected: 10/04/16 15:40
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	14		1.4	0.089	mg/Kg		11/05/16 13:26	11/08/16 22:05	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S464 P101 0-2"

Lab Sample ID: 580-63706-29

Date Collected: 10/04/16 15:52
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	28	F1	1.3	0.083	mg/Kg		11/07/16 15:27	11/09/16 19:09	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S464 P101 0-2" DUP

Lab Sample ID: 580-63706-30

Date Collected: 10/04/16 15:52
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	21	B	1.3	0.086	mg/Kg		11/07/16 14:44	11/09/16 18:33	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S464 P102 0-2"

Lab Sample ID: 580-63706-31

Date Collected: 10/04/16 16:02
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	19	B	1.3	0.086	mg/Kg		11/07/16 14:44	11/09/16 18:36	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S464 P102 0-2" DUP

Lab Sample ID: 580-63706-32

Date Collected: 10/04/16 16:02
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	18	B	1.4	0.089	mg/Kg		11/07/16 14:44	11/09/16 18:40	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S464 P103 0-2"

Lab Sample ID: 580-63706-33

Date Collected: 10/04/16 16:09
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	29		1.3	0.085	mg/Kg		11/07/16 15:27	11/09/16 19:37	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S464 P103 0-2" DUP

Lab Sample ID: 580-63706-34

Date Collected: 10/04/16 16:09
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	31		1.3	0.086	mg/Kg		11/07/16 15:27	11/09/16 19:41	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S464 P104 0-2"

Lab Sample ID: 580-63706-35

Date Collected: 10/04/16 16:14
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	34		1.3	0.085	mg/Kg		11/07/16 15:27	11/09/16 19:45	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S464 P104 0-2" DUP

Lab Sample ID: 580-63706-36

Date Collected: 10/04/16 16:14

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	36		1.3	0.086	mg/Kg		11/07/16 15:27	11/09/16 19:48	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 520 P100 0-2"

Lab Sample ID: 580-63706-37

Date Collected: 10/07/16 12:50
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	17		1.3	0.081	mg/Kg		11/05/16 14:54	11/08/16 20:13	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 520 P100 0-2" DUP

Lab Sample ID: 580-63706-38

Date Collected: 10/07/16 12:50
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	16		1.3	0.085	mg/Kg		11/07/16 15:27	11/09/16 19:52	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 520 P101 0-2"

Lab Sample ID: 580-63706-39

Date Collected: 10/07/16 13:05
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	48		1.3	0.085	mg/Kg		11/07/16 15:27	11/09/16 19:56	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 520 P101 0-2" DUP

Lab Sample ID: 580-63706-40

Date Collected: 10/07/16 13:05
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	43		1.3	0.086	mg/Kg		11/07/16 15:27	11/09/16 19:59	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 520 P102 0-2"

Lab Sample ID: 580-63706-41

Date Collected: 10/07/16 13:13

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	2.5		1.3	0.084	mg/Kg		11/07/16 15:27	11/09/16 20:03	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 520 P102 0-2" DUP

Lab Sample ID: 580-63706-42

Date Collected: 10/07/16 13:13
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.1		1.3	0.084	mg/Kg		11/05/16 14:54	11/08/16 20:16	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 520 P103 0-2"

Lab Sample ID: 580-63706-43

Date Collected: 10/07/16 13:17

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.1		1.3	0.083	mg/Kg		11/05/16 13:26	11/08/16 22:09	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 520 P103 0-2" DUP

Lab Sample ID: 580-63706-44

Date Collected: 10/07/16 13:17
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.2		1.2	0.079	mg/Kg		11/05/16 13:26	11/08/16 22:12	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 520 P104 0-2"

Lab Sample ID: 580-63706-45

Date Collected: 10/07/16 13:24
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.0		1.3	0.080	mg/Kg		11/05/16 14:54	11/08/16 20:20	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 520 P104 0-2" DUP

Lab Sample ID: 580-63706-46

Date Collected: 10/07/16 13:24
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.2		1.4	0.088	mg/Kg		11/05/16 14:54	11/08/16 20:24	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 520 P105 0-2"

Lab Sample ID: 580-63706-47

Date Collected: 10/07/16 13:28
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	180		1.3	0.083	mg/Kg		11/07/16 15:27	11/09/16 20:13	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 520 P105 0-2" DUP

Lab Sample ID: 580-63706-48

Date Collected: 10/07/16 13:28
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	200		1.4	0.087	mg/Kg		11/07/16 15:27	11/09/16 20:17	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5295 P100 0-2"

Lab Sample ID: 580-63706-49

Date Collected: 10/07/16 14:43

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	64		1.3	0.083	mg/Kg		11/07/16 15:27	11/09/16 20:20	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5295 P100 0-2" DUP

Lab Sample ID: 580-63706-50

Date Collected: 10/07/16 14:43

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	70		1.3	0.081	mg/Kg		11/05/16 13:26	11/08/16 22:16	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5295 P101 0-2"

Lab Sample ID: 580-63706-51

Date Collected: 10/07/16 14:56

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	51		1.3	0.084	mg/Kg		11/05/16 13:26	11/08/16 22:20	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5295 P101 0-2" DUP

Lab Sample ID: 580-63706-52

Date Collected: 10/07/16 14:56

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	51		1.3	0.084	mg/Kg		11/05/16 13:26	11/08/16 22:23	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5295 P102 0-2"

Lab Sample ID: 580-63706-53

Date Collected: 10/07/16 15:03

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	28		1.3	0.085	mg/Kg		11/07/16 15:27	11/09/16 20:24	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5295 P102 0-2" DUP

Lab Sample ID: 580-63706-54

Date Collected: 10/07/16 15:03
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	37		1.3	0.080	mg/Kg		11/05/16 13:26	11/08/16 22:33	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5295 P103 0-2"

Lab Sample ID: 580-63706-55

Date Collected: 10/07/16 15:11

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	38		1.2	0.079	mg/Kg		11/05/16 13:26	11/08/16 22:37	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5295 P103 0-2" DUP

Lab Sample ID: 580-63706-56

Date Collected: 10/07/16 15:11

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	37		1.3	0.085	mg/Kg		11/07/16 15:27	11/09/16 20:28	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5295 P104 0-2"

Lab Sample ID: 580-63706-57

Date Collected: 10/07/16 15:18

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.2		1.4	0.090	mg/Kg		11/07/16 15:27	11/09/16 20:31	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5295 P104 0-2" DUP

Lab Sample ID: 580-63706-58

Date Collected: 10/07/16 15:18

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.5		1.4	0.090	mg/Kg		11/07/16 15:27	11/09/16 20:35	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5295 P105 0-2"

Lab Sample ID: 580-63706-59

Date Collected: 10/07/16 15:28

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.0		1.4	0.086	mg/Kg		11/07/16 15:27	11/09/16 20:39	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5295 P105 0-2" DUP

Lab Sample ID: 580-63706-60

Date Collected: 10/07/16 15:28
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.3		1.3	0.084	mg/Kg		11/05/16 13:26	11/08/16 22:40	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4201 P100 0-2"

Lab Sample ID: 580-63706-61

Date Collected: 10/08/16 08:27

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.6		1.3	0.084	mg/Kg		11/05/16 14:54	11/08/16 20:28	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4201 P100 0-2" DUP

Lab Sample ID: 580-63706-62

Date Collected: 10/08/16 08:27

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.6		1.2	0.078	mg/Kg		11/05/16 14:54	11/08/16 20:38	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4201 P101 0-2"

Lab Sample ID: 580-63706-63

Date Collected: 10/08/16 08:31

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.1		1.3	0.085	mg/Kg		11/05/16 14:54	11/08/16 20:41	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4201 P101 0-2" DUP

Lab Sample ID: 580-63706-64

Date Collected: 10/08/16 08:31

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.4	B	1.4	0.089	mg/Kg		11/08/16 14:24	11/09/16 21:01	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4201 P102 0-2"

Lab Sample ID: 580-63706-65

Date Collected: 10/08/16 08:36

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	20		1.4	0.088	mg/Kg		11/05/16 14:54	11/08/16 20:45	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4201 P102 0-2" DUP

Lab Sample ID: 580-63706-66

Date Collected: 10/08/16 08:36

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	22		1.3	0.085	mg/Kg		11/05/16 13:26	11/08/16 22:44	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4201 P103 0-2"

Lab Sample ID: 580-63706-67

Date Collected: 10/08/16 08:39

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	12		1.2	0.077	mg/Kg		11/05/16 14:54	11/08/16 20:49	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4201 P103 0-2" DUP

Lab Sample ID: 580-63706-68

Date Collected: 10/08/16 08:39

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	16		1.3	0.084	mg/Kg		11/05/16 13:26	11/08/16 22:48	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4201 P104 0-2"

Lab Sample ID: 580-63706-69

Date Collected: 10/08/16 08:43

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	44	B	1.4	0.088	mg/Kg		11/08/16 14:24	11/10/16 10:37	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4201 P104 0-2" DUP

Lab Sample ID: 580-63706-70

Date Collected: 10/08/16 08:43
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	30		1.2	0.077	mg/Kg		11/05/16 14:54	11/08/16 20:52	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5360 P100 0-2"

Lab Sample ID: 580-63706-71

Date Collected: 10/08/16 15:48

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.9		1.4	0.087	mg/Kg		11/05/16 13:26	11/08/16 22:51	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5360 P100 0-2" DUP

Lab Sample ID: 580-63706-72

Date Collected: 10/08/16 15:48

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.6		1.3	0.082	mg/Kg		11/05/16 14:54	11/08/16 20:56	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5360 P101 0-2"

Lab Sample ID: 580-63706-73

Date Collected: 10/08/16 15:56
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.7		1.4	0.088	mg/Kg		11/05/16 14:54	11/08/16 21:00	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5360 P101 0-2" DUP

Lab Sample ID: 580-63706-74

Date Collected: 10/08/16 15:56

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.71	J B	1.3	0.084	mg/Kg		11/08/16 14:24	11/10/16 10:41	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5361 P100 0-2"

Lab Sample ID: 580-63706-75

Date Collected: 10/08/16 16:15

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.5		1.2	0.077	mg/Kg		11/05/16 13:26	11/08/16 22:55	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5361 P100 0-2" DUP

Lab Sample ID: 580-63706-76

Date Collected: 10/08/16 16:15

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.0		1.3	0.084	mg/Kg		11/05/16 13:26	11/08/16 22:59	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5361 P101 0-2"

Lab Sample ID: 580-63706-77

Date Collected: 10/08/16 16:22
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.3		1.3	0.085	mg/Kg		11/05/16 14:54	11/08/16 21:03	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5361 P101 0-2" DUP

Lab Sample ID: 580-63706-78

Date Collected: 10/08/16 16:22
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.2	B	1.4	0.089	mg/Kg		11/08/16 14:24	11/10/16 10:45	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3127W P6 0-6"

Lab Sample ID: 580-63706-79

Date Collected: 10/09/16 08:45
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	91	B	1.4	0.090	mg/Kg		11/08/16 14:24	11/10/16 10:48	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3127W P6 12-18"

Lab Sample ID: 580-63706-80

Date Collected: 10/09/16 08:45

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	84	B	1.4	0.087	mg/Kg		11/08/16 14:24	11/10/16 10:53	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3127W P6 24-30"

Lab Sample ID: 580-63706-81

Date Collected: 10/09/16 08:45

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	20	B	1.4	0.091	mg/Kg		11/08/16 14:24	11/10/16 10:57	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 347 P9 0-6"

Date Collected: 10/09/16 09:05
Date Received: 10/28/16 09:25

Lab Sample ID: 580-63706-82

Matrix: Solid

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	78		1.3	0.085	mg/Kg		11/08/16 15:28	11/10/16 17:08	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 347 P9 12-18"

Lab Sample ID: 580-63706-83

Date Collected: 10/09/16 09:05
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	36		1.4	0.088	mg/Kg		11/08/16 15:28	11/10/16 17:36	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 347 P9 24-30"

Lab Sample ID: 580-63706-84

Date Collected: 10/09/16 09:05
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	18		1.4	0.088	mg/Kg		11/08/16 15:28	11/10/16 17:39	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3501 P8 0-6"

Lab Sample ID: 580-63706-85

Date Collected: 10/09/16 09:34
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	530		1.4	0.089	mg/Kg		11/08/16 15:28	11/10/16 17:43	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3501 P8 12-18"

Lab Sample ID: 580-63706-86

Date Collected: 10/09/16 09:34

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	52		1.4	0.090	mg/Kg		11/08/16 15:28	11/10/16 17:47	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3501 P8 24-30"

Lab Sample ID: 580-63706-87

Date Collected: 10/09/16 09:34
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4.9		1.4	0.088	mg/Kg		11/08/16 15:28	11/10/16 17:50	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3501 P9 0-6"

Lab Sample ID: 580-63706-88

Date Collected: 10/09/16 09:52

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	25		1.4	0.087	mg/Kg		11/08/16 15:28	11/10/16 17:54	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3501 P9 12-18"

Lab Sample ID: 580-63706-89

Date Collected: 10/09/16 09:52
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	24	B	1.3	0.083	mg/Kg		11/09/16 13:03	11/10/16 19:00	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3501 P9 24-30"

Lab Sample ID: 580-63706-90

Date Collected: 10/09/16 09:52
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	17		1.4	0.088	mg/Kg		11/08/16 15:28	11/10/16 17:58	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3501 P10 0-6"

Lab Sample ID: 580-63706-91

Date Collected: 10/09/16 10:20
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	110		1.4	0.089	mg/Kg		11/08/16 15:28	11/10/16 18:01	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3501 P10 12-18"

Lab Sample ID: 580-63706-92

Date Collected: 10/09/16 10:20

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	70		1.4	0.088	mg/Kg		11/08/16 15:28	11/10/16 18:12	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3501 P10 24-30"

Lab Sample ID: 580-63706-93

Date Collected: 10/09/16 10:20

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.9		1.4	0.088	mg/Kg		11/08/16 15:28	11/10/16 18:15	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3501 P11 0-6"

Lab Sample ID: 580-63706-94

Date Collected: 10/09/16 10:45
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	63		1.4	0.088	mg/Kg		11/08/16 15:28	11/10/16 18:19	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3501 P11 12-18"

Lab Sample ID: 580-63706-95

Date Collected: 10/09/16 10:45

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	17		1.3	0.081	mg/Kg		11/08/16 15:28	11/10/16 18:23	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3501 P11 24-30"

Lab Sample ID: 580-63706-96

Date Collected: 10/09/16 10:45
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.83	J	1.3	0.084	mg/Kg		11/08/16 15:28	11/10/16 18:26	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5267 P100 0-2"

Lab Sample ID: 580-63706-97

Date Collected: 10/09/16 12:05
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4.4		1.4	0.088	mg/Kg		11/08/16 15:28	11/10/16 18:30	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5267 P100 0-2" DUP

Lab Sample ID: 580-63706-98

Date Collected: 10/09/16 12:05

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.3		1.4	0.090	mg/Kg		11/08/16 15:28	11/10/16 18:34	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5267 P101 0-2"

Lab Sample ID: 580-63706-99

Date Collected: 10/09/16 12:11

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.15	J	1.4	0.088	mg/Kg		11/08/16 15:28	11/10/16 18:37	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5267 P101 0-2" DUP

Lab Sample ID: 580-63706-100

Date Collected: 10/09/16 12:11
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.19	J	1.4	0.089	mg/Kg		11/09/16 13:58	11/10/16 20:53	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 502 P100 0-2"

Lab Sample ID: 580-63706-101

Date Collected: 10/09/16 12:33
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.6		1.3	0.086	mg/Kg		11/09/16 13:58	11/10/16 21:21	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 502 P100 0-2" DUP

Lab Sample ID: 580-63706-102

Date Collected: 10/09/16 12:33
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4.0		1.3	0.082	mg/Kg		11/09/16 13:58	11/10/16 21:24	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 502 P101 0-2"

Lab Sample ID: 580-63706-103

Date Collected: 10/09/16 12:40
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.4		1.4	0.088	mg/Kg		11/09/16 13:58	11/10/16 21:28	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 502 P101 0-2" DUP

Lab Sample ID: 580-63706-104

Date Collected: 10/09/16 12:40
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	36		1.4	0.088	mg/Kg		11/09/16 13:58	11/10/16 21:32	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 502 P102 0-2"

Lab Sample ID: 580-63706-105

Date Collected: 10/09/16 12:51
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	22		1.4	0.089	mg/Kg		11/09/16 13:58	11/10/16 21:35	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 502 P102 0-2" DUP

Lab Sample ID: 580-63706-106

Date Collected: 10/09/16 12:51
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	12		1.3	0.082	mg/Kg		11/09/16 13:58	11/10/16 21:39	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 502 P103 0-2"

Lab Sample ID: 580-63706-107

Date Collected: 10/09/16 13:02
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.9		1.4	0.090	mg/Kg		11/09/16 13:58	11/10/16 21:43	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 502 P103 0-2" DUP

Lab Sample ID: 580-63706-108

Date Collected: 10/09/16 13:02
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	10		1.4	0.089	mg/Kg		11/09/16 13:58	11/10/16 21:46	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 2411 P100 0-2"

Lab Sample ID: 580-63706-109

Date Collected: 10/09/16 14:01
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.0	J	1.4	0.086	mg/Kg		11/09/16 13:58	11/10/16 21:56	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 2411 P100 0-2" DUP

Lab Sample ID: 580-63706-110

Date Collected: 10/09/16 14:01

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.1	J	1.3	0.084	mg/Kg		11/09/16 13:58	11/10/16 22:00	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 2411 P101 0-2"

Lab Sample ID: 580-63706-111

Date Collected: 10/09/16 14:08

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	35		1.3	0.083	mg/Kg		11/09/16 13:58	11/10/16 22:04	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 2411 P101 0-2" DUP

Lab Sample ID: 580-63706-112

Date Collected: 10/09/16 14:08

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	49		1.3	0.086	mg/Kg		11/09/16 13:58	11/10/16 22:08	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3509 P100 0-2"

Lab Sample ID: 580-63706-113

Date Collected: 10/09/16 15:07

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.7		1.4	0.089	mg/Kg		11/09/16 13:58	11/10/16 22:11	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3509 P100 0-2" DUP

Lab Sample ID: 580-63706-114

Date Collected: 10/09/16 15:07

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.1		1.4	0.090	mg/Kg		11/09/16 13:58	11/10/16 22:15	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3509 P101 0-2"

Lab Sample ID: 580-63706-115

Date Collected: 10/09/16 15:12

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	27		1.4	0.089	mg/Kg		11/09/16 13:58	11/10/16 22:19	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3509 P101 0-2" DUP

Lab Sample ID: 580-63706-116

Date Collected: 10/09/16 15:12

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	25	B	1.4	0.086	mg/Kg		11/09/16 15:29	11/11/16 00:00	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3511 P100 0-2"

Lab Sample ID: 580-63706-117

Date Collected: 10/09/16 15:41
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.6	B	1.4	0.088	mg/Kg		11/09/16 15:29	11/11/16 00:27	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3511 P100 0-2" DUP

Lab Sample ID: 580-63706-118

Date Collected: 10/09/16 15:41

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.6	B	1.4	0.090	mg/Kg		11/09/16 15:29	11/11/16 00:31	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3511 P101 0-2"

Lab Sample ID: 580-63706-119

Date Collected: 10/09/16 15:50

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.0	B	1.4	0.089	mg/Kg		11/09/16 15:29	11/11/16 00:35	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3511 P101 0-2" DUP

Lab Sample ID: 580-63706-120

Date Collected: 10/09/16 15:50

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.2	B	1.4	0.090	mg/Kg		11/09/16 15:29	11/11/16 00:38	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5340 P100 0-2"

Lab Sample ID: 580-63706-121

Date Collected: 10/12/16 14:45

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.87	J B	1.3	0.085	mg/Kg		11/09/16 15:29	11/11/16 00:42	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5340 P100 0-2" DUP

Lab Sample ID: 580-63706-122

Date Collected: 10/12/16 14:45

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.85	J B	1.4	0.088	mg/Kg		11/09/16 15:29	11/11/16 00:46	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5340 P101 0-2"

Lab Sample ID: 580-63706-123

Date Collected: 10/12/16 14:52
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4.0	B	1.4	0.088	mg/Kg		11/09/16 15:29	11/11/16 00:50	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5340 P101 0-2" DUP

Lab Sample ID: 580-63706-124

Date Collected: 10/12/16 14:52
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.6		1.1	0.067	mg/Kg		11/09/16 12:10	11/10/16 15:44	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5350 P100 0-2"

Lab Sample ID: 580-63706-125

Date Collected: 10/12/16 15:15

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.4		0.95	0.061	mg/Kg		11/09/16 12:10	11/10/16 15:48	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5350 P100 0-2" DUP

Lab Sample ID: 580-63706-126

Date Collected: 10/12/16 15:15

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.1		1.3	0.084	mg/Kg		11/09/16 12:10	11/10/16 15:51	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5350 P101 0-2"

Lab Sample ID: 580-63706-127

Date Collected: 10/12/16 15:23
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.0		1.4	0.088	mg/Kg		11/09/16 12:10	11/10/16 15:55	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5350 P101 0-2" DUP

Lab Sample ID: 580-63706-128

Date Collected: 10/12/16 15:23
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.5		1.3	0.082	mg/Kg		11/09/16 12:10	11/10/16 15:59	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 200 P100 0-2"

Lab Sample ID: 580-63706-129

Date Collected: 10/12/16 15:43
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.4	0.091	mg/Kg		11/09/16 12:10	11/10/16 16:02	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 200 P100 0-2" DUP

Lab Sample ID: 580-63706-130

Date Collected: 10/12/16 15:43

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.4	0.091	mg/Kg		11/09/16 12:10	11/10/16 16:06	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 200 P101 0-2"

Lab Sample ID: 580-63706-131

Date Collected: 10/12/16 15:51
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.2		1.2	0.079	mg/Kg		11/09/16 12:10	11/10/16 16:10	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 200 P101 0-2" DUP

Lab Sample ID: 580-63706-132

Date Collected: 10/12/16 15:51
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.4		1.4	0.089	mg/Kg		11/09/16 12:10	11/10/16 16:20	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3506 P100 0-2"

Lab Sample ID: 580-63706-133

Date Collected: 10/12/16 16:31

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	28		1.4	0.089	mg/Kg		11/09/16 12:10	11/10/16 16:24	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3506 P100 0-2" DUP

Lab Sample ID: 580-63706-134

Date Collected: 10/12/16 16:31

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	30		1.4	0.087	mg/Kg		11/09/16 12:10	11/10/16 16:27	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3506 P101 0-2"

Lab Sample ID: 580-63706-135

Date Collected: 10/12/16 16:40
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.5		1.4	0.088	mg/Kg		11/09/16 12:10	11/10/16 16:31	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3506 P101 0-2" DUP

Lab Sample ID: 580-63706-136

Date Collected: 10/12/16 16:40

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.0		1.4	0.087	mg/Kg		11/09/16 12:10	11/10/16 16:35	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 503 P100 0-2"

Lab Sample ID: 580-63706-137

Date Collected: 10/14/16 08:46
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	47		1.2	0.078	mg/Kg		11/09/16 12:10	11/10/16 16:39	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 503 P100 0-2" DUP

Lab Sample ID: 580-63706-138

Date Collected: 10/14/16 08:46
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	45		1.2	0.079	mg/Kg		11/09/16 12:10	11/10/16 16:42	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 503 P101 0-2"

Lab Sample ID: 580-63706-139

Date Collected: 10/14/16 08:51

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	110		1.5	0.095	mg/Kg		11/09/16 12:10	11/10/16 16:46	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 503 P101 0-2" DUP

Lab Sample ID: 580-63706-140

Date Collected: 10/14/16 08:51
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	70	B	1.4	0.088	mg/Kg		11/08/16 14:24	11/10/16 11:01	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 9149 P100 0-2"

Lab Sample ID: 580-63706-141

Date Collected: 10/15/16 08:05
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	16	B	1.4	0.088	mg/Kg		11/08/16 14:24	11/10/16 11:04	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 9149 P100 0-2" DUP

Lab Sample ID: 580-63706-142

Date Collected: 10/15/16 08:05

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	18	B	1.3	0.084	mg/Kg		11/08/16 14:24	11/10/16 10:02	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 9149 P101 0-2"

Lab Sample ID: 580-63706-143

Date Collected: 10/15/16 08:12
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.6	B	1.4	0.089	mg/Kg		11/08/16 14:24	11/10/16 10:05	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 9149 P101 0-2" DUP

Lab Sample ID: 580-63706-144

Date Collected: 10/15/16 08:12
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.8	B	1.4	0.088	mg/Kg		11/08/16 14:24	11/10/16 10:09	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 9149 P102 0-2"

Lab Sample ID: 580-63706-145

Date Collected: 10/15/16 08:21
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	11	B	1.4	0.088	mg/Kg		11/08/16 14:24	11/10/16 10:13	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 9149 P102 0-2" DUP

Lab Sample ID: 580-63706-146

Date Collected: 10/15/16 08:21
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	11	B	1.4	0.089	mg/Kg		11/08/16 14:24	11/10/16 10:16	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4214 P100 0-2"

Lab Sample ID: 580-63706-147

Date Collected: 10/15/16 15:10
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.2	B	1.3	0.086	mg/Kg		11/08/16 14:24	11/10/16 10:20	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4214 P100 0-2" DUP

Lab Sample ID: 580-63706-148

Date Collected: 10/15/16 15:10

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	2.6	B	1.4	0.089	mg/Kg		11/08/16 14:24	11/10/16 10:24	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4214 P1 0-6"

Lab Sample ID: 580-63706-149

Date Collected: 10/15/16 15:17

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	19	B	1.4	0.087	mg/Kg		11/08/16 14:24	11/10/16 10:27	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4214 P2 0-6"

Lab Sample ID: 580-63706-150
Date Collected: 10/15/16 15:26
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	65		1.4	0.091	mg/Kg		11/10/16 17:09	11/11/16 18:22	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S29 P1 0-6"

Lab Sample ID: 580-63706-151

Date Collected: 10/16/16 07:25
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.8	F1	1.4	0.088	mg/Kg		11/10/16 15:30	11/11/16 17:45	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S29 P2 0-6"

Lab Sample ID: 580-63706-152

Date Collected: 10/16/16 07:36

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	29		1.4	0.089	mg/Kg		11/10/16 15:30	11/11/16 22:29	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S29 P3 0-6"

Lab Sample ID: 580-63706-153

Date Collected: 10/16/16 07:44
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	18		1.3	0.085	mg/Kg		11/10/16 15:30	11/11/16 22:33	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S29 P4 0-6"

Lab Sample ID: 580-63706-154

Date Collected: 10/16/16 07:54
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	18		1.4	0.087	mg/Kg		11/10/16 15:30	11/11/16 22:46	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S29 P5 0-6"

Lab Sample ID: 580-63706-155

Date Collected: 10/16/16 08:01
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	21		1.3	0.085	mg/Kg		11/10/16 15:30	11/11/16 22:50	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S29 P6 0-6"

Lab Sample ID: 580-63706-156

Date Collected: 10/16/16 08:11

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	24		1.3	0.084	mg/Kg		11/10/16 17:09	11/11/16 23:49	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S29 P7 0-6"

Lab Sample ID: 580-63706-157

Date Collected: 10/16/16 08:20

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	21		1.3	0.084	mg/Kg		11/10/16 17:09	11/11/16 23:52	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S29 P8 0-6"

Lab Sample ID: 580-63706-158

Date Collected: 10/16/16 08:28

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	26		1.3	0.081	mg/Kg		11/10/16 17:09	11/11/16 23:56	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S29 P8 0-6" DUP

Lab Sample ID: 580-63706-159

Date Collected: 10/16/16 08:28

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	32		1.4	0.089	mg/Kg		11/10/16 17:09	11/12/16 00:00	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S29 P9 0-6"

Lab Sample ID: 580-63706-160

Date Collected: 10/16/16 08:45
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.2		1.3	0.085	mg/Kg		11/10/16 17:09	11/12/16 00:03	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P1 0-6"

Lab Sample ID: 580-63706-161

Date Collected: 10/16/16 10:15
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	25		1.3	0.086	mg/Kg		11/10/16 17:09	11/12/16 00:07	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P2 0-6"

Lab Sample ID: 580-63706-162

Date Collected: 10/16/16 10:21

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	16		1.2	0.076	mg/Kg		11/10/16 17:09	11/12/16 00:21	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P3 0-6"

Lab Sample ID: 580-63706-163

Date Collected: 10/16/16 10:30

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4.5		1.3	0.085	mg/Kg		11/10/16 17:09	11/12/16 00:24	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P4 0-6"

Lab Sample ID: 580-63706-164

Date Collected: 10/16/16 10:45
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.68	J B	1.3	0.083	mg/Kg		11/09/16 13:03	11/10/16 19:28	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P5 0-6"

Lab Sample ID: 580-63706-165

Date Collected: 10/16/16 10:56
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.3	B	1.3	0.082	mg/Kg		11/09/16 13:03	11/10/16 19:32	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P6 0-6"

Lab Sample ID: 580-63706-166

Date Collected: 10/16/16 11:05

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.8	B	1.3	0.084	mg/Kg		11/09/16 13:03	11/10/16 19:35	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P7 0-6"

Lab Sample ID: 580-63706-167

Date Collected: 10/16/16 11:15
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	48	B	1.3	0.086	mg/Kg		11/09/16 13:03	11/10/16 19:39	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P8 0-6"

Lab Sample ID: 580-63706-168

Date Collected: 10/16/16 11:22

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	34	B	1.3	0.086	mg/Kg		11/09/16 13:03	11/10/16 19:43	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P9 0-6"

Lab Sample ID: 580-63706-169

Date Collected: 10/16/16 11:31

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.1	B	1.4	0.089	mg/Kg		11/09/16 13:03	11/10/16 19:46	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P10 0-6"

Lab Sample ID: 580-63706-170

Date Collected: 10/16/16 11:42
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	31	B	1.4	0.089	mg/Kg		11/09/16 13:03	11/10/16 19:50	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P11 0-6"

Lab Sample ID: 580-63706-171

Date Collected: 10/16/16 11:51
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	120	B	1.4	0.088	mg/Kg		11/09/16 13:03	11/10/16 19:54	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P12 0-6"

Lab Sample ID: 580-63706-172

Date Collected: 10/16/16 11:59
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	31	B	1.4	0.088	mg/Kg		11/09/16 13:03	11/10/16 20:04	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P13 0-6"

Lab Sample ID: 580-63706-173

Date Collected: 10/16/16 12:11

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	25	B	1.3	0.083	mg/Kg		11/09/16 13:03	11/10/16 20:08	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P14 0-6"

Lab Sample ID: 580-63706-174

Date Collected: 10/16/16 12:20
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	100	B	1.3	0.083	mg/Kg		11/09/16 13:03	11/10/16 20:11	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P15 0-6"

Lab Sample ID: 580-63706-175

Date Collected: 10/16/16 12:29
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	36	B	1.4	0.088	mg/Kg		11/09/16 13:03	11/10/16 20:15	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P16 0-6"

Lab Sample ID: 580-63706-176

Date Collected: 10/16/16 12:36
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	61	B	1.4	0.089	mg/Kg		11/09/16 13:03	11/10/16 20:19	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P17 0-6"

Lab Sample ID: 580-63706-177

Date Collected: 10/16/16 12:44
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	44	B	1.3	0.083	mg/Kg		11/09/16 13:03	11/10/16 20:22	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P18 0-6"

Lab Sample ID: 580-63706-178

Date Collected: 10/16/16 12:53
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	92	B	1.4	0.089	mg/Kg		11/09/16 13:03	11/10/16 20:26	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P19 0-6"

Lab Sample ID: 580-63706-179

Date Collected: 10/16/16 13:06

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	290	B	1.3	0.085	mg/Kg		11/09/16 13:03	11/10/16 20:30	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P20 0-6"

Lab Sample ID: 580-63706-180

Date Collected: 10/16/16 13:15
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	310		1.4	0.089	mg/Kg		11/10/16 15:30	11/11/16 22:54	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P21 0-6"

Lab Sample ID: 580-63706-181

Date Collected: 10/16/16 13:24

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	63		1.4	0.090	mg/Kg		11/10/16 15:30	11/11/16 22:58	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P22 0-6"

Lab Sample ID: 580-63706-182

Date Collected: 10/16/16 13:37

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	120		1.3	0.082	mg/Kg		11/10/16 15:30	11/11/16 23:02	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P23 0-6"

Lab Sample ID: 580-63706-183

Date Collected: 10/16/16 13:45

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	460		1.4	0.087	mg/Kg		11/10/16 15:30	11/11/16 23:05	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P24 0-6"

Lab Sample ID: 580-63706-184

Date Collected: 10/16/16 13:53

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	91		1.4	0.088	mg/Kg		11/10/16 15:30	11/11/16 23:09	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P24 0-6" DUP

Lab Sample ID: 580-63706-185

Date Collected: 10/16/16 13:53

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	79		1.4	0.092	mg/Kg		11/10/16 15:30	11/11/16 23:13	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: Bollard P1 MID 0-6"

Lab Sample ID: 580-63706-186

Date Collected: 10/16/16 14:15
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	63		1.4	0.088	mg/Kg		11/10/16 15:30	11/11/16 23:17	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: Bollard P2 NEAR 0-6"

Lab Sample ID: 580-63706-187

Date Collected: 10/16/16 14:21
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	81		1.4	0.091	mg/Kg		11/10/16 15:30	11/11/16 23:20	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3127W P7 0-6"

Lab Sample ID: 580-63706-188

Date Collected: 10/16/16 15:40

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	24		1.4	0.087	mg/Kg		11/10/16 15:30	11/11/16 23:34	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3127W P7 12-18"

Lab Sample ID: 580-63706-189

Date Collected: 10/16/16 15:40

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	17		1.4	0.090	mg/Kg		11/10/16 15:30	11/11/16 23:37	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3127W P7 24-30"

Lab Sample ID: 580-63706-190

Date Collected: 10/16/16 15:40

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	2.2		1.3	0.082	mg/Kg		11/10/16 15:30	11/11/16 23:41	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3127W P8 0-6"

Lab Sample ID: 580-63706-191

Date Collected: 10/16/16 16:17

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	21		1.4	0.089	mg/Kg		11/10/16 15:30	11/11/16 23:45	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3127W P8 12-18"

Lab Sample ID: 580-63706-192

Date Collected: 10/16/16 16:17

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.3	B	1.4	0.088	mg/Kg		11/10/16 14:48	11/11/16 17:08	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3127W P8 24-30"

Lab Sample ID: 580-63706-193

Date Collected: 10/16/16 16:17

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4.5	B	1.4	0.088	mg/Kg		11/10/16 14:48	11/11/16 21:20	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 340 P100 0-2"

Lab Sample ID: 580-63706-194

Date Collected: 10/17/16 10:40
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.97	J B	1.4	0.090	mg/Kg		11/10/16 14:48	11/11/16 21:24	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 340 P100 0-2" DUP

Lab Sample ID: 580-63706-195

Date Collected: 10/17/16 10:40

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.74	J B	1.4	0.088	mg/Kg		11/10/16 14:48	11/11/16 21:28	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 340 P101 0-2"

Lab Sample ID: 580-63706-196

Date Collected: 10/17/16 10:45
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.5	B	1.4	0.091	mg/Kg		11/10/16 14:48	11/11/16 21:31	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 340 P101 0-2" DUP

Lab Sample ID: 580-63706-197

Date Collected: 10/17/16 10:45
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.0	B	1.4	0.089	mg/Kg		11/10/16 14:48	11/11/16 21:35	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5301 P100 0-2"

Lab Sample ID: 580-63706-198

Date Collected: 10/17/16 13:50
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4.1	B	1.4	0.090	mg/Kg		11/10/16 14:48	11/11/16 21:39	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5301 P100 0-2" DUP

Lab Sample ID: 580-63706-199

Date Collected: 10/17/16 13:50

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.8	B	1.4	0.089	mg/Kg		11/10/16 14:48	11/11/16 21:42	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5301 P101 0-2"

Lab Sample ID: 580-63706-200

Date Collected: 10/17/16 14:01
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.1	B	1.4	0.087	mg/Kg		11/10/16 14:48	11/11/16 21:46	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5301 P101 0-2" DUP

Lab Sample ID: 580-63706-201

Date Collected: 10/17/16 14:01
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.3	B	1.4	0.088	mg/Kg		11/10/16 14:48	11/11/16 22:00	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5301 P102 0-2"

Lab Sample ID: 580-63706-202

Date Collected: 10/17/16 14:09

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.9	B	1.4	0.089	mg/Kg		11/10/16 14:48	11/11/16 22:03	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5301 P102 0-2" DUP

Lab Sample ID: 580-63706-203

Date Collected: 10/17/16 14:09

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.5	B	1.4	0.088	mg/Kg		11/10/16 14:48	11/11/16 22:07	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5301 P103 0-2"

Lab Sample ID: 580-63706-204

Date Collected: 10/17/16 14:16

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	14	B	1.3	0.082	mg/Kg		11/10/16 14:48	11/11/16 22:11	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5301 P103 0-2" DUP

Lab Sample ID: 580-63706-205

Date Collected: 10/17/16 14:16

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	14	B	1.4	0.088	mg/Kg		11/10/16 14:48	11/11/16 22:14	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4213 P1 0-6"

Lab Sample ID: 580-63706-206
Matrix: Solid
Date Collected: 10/19/16 13:30
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	10	B	1.4	0.087	mg/Kg		11/10/16 14:48	11/11/16 22:18	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4213 P1 12-18"

Lab Sample ID: 580-63706-207

Date Collected: 10/19/16 13:30
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4.4		1.0	0.064	mg/Kg		11/10/16 17:09	11/12/16 00:28	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4213 P1 24-30"

Lab Sample ID: 580-63706-208

Date Collected: 10/19/16 13:00
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.1	0.069	mg/Kg		11/10/16 17:09	11/12/16 00:32	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4213 P2 0-6"

Lab Sample ID: 580-63706-209

Date Collected: 10/19/16 14:20

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.3		1.4	0.092	mg/Kg		11/10/16 17:09	11/12/16 00:35	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4213 P2 12-18"

Lab Sample ID: 580-63706-210

Date Collected: 10/19/16 14:20
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.3	0.083	mg/Kg		11/10/16 14:48	11/11/16 22:22	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4213 P2 24-30"

Lab Sample ID: 580-63706-211

Date Collected: 10/19/16 14:20
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.4	0.089	mg/Kg		11/10/16 14:48	11/11/16 22:25	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4213 P3 0-6"

Lab Sample ID: 580-63706-212

Date Collected: 10/19/16 14:50
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.7	B	1.3	0.085	mg/Kg		11/10/16 13:44	11/11/16 21:16	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4213 P3 12-18"

Lab Sample ID: 580-63706-213

Date Collected: 10/19/16 14:50

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4.0	B	1.3	0.085	mg/Kg		11/10/16 13:44	11/11/16 15:44	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4213 P3 24-30"

Lab Sample ID: 580-63706-214

Date Collected: 10/19/16 14:50
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.8	B	1.4	0.087	mg/Kg		11/10/16 13:44	11/11/16 20:01	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4213 P3 0-6" DUP

Lab Sample ID: 580-63706-215

Date Collected: 10/19/16 14:50
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.0	B	1.4	0.087	mg/Kg		11/10/16 13:44	11/11/16 20:05	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4213 P3 12-18" DUP

Lab Sample ID: 580-63706-216

Date Collected: 10/19/16 14:50

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.3	B	1.4	0.088	mg/Kg		11/10/16 13:44	11/11/16 20:08	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4213 P3 24-30" DUP

Lab Sample ID: 580-63706-217

Date Collected: 10/19/16 14:50
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.2	J B	1.3	0.086	mg/Kg		11/10/16 13:44	11/11/16 20:12	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4213 P4 0-6"

Lab Sample ID: 580-63706-218
Date Collected: 10/19/16 15:40
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.9	B	1.4	0.088	mg/Kg		11/10/16 13:44	11/11/16 20:26	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4213 P4 12-18"

Lab Sample ID: 580-63706-219

Date Collected: 10/19/16 15:40

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.9	B	1.3	0.086	mg/Kg		11/10/16 13:44	11/11/16 20:29	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4213 P4 24-30"

Lab Sample ID: 580-63706-220

Date Collected: 10/19/16 15:40

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.64	J B	1.3	0.084	mg/Kg		11/10/16 13:44	11/11/16 20:33	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4213 P5 0-6"

Lab Sample ID: 580-63706-221

Date Collected: 10/19/16 16:15

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	78	B	1.3	0.083	mg/Kg		11/10/16 13:44	11/11/16 20:37	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4213 P5 12-18"

Lab Sample ID: 580-63706-222

Date Collected: 10/19/16 16:15
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	20	B	1.4	0.087	mg/Kg		11/10/16 13:44	11/11/16 20:40	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4213 P5 24-30"

Lab Sample ID: 580-63706-223

Date Collected: 10/19/16 16:15
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.6	B	1.3	0.084	mg/Kg		11/10/16 13:44	11/11/16 20:44	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4213 P6 0-6"

Lab Sample ID: 580-63706-224

Date Collected: 10/19/16 16:55
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	15	B	1.3	0.086	mg/Kg		11/10/16 13:44	11/11/16 20:48	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4213 P6 12-18"

Lab Sample ID: 580-63706-225
Matrix: Solid

Date Collected: 10/19/16 16:55
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	12	B	1.4	0.089	mg/Kg		11/10/16 13:44	11/11/16 20:51	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4213 P6 24-30"

Lab Sample ID: 580-63706-226

Date Collected: 10/19/16 16:55

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.1	B	1.3	0.082	mg/Kg		11/10/16 13:44	11/11/16 20:55	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4205 P1 0-6"

Lab Sample ID: 580-63706-227
Date Collected: 10/20/16 14:50
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	19	B	1.4	0.088	mg/Kg		11/10/16 13:44	11/11/16 20:59	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4205 P1 12-18"

Lab Sample ID: 580-63706-228
Matrix: Solid

Date Collected: 10/20/16 14:50
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	20	B	1.3	0.081	mg/Kg		11/10/16 13:44	11/11/16 21:12	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4205 P1 24-30"

Lab Sample ID: 580-63706-229

Date Collected: 10/20/16 14:50
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	21	F1 B	1.2	0.075	mg/Kg		11/10/16 12:49	11/11/16 15:07	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4205 P1 30-36"

Lab Sample ID: 580-63706-230

Date Collected: 10/20/16 14:50
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	12	B	1.3	0.086	mg/Kg		11/10/16 12:49	11/11/16 18:53	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4205 P2 0-6"

Lab Sample ID: 580-63706-231

Date Collected: 10/20/16 15:31
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.5	B	1.4	0.088	mg/Kg		11/10/16 12:49	11/11/16 18:56	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4205 P2 12-18"

Lab Sample ID: 580-63706-232

Date Collected: 10/20/16 15:31
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	21	B	1.2	0.077	mg/Kg		11/10/16 12:49	11/11/16 19:00	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4205 P2 24-30"

Lab Sample ID: 580-63706-233

Date Collected: 10/20/16 15:31
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	12	B	1.1	0.071	mg/Kg		11/10/16 12:49	11/11/16 19:04	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4205 P3 0-6"

Lab Sample ID: 580-63706-234

Date Collected: 10/20/16 16:15
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	20	B	1.4	0.090	mg/Kg		11/10/16 12:49	11/11/16 19:07	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4205 P3 12-18"

Lab Sample ID: 580-63706-235
Matrix: Solid

Date Collected: 10/20/16 16:15
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.2	B	1.3	0.081	mg/Kg		11/10/16 12:49	11/11/16 19:11	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4205 P3 24-30"

Lab Sample ID: 580-63706-236
Matrix: Solid

Date Collected: 10/20/16 16:15
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.7	B	1.2	0.076	mg/Kg		11/10/16 12:49	11/11/16 19:15	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4205 P4 0-6"

Lab Sample ID: 580-63706-237
Date Collected: 10/20/16 16:44
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	18	B	1.4	0.087	mg/Kg		11/10/16 12:49	11/11/16 19:18	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4205 P4 12-18"

Lab Sample ID: 580-63706-238
Date Collected: 10/20/16 16:44
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	10	B	1.2	0.078	mg/Kg		11/10/16 12:49	11/11/16 19:22	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4205 P4 24-30"

Lab Sample ID: 580-63706-239

Date Collected: 10/20/16 16:44

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.4	B	1.4	0.090	mg/Kg		11/10/16 12:49	11/11/16 19:26	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4206 P1 0-6"

Lab Sample ID: 580-63706-240
Date Collected: 10/21/16 11:06
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.2	B	1.5	0.094	mg/Kg		11/10/16 12:49	11/11/16 19:39	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4206 P1 12-18"

Lab Sample ID: 580-63706-241

Date Collected: 10/21/16 11:06
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.7	B	1.5	0.095	mg/Kg		11/10/16 12:49	11/11/16 19:43	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4206 P1 24-30"

Lab Sample ID: 580-63706-242

Date Collected: 10/21/16 11:06
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.1	0.073	mg/Kg		11/10/16 12:49	11/11/16 19:46	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4206 P2 0-6"

Lab Sample ID: 580-63706-243
Matrix: Solid
Date Collected: 10/21/16 12:25
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.8	B	1.1	0.071	mg/Kg		11/10/16 12:49	11/11/16 19:50	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4206 P2 12-18"

Lab Sample ID: 580-63706-244

Date Collected: 10/21/16 12:25
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.2	B	1.2	0.076	mg/Kg		11/10/16 12:49	11/11/16 19:54	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4206 P2 24-30"

Lab Sample ID: 580-63706-245

Date Collected: 10/21/16 12:25
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.6	B	1.0	0.064	mg/Kg		11/10/16 12:49	11/11/16 19:57	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4206 P3 0-6"

Lab Sample ID: 580-63706-246

Date Collected: 10/21/16 13:10

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	24	B	1.4	0.089	mg/Kg		11/11/16 10:02	11/14/16 11:54	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4206 P3 12-18"

Lab Sample ID: 580-63706-247
Date Collected: 10/21/16 13:10
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.4	B	1.4	0.087	mg/Kg		11/11/16 10:02	11/14/16 14:45	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4206 P3 24-30"

Lab Sample ID: 580-63706-248
Matrix: Solid

Date Collected: 10/21/16 13:10
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.8	B	1.3	0.086	mg/Kg		11/11/16 10:02	11/14/16 14:48	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4206 P4 0-6"

Lab Sample ID: 580-63706-249

Date Collected: 10/21/16 13:56

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	15	B	1.4	0.090	mg/Kg		11/11/16 10:02	11/14/16 14:52	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4206 P4 12-18"

Lab Sample ID: 580-63706-250
Matrix: Solid

Date Collected: 10/21/16 13:56
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.8	B	1.4	0.088	mg/Kg		11/11/16 10:02	11/14/16 14:56	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4206 P4 24-30"

Lab Sample ID: 580-63706-251

Date Collected: 10/21/16 13:56

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.4	0.088	mg/Kg		11/11/16 10:02	11/14/16 14:59	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4207 P1 0-6"

Lab Sample ID: 580-63706-252
Date Collected: 10/21/16 14:49
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.8	B	1.4	0.088	mg/Kg		11/11/16 10:02	11/14/16 15:03	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4207 P1 12-18"

Lab Sample ID: 580-63706-253
Matrix: Solid

Date Collected: 10/21/16 14:49
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.6	B	1.4	0.087	mg/Kg		11/11/16 10:02	11/14/16 15:07	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4207 P1 24-30"

Lab Sample ID: 580-63706-254

Date Collected: 10/21/16 14:49
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.9	B	1.3	0.084	mg/Kg		11/11/16 10:02	11/14/16 15:24	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4207 P2 0-6"

Lab Sample ID: 580-63706-255

Date Collected: 10/22/16 08:56

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	15	B	1.3	0.086	mg/Kg		11/11/16 10:02	11/14/16 15:27	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4207 P2 12-18"

Lab Sample ID: 580-63706-256

Date Collected: 10/22/16 08:56

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	22	B	1.3	0.084	mg/Kg		11/11/16 10:02	11/14/16 15:31	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4207 P2 24-30"

Lab Sample ID: 580-63706-257

Date Collected: 10/22/16 08:56
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.2	B	1.3	0.084	mg/Kg		11/11/16 10:02	11/14/16 15:35	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4207 P3 0-6"

Lab Sample ID: 580-63706-258
Date Collected: 10/22/16 10:11
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	14	B	1.4	0.089	mg/Kg		11/11/16 10:02	11/14/16 15:38	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4207 P3 12-18"

Lab Sample ID: 580-63706-259

Date Collected: 10/22/16 10:11

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	16	B	1.3	0.084	mg/Kg		11/11/16 10:02	11/14/16 15:42	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4207 P3 24-30"

Lab Sample ID: 580-63706-260

Date Collected: 10/22/16 10:11

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	19	B	1.3	0.082	mg/Kg		11/11/16 10:02	11/14/16 15:45	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4207 P3 0-6" DUP

Lab Sample ID: 580-63706-261

Date Collected: 10/22/16 10:11

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	10	B	1.4	0.089	mg/Kg		11/11/16 10:02	11/14/16 15:49	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4207 P3 12-18" DUP

Lab Sample ID: 580-63706-262

Date Collected: 10/22/16 10:11

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	19	B	1.4	0.087	mg/Kg		11/11/16 10:02	11/14/16 15:53	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4207 P3 24-30" DUP

Lab Sample ID: 580-63706-263

Date Collected: 10/22/16 10:11

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	22	F1	1.4	0.088	mg/Kg		11/11/16 08:49	11/14/16 11:17	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4207 P4 0-6"

Lab Sample ID: 580-63706-264
Date Collected: 10/22/16 10:42
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.0		1.4	0.089	mg/Kg		11/11/16 08:49	11/14/16 13:29	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4207 P4 12-18"

Lab Sample ID: 580-63706-265

Date Collected: 10/22/16 10:42

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.2		1.4	0.090	mg/Kg		11/11/16 08:49	11/14/16 13:33	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4207 P4 24-30"

Lab Sample ID: 580-63706-266

Date Collected: 10/22/16 10:42

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.8		1.4	0.088	mg/Kg		11/11/16 08:49	11/14/16 13:36	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5303 NW A 0-2"

Lab Sample ID: 580-63706-267
Matrix: Solid

Date Collected: 10/21/16 15:59
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	110		1.3	0.084	mg/Kg		11/11/16 08:49	11/14/16 13:40	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5303 NW A 0-2" DUP

Lab Sample ID: 580-63706-268

Date Collected: 10/21/16 15:59
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	110		1.4	0.087	mg/Kg		11/11/16 08:49	11/14/16 13:53	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5303 NW B 0-2"

Lab Sample ID: 580-63706-269

Date Collected: 10/21/16 16:11
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	98		1.3	0.086	mg/Kg		11/11/16 08:49	11/14/16 13:57	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5303 NW B 0-2" DUP

Lab Sample ID: 580-63706-270

Date Collected: 10/21/16 16:11
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	87	B	1.3	0.083	mg/Kg		11/11/16 10:11	11/14/16 15:56	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5303 NW C 0-2"

Lab Sample ID: 580-63706-271

Date Collected: 10/21/16 16:20
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	13		1.4	0.087	mg/Kg		11/11/16 08:49	11/14/16 14:00	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5303 NW C 0-2" DUP

Lab Sample ID: 580-63706-272

Date Collected: 10/21/16 16:20

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	12		1.3	0.084	mg/Kg		11/11/16 08:49	11/14/16 14:04	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5303 NW D 0-2"

Lab Sample ID: 580-63706-273

Date Collected: 10/21/16 16:30

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	320		1.4	0.089	mg/Kg		11/11/16 08:49	11/14/16 14:08	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5303 NW D 0-2" DUP

Lab Sample ID: 580-63706-274

Date Collected: 10/21/16 16:30

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	270		1.3	0.085	mg/Kg		11/11/16 08:49	11/14/16 14:12	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5303 E A 0-2"

Lab Sample ID: 580-63706-275

Date Collected: 10/22/16 07:49

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	120		1.3	0.084	mg/Kg		11/11/16 08:49	11/14/16 14:17	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5303 E A 0-2" DUP

Lab Sample ID: 580-63706-276

Date Collected: 10/22/16 07:49

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.7		1.4	0.088	mg/Kg		11/11/16 08:49	11/14/16 14:20	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5303 E B 0-2"

Lab Sample ID: 580-63706-277

Date Collected: 10/22/16 07:56
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	190		1.3	0.086	mg/Kg		11/11/16 08:49	11/14/16 14:24	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5303 E B 0-2" DUP

Lab Sample ID: 580-63706-278

Date Collected: 10/22/16 07:56

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	87		1.3	0.086	mg/Kg		11/11/16 08:49	11/14/16 14:28	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5303 E C 0-2"

Lab Sample ID: 580-63706-279

Date Collected: 10/22/16 08:01

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	14		1.2	0.079	mg/Kg		11/10/16 19:26	11/14/16 10:41	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5303 E C 0-2" DUP

Lab Sample ID: 580-63706-280

Date Collected: 10/22/16 08:01

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	12		1.3	0.081	mg/Kg		11/10/16 19:26	11/14/16 12:24	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5303 E D 0-2"

Lab Sample ID: 580-63706-281
Date Collected: 10/22/16 08:10
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	40		1.4	0.088	mg/Kg		11/11/16 08:49	11/14/16 14:37	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5303 E D 0-2" DUP

Lab Sample ID: 580-63706-282

Date Collected: 10/22/16 08:10

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	45		1.4	0.087	mg/Kg		11/11/16 08:49	11/14/16 14:41	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S28 P12 0-6"

Lab Sample ID: 580-63706-283

Date Collected: 10/22/16 14:50

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	19		1.4	0.092	mg/Kg		11/10/16 19:26	11/14/16 12:28	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S28 P13 0-6"

Lab Sample ID: 580-63706-284

Date Collected: 10/22/16 15:25

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	19		1.4	0.091	mg/Kg		11/10/16 19:26	11/14/16 12:32	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S28 P14 0-6"

Lab Sample ID: 580-63706-285
Date Collected: 10/22/16 15:31
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	20		1.3	0.082	mg/Kg		11/10/16 19:26	11/14/16 12:35	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S30 P11 0-6"

Lab Sample ID: 580-63706-286
Date Collected: 10/22/16 15:50
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	14		1.3	0.080	mg/Kg		11/10/16 19:26	11/14/16 12:39	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S30 P12 0-6"

Lab Sample ID: 580-63706-287

Date Collected: 10/22/16 15:58

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	59		1.3	0.082	mg/Kg		11/10/16 19:26	11/14/16 12:43	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S30 P13 0-6"

Lab Sample ID: 580-63706-288

Date Collected: 10/22/16 16:05

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.74	J	0.98	0.063	mg/Kg		11/10/16 19:26	11/14/16 12:46	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S30 P14 0-6"

Lab Sample ID: 580-63706-289

Date Collected: 10/23/16 08:10

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	21		1.4	0.090	mg/Kg		11/10/16 19:26	11/14/16 12:50	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S30 P15 0-6"

Lab Sample ID: 580-63706-290

Date Collected: 10/23/16 08:15

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	13		1.4	0.092	mg/Kg		11/10/16 19:26	11/14/16 12:53	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S30 P16 0-6"

Lab Sample ID: 580-63706-291
Date Collected: 10/23/16 08:19
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	36		1.2	0.077	mg/Kg		11/10/16 17:09	11/12/16 00:39	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5304 WT P1 0-6"

Lab Sample ID: 580-63706-292
Date Collected: 10/23/16 11:46
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6200		13	0.84	mg/Kg		11/10/16 17:09	11/14/16 15:10	10

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5304 WT P1 12-18"

Lab Sample ID: 580-63706-293
Date Collected: 10/23/16 11:46
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.9		1.0	0.067	mg/Kg		11/10/16 17:09	11/12/16 00:46	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5304 WT P1 24-30"

Lab Sample ID: 580-63706-294

Date Collected: 10/23/16 11:46
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.1		0.91	0.058	mg/Kg		11/10/16 17:09	11/12/16 00:50	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5304 WT P2 0-6"

Lab Sample ID: 580-63706-295
Date Collected: 10/23/16 12:31
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	110		1.5	0.094	mg/Kg		11/10/16 17:09	11/12/16 00:54	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5304 WT P2 12-18"

Lab Sample ID: 580-63706-296
Date Collected: 10/23/16 12:31
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.2		0.93	0.059	mg/Kg		11/10/16 19:26	11/14/16 12:57	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5304 WT P2 24-30"

Lab Sample ID: 580-63706-297

Date Collected: 10/23/16 12:31
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.2	0.075	mg/Kg		11/10/16 19:26	11/14/16 13:07	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5305 WT P1 0-6"

Lab Sample ID: 580-63706-298

Date Collected: 10/23/16 13:36

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	650		1.4	0.090	mg/Kg		11/10/16 19:26	11/14/16 13:11	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5305 WT P1 12-18"

Lab Sample ID: 580-63706-299

Date Collected: 10/23/16 13:36
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	82		1.1	0.069	mg/Kg		11/10/16 19:26	11/14/16 13:15	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5305 WT P1 24-30"

Lab Sample ID: 580-63706-300

Date Collected: 10/23/16 13:36
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.1	0.072	mg/Kg		11/10/16 19:26	11/14/16 13:18	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3126E P7 0-6"

Lab Sample ID: 580-63706-301

Date Collected: 10/23/16 10:01
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	63		1.1	0.071	mg/Kg		11/10/16 19:26	11/14/16 13:22	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3126E P7 12-18"

Lab Sample ID: 580-63706-302

Date Collected: 10/23/16 10:01
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	59		1.1	0.070	mg/Kg		11/10/16 19:26	11/14/16 13:26	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3126E P7 24-30"

Lab Sample ID: 580-63706-303

Date Collected: 10/23/16 10:01

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	14	B	1.4	0.088	mg/Kg		11/09/16 15:29	11/11/16 01:00	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3126E P8 0-6"

Lab Sample ID: 580-63706-304

Date Collected: 10/23/16 10:17

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	73	B	1.4	0.090	mg/Kg		11/09/16 15:29	11/11/16 01:04	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3126E P8 12-18"

Lab Sample ID: 580-63706-305

Date Collected: 10/23/16 10:17

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.60	J B	1.3	0.083	mg/Kg		11/09/16 15:29	11/11/16 01:07	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3126E P8 24-30"

Lab Sample ID: 580-63706-306

Date Collected: 10/23/16 10:17

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.3	B	1.3	0.082	mg/Kg		11/09/16 15:29	11/11/16 01:11	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3126E P6 0-6"

Lab Sample ID: 580-63706-307

Date Collected: 10/23/16 10:32
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	61	B	1.4	0.089	mg/Kg		11/09/16 15:29	11/11/16 01:14	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3126E P6 12-18"

Lab Sample ID: 580-63706-308

Date Collected: 10/23/16 10:32

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.2	B	1.3	0.083	mg/Kg		11/09/16 15:29	11/11/16 01:18	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3126E P6 24-30"

Lab Sample ID: 580-63706-309

Date Collected: 10/23/16 10:32

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.3	0.083	mg/Kg		11/09/16 15:29	11/11/16 01:22	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: R2 Cell 3 0-6"

Lab Sample ID: 580-63706-310

Date Collected: 10/23/16 07:25
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	41	B	1.3	0.082	mg/Kg		11/09/16 15:29	11/11/16 01:26	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: R2 Cell 4 0-6"

Lab Sample ID: 580-63706-311

Date Collected: 10/23/16 07:39

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	14	B	1.4	0.088	mg/Kg		11/09/16 15:29	11/11/16 01:29	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: Equipment Rinsate

Lab Sample ID: 580-63706-312

Date Collected: 10/23/16 14:05

Matrix: Water

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.030	0.0026	mg/L		11/05/16 12:05	11/07/16 22:00	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: Trip Blank

Lab Sample ID: 580-63706-313

Date Collected: 10/23/16 00:00
Matrix: Water
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.030	0.0026	mg/L		11/05/16 12:05	11/07/16 22:03	1

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 580-231635/19-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 231747 — **Prep Batch: 231635**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5	0.096	mg/Kg		11/04/16 14:37	11/04/16 23:25	1

Lab Sample ID: LCS 580-231635/20-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 231747 — **Prep Batch: 231635**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	50.0	47.8		mg/Kg		96	80 - 120

Lab Sample ID: LCSD 580-231635/21-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 231747 — **Prep Batch: 231635**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	50.0	48.8		mg/Kg		98	80 - 120	2	20

Lab Sample ID: 580-63706-1 MS — **Client Sample ID: S1123 P100 0-2"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 231747 — **Prep Batch: 231635**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	8.1	F1 F2	45.8	53.5		mg/Kg		99	80 - 120

Lab Sample ID: 580-63706-1 MSD — **Client Sample ID: S1123 P100 0-2"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 231747 — **Prep Batch: 231635**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	8.1	F1 F2	45.8	41.3	F1 F2	mg/Kg		73	80 - 120	26	20

Lab Sample ID: 580-63706-1 DU — **Client Sample ID: S1123 P100 0-2"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 231747 — **Prep Batch: 231635**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lead	8.1	F1 F2	7.73		mg/Kg		5	20

Lab Sample ID: MB 580-231685/22-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 231916 — **Prep Batch: 231685**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5	0.096	mg/Kg		11/05/16 13:26	11/08/16 21:17	1

Lab Sample ID: LCS 580-231685/23-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 231916 — **Prep Batch: 231685**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	50.0	41.1		mg/Kg		82	80 - 120

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Lab Sample ID: LCSD 580-231685/24-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 231916 — **Prep Batch: 231685**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead			50.0	40.8		mg/Kg		82	80 - 120	1	20

Lab Sample ID: 580-63706-15 MS — **Client Sample ID: 170 P101 0-2"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 231916 — **Prep Batch: 231685**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead	5.9		45.0	48.3		mg/Kg		94	80 - 120		

Lab Sample ID: 580-63706-15 MSD — **Client Sample ID: 170 P101 0-2"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 231916 — **Prep Batch: 231685**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	5.9		43.2	47.3		mg/Kg		96	80 - 120	2	20

Lab Sample ID: 580-63706-15 DU — **Client Sample ID: 170 P101 0-2"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 231916 — **Prep Batch: 231685**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Lead	5.9			7.04		mg/Kg				17	20

Lab Sample ID: MB 580-231696/22-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 231916 — **Prep Batch: 231696**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5	0.096	mg/Kg		11/05/16 14:54	11/08/16 19:20	1

Lab Sample ID: LCS 580-231696/23-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 231916 — **Prep Batch: 231696**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead			100	94.5		mg/Kg		94	80 - 120		

Lab Sample ID: LCSD 580-231696/24-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 231916 — **Prep Batch: 231696**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead			100	94.8		mg/Kg		95	80 - 120	0	20

Lab Sample ID: 580-63706-14 MS — **Client Sample ID: 170 P100 0-2" DUP**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 231916 — **Prep Batch: 231696**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead	31		83.7	115		mg/Kg		101	80 - 120		

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 580-63706-14 MSD — **Client Sample ID: 170 P100 0-2" DUP**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 231916 — **Prep Batch: 231696**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	31		85.9	116		mg/Kg		99	80 - 120	1	20

Lab Sample ID: 580-63706-14 DU — **Client Sample ID: 170 P100 0-2" DUP**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 231916 — **Prep Batch: 231696**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Lead	31			29.7		mg/Kg				4	20

Lab Sample ID: MB 580-231788/21-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232060 — **Prep Batch: 231788**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.110	J	1.5	0.096	mg/Kg		11/07/16 14:44	11/09/16 17:08	1

Lab Sample ID: LCS 580-231788/22-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232060 — **Prep Batch: 231788**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead			50.0	45.6		mg/Kg		91	80 - 120		

Lab Sample ID: LCSD 580-231788/23-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232060 — **Prep Batch: 231788**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead			50.0	44.6		mg/Kg		89	80 - 120	2	20

Lab Sample ID: 440-163463-A-15-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232060 — **Prep Batch: 231788**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead	430	B	46.7	522	4	mg/Kg		190	80 - 120		

Lab Sample ID: 440-163463-A-15-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232060 — **Prep Batch: 231788**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	430	B	46.5	556	4	mg/Kg		265	80 - 120	6	20

Lab Sample ID: 440-163463-A-15-B DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232060 — **Prep Batch: 231788**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Lead	430	B		955	F3	mg/Kg				75	20

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Lab Sample ID: MB 580-231792/21-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232060 — **Prep Batch: 231792**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5	0.096	mg/Kg		11/07/16 15:27	11/09/16 19:00	1

Lab Sample ID: LCS 580-231792/22-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232060 — **Prep Batch: 231792**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	50.0	44.7		mg/Kg		89	80 - 120

Lab Sample ID: LCSD 580-231792/23-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232060 — **Prep Batch: 231792**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	50.0	44.3		mg/Kg		89	80 - 120	1	20

Lab Sample ID: 580-63706-29 MS — **Client Sample ID: S464 P101 0-2"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232060 — **Prep Batch: 231792**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	28	F1	43.5	57.7	F1	mg/Kg		69	80 - 120

Lab Sample ID: 580-63706-29 MSD — **Client Sample ID: S464 P101 0-2"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232060 — **Prep Batch: 231792**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	28	F1	43.3	58.3	F1	mg/Kg		71	80 - 120	1	20

Lab Sample ID: 580-63706-29 DU — **Client Sample ID: S464 P101 0-2"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232060 — **Prep Batch: 231792**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lead	28	F1	21.7	F3	mg/Kg		24	20

Lab Sample ID: MB 580-231882/21-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232060 — **Prep Batch: 231882**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.105	J	1.5	0.096	mg/Kg		11/08/16 14:24	11/09/16 20:52	1

Lab Sample ID: LCS 580-231882/22-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232060 — **Prep Batch: 231882**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	50.0	44.2		mg/Kg		88	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSD 580-231882/23-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232060 — **Prep Batch: 231882**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead			50.0	43.3		mg/Kg		87	80 - 120	2	20

Lab Sample ID: 580-63706-64 MS — **Client Sample ID: 4201 P101 0-2" DUP**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232060 — **Prep Batch: 231882**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead	8.4	B	46.7	53.2		mg/Kg		96	80 - 120		

Lab Sample ID: 580-63706-64 MSD — **Client Sample ID: 4201 P101 0-2" DUP**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232060 — **Prep Batch: 231882**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	8.4	B	46.7	49.1		mg/Kg		87	80 - 120	8	20

Lab Sample ID: 580-63706-64 DU — **Client Sample ID: 4201 P101 0-2" DUP**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232060 — **Prep Batch: 231882**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Lead	8.4	B		6.98		mg/Kg				18	20

Lab Sample ID: MB 580-231894/21-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232158 — **Prep Batch: 231894**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5	0.096	mg/Kg		11/08/16 15:28	11/10/16 16:59	1

Lab Sample ID: LCS 580-231894/22-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232158 — **Prep Batch: 231894**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead			50.0	46.4		mg/Kg		93	80 - 120		

Lab Sample ID: LCSD 580-231894/23-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232158 — **Prep Batch: 231894**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead			50.0	49.0		mg/Kg		98	80 - 120	5	20

Lab Sample ID: 580-63706-82 MS — **Client Sample ID: 347 P9 0-6"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232158 — **Prep Batch: 231894**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead	78		44.6	124		mg/Kg		104	80 - 120		

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Lab Sample ID: 580-63706-82 MSD — **Client Sample ID: 347 P9 0-6"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232158 — **Prep Batch: 231894**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	78		44.4	117		mg/Kg		89	80 - 120	5	20

Lab Sample ID: 580-63706-82 DU — **Client Sample ID: 347 P9 0-6"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232158 — **Prep Batch: 231894**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Lead	78			66.7		mg/Kg				15	20

Lab Sample ID: MB 580-231964/21-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232116 — **Prep Batch: 231964**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5	0.096	mg/Kg		11/09/16 12:10	11/10/16 11:18	1

Lab Sample ID: LCS 580-231964/22-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232116 — **Prep Batch: 231964**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead			50.0	46.2		mg/Kg		92	80 - 120		

Lab Sample ID: LCSD 580-231964/23-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232116 — **Prep Batch: 231964**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead			50.0	47.2		mg/Kg		94	80 - 120	2	20

Lab Sample ID: LCSSRM 580-231964/24-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232116 — **Prep Batch: 231964**

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead			133	131		mg/Kg		98.6	72.9 - 127.8		

Lab Sample ID: 580-63963-A-1-H MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232116 — **Prep Batch: 231964**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead	240		37.1	287	4	mg/Kg		137	80 - 120		

Lab Sample ID: 580-63963-A-1-I MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232116 — **Prep Batch: 231964**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	240		42.0	294	4	mg/Kg		138	80 - 120	2	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 580-63963-A-1-G DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232116 — **Prep Batch: 231964**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Lead	240			259		mg/Kg				9	20

Lab Sample ID: MB 580-231978/21-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232158 — **Prep Batch: 231978**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.115	J	1.5	0.096	mg/Kg		11/09/16 13:03	11/10/16 18:51	1

Lab Sample ID: LCS 580-231978/22-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232158 — **Prep Batch: 231978**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead			50.0	50.2		mg/Kg		100	80 - 120		

Lab Sample ID: LCSD 580-231978/23-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232158 — **Prep Batch: 231978**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead			50.0	50.2		mg/Kg		100	80 - 120	0	20

Lab Sample ID: 580-63706-89 MS — **Client Sample ID: 3501 P9 12-18"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232158 — **Prep Batch: 231978**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead	24	B	43.0	63.9		mg/Kg		93	80 - 120		

Lab Sample ID: 580-63706-89 MSD — **Client Sample ID: 3501 P9 12-18"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232158 — **Prep Batch: 231978**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	24	B	42.8	67.1		mg/Kg		101	80 - 120	5	20

Lab Sample ID: 580-63706-89 DU — **Client Sample ID: 3501 P9 12-18"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232158 — **Prep Batch: 231978**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Lead	24	B		24.0		mg/Kg				0.4	20

Lab Sample ID: MB 580-231992/21-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232158 — **Prep Batch: 231992**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5	0.096	mg/Kg		11/09/16 13:58	11/10/16 20:43	1

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Lab Sample ID: LCS 580-231992/22-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232158 — **Prep Batch: 231992**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead			50.0	43.8		mg/Kg		88	80 - 120		

Lab Sample ID: LCSD 580-231992/23-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232158 — **Prep Batch: 231992**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead			50.0	46.2		mg/Kg		92	80 - 120	5	20

Lab Sample ID: 580-63706-100 MS — **Client Sample ID: 5267 P101 0-2" DUP**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232158 — **Prep Batch: 231992**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead	0.19	J	46.2	44.9		mg/Kg		97	80 - 120		

Lab Sample ID: 580-63706-100 MSD — **Client Sample ID: 5267 P101 0-2" DUP**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232158 — **Prep Batch: 231992**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	0.19	J	45.9	47.3		mg/Kg		103	80 - 120	5	20

Lab Sample ID: 580-63706-100 DU — **Client Sample ID: 5267 P101 0-2" DUP**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232158 — **Prep Batch: 231992**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Lead	0.19	J		0.225	J	mg/Kg				19	20

Lab Sample ID: MB 580-232014/21-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232158 — **Prep Batch: 232014**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.250	J	1.5	0.096	mg/Kg		11/09/16 15:29	11/10/16 23:50	1

Lab Sample ID: LCS 580-232014/22-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232158 — **Prep Batch: 232014**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead			50.0	46.7		mg/Kg		93	80 - 120		

Lab Sample ID: LCSD 580-232014/23-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232158 — **Prep Batch: 232014**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead			50.0	45.8		mg/Kg		92	80 - 120	2	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 580-63706-116 MS — **Client Sample ID: 3509 P101 0-2" DUP**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232158 — **Prep Batch: 232014**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	25	B	44.8	70.9		mg/Kg		103	80 - 120

Lab Sample ID: 580-63706-116 MSD — **Client Sample ID: 3509 P101 0-2" DUP**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232158 — **Prep Batch: 232014**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	25	B	45.0	74.9		mg/Kg		111	80 - 120	6	20

Lab Sample ID: 580-63706-116 DU — **Client Sample ID: 3509 P101 0-2" DUP**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232158 — **Prep Batch: 232014**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lead	25	B	23.8		mg/Kg		4	20

Lab Sample ID: MB 580-232102/21-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232294 — **Prep Batch: 232102**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.170	J	1.5	0.096	mg/Kg		11/10/16 12:49	11/11/16 14:57	1

Lab Sample ID: LCS 580-232102/22-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232294 — **Prep Batch: 232102**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	50.0	46.7		mg/Kg		93	80 - 120

Lab Sample ID: LCSD 580-232102/23-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232294 — **Prep Batch: 232102**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	50.0	48.4		mg/Kg		97	80 - 120	4	20

Lab Sample ID: 580-63706-229 MS — **Client Sample ID: 4205 P1 24-30"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232294 — **Prep Batch: 232102**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	21	F1 B	45.4	70.8		mg/Kg		110	80 - 120

Lab Sample ID: 580-63706-229 MSD — **Client Sample ID: 4205 P1 24-30"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232294 — **Prep Batch: 232102**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	21	F1 B	37.1	68.1	F1	mg/Kg		127	80 - 120	4	20

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Lab Sample ID: 580-63706-229 DU — **Client Sample ID: 4205 P1 24-30"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232294 — **Prep Batch: 232102**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Lead	21	F1 B		29.0	F3	mg/Kg				33	20

Lab Sample ID: MB 580-232117/21-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232294 — **Prep Batch: 232117**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.240	J	1.5	0.096	mg/Kg		11/10/16 13:44	11/11/16 15:34	1

Lab Sample ID: LCS 580-232117/22-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232294 — **Prep Batch: 232117**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead			50.0	49.3		mg/Kg		99	80 - 120		

Lab Sample ID: LCSD 580-232117/23-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232294 — **Prep Batch: 232117**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead			50.0	47.0		mg/Kg		94	80 - 120	5	20

Lab Sample ID: 580-63706-213 MS — **Client Sample ID: 4213 P3 12-18"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232294 — **Prep Batch: 232117**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead	4.0	B	44.1	51.6		mg/Kg		108	80 - 120		

Lab Sample ID: 580-63706-213 MSD — **Client Sample ID: 4213 P3 12-18"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232294 — **Prep Batch: 232117**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	4.0	B	43.9	46.2		mg/Kg		96	80 - 120	11	20

Lab Sample ID: 580-63706-213 DU — **Client Sample ID: 4213 P3 12-18"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232294 — **Prep Batch: 232117**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Lead	4.0	B		4.17		mg/Kg				4	20

Lab Sample ID: MB 580-232129/21-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232283 — **Prep Batch: 232129**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.165	J	1.5	0.096	mg/Kg		11/10/16 14:48	11/11/16 16:58	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 580-232129/22-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232283 — **Prep Batch: 232129**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	50.0	49.0		mg/Kg		98	80 - 120

Lab Sample ID: LCSD 580-232129/23-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232283 — **Prep Batch: 232129**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	50.0	45.2		mg/Kg		90	80 - 120	8	20

Lab Sample ID: 580-63706-192 MS — **Client Sample ID: 3127W P8 12-18"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232283 — **Prep Batch: 232129**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	7.3	B	45.5	50.9		mg/Kg		96	80 - 120

Lab Sample ID: 580-63706-192 MSD — **Client Sample ID: 3127W P8 12-18"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232283 — **Prep Batch: 232129**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	7.3	B	45.9	50.7		mg/Kg		94	80 - 120	0	20

Lab Sample ID: 580-63706-192 DU — **Client Sample ID: 3127W P8 12-18"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232283 — **Prep Batch: 232129**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lead	7.3	B	6.11		mg/Kg		18	20

Lab Sample ID: MB 580-232136/21-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232283 — **Prep Batch: 232136**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5	0.096	mg/Kg		11/10/16 15:30	11/11/16 17:35	1

Lab Sample ID: LCS 580-232136/22-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232283 — **Prep Batch: 232136**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	50.0	45.3		mg/Kg		91	80 - 120

Lab Sample ID: LCSD 580-232136/23-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232283 — **Prep Batch: 232136**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	50.0	46.0		mg/Kg		92	80 - 120	2	20

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Lab Sample ID: 580-63706-151 MS — **Client Sample ID: S29 P1 0-6"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232283 — **Prep Batch: 232136**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	9.8	F1	45.9	66.7	F1	mg/Kg		124	80 - 120

Lab Sample ID: 580-63706-151 MSD — **Client Sample ID: S29 P1 0-6"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232283 — **Prep Batch: 232136**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	9.8	F1	46.0	55.8		mg/Kg		100	80 - 120	18	20

Lab Sample ID: 580-63706-151 DU — **Client Sample ID: S29 P1 0-6"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232283 — **Prep Batch: 232136**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lead	9.8	F1	10.2		mg/Kg		5	20

Lab Sample ID: MB 580-232153/21-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232283 — **Prep Batch: 232153**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5	0.096	mg/Kg		11/10/16 17:09	11/11/16 18:12	1

Lab Sample ID: LCS 580-232153/22-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232283 — **Prep Batch: 232153**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	50.0	45.0		mg/Kg		90	80 - 120

Lab Sample ID: LCSD 580-232153/23-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232283 — **Prep Batch: 232153**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	50.0	47.3		mg/Kg		95	80 - 120	5	20

Lab Sample ID: 580-63706-150 MS — **Client Sample ID: 4214 P2 0-6"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232283 — **Prep Batch: 232153**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	65		46.0	118		mg/Kg		116	80 - 120

Lab Sample ID: 580-63706-150 MSD — **Client Sample ID: 4214 P2 0-6"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232283 — **Prep Batch: 232153**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	65		38.9	111		mg/Kg		119	80 - 120	6	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 580-63706-150 DU — **Client Sample ID: 4214 P2 0-6"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232283 — **Prep Batch: 232153**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Lead	65			69.2		mg/Kg				7	20

Lab Sample ID: MB 580-232157/21-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232365 — **Prep Batch: 232157**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5	0.096	mg/Kg		11/10/16 19:26	11/14/16 10:32	1

Lab Sample ID: LCS 580-232157/22-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232365 — **Prep Batch: 232157**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead			50.0	52.8		mg/Kg		106	80 - 120		

Lab Sample ID: LCSD 580-232157/23-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232365 — **Prep Batch: 232157**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead			50.0	52.6		mg/Kg		105	80 - 120	0	20

Lab Sample ID: 580-63706-279 MS — **Client Sample ID: 5303 E C 0-2"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232365 — **Prep Batch: 232157**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead	14		45.9	63.4		mg/Kg		108	80 - 120		

Lab Sample ID: 580-63706-279 MSD — **Client Sample ID: 5303 E C 0-2"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232365 — **Prep Batch: 232157**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	14		43.9	60.5		mg/Kg		107	80 - 120	5	20

Lab Sample ID: 580-63706-279 DU — **Client Sample ID: 5303 E C 0-2"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232365 — **Prep Batch: 232157**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Lead	14			12.3		mg/Kg				10	20

Lab Sample ID: MB 580-232173/21-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232365 — **Prep Batch: 232173**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5	0.096	mg/Kg		11/11/16 08:49	11/14/16 11:08	1

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Lab Sample ID: LCS 580-232173/22-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232365 — **Prep Batch: 232173**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead			50.0	51.3		mg/Kg		103	80 - 120		

Lab Sample ID: LCSD 580-232173/23-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232365 — **Prep Batch: 232173**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead			50.0	50.3		mg/Kg		101	80 - 120	2	20

Lab Sample ID: 580-63706-263 MS — **Client Sample ID: 4207 P3 24-30" DUP**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232365 — **Prep Batch: 232173**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead	22	F1	45.6	77.7	F1	mg/Kg		121	80 - 120		

Lab Sample ID: 580-63706-263 MSD — **Client Sample ID: 4207 P3 24-30" DUP**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232365 — **Prep Batch: 232173**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	22	F1	45.7	77.0		mg/Kg		120	80 - 120	1	20

Lab Sample ID: 580-63706-263 DU — **Client Sample ID: 4207 P3 24-30" DUP**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232365 — **Prep Batch: 232173**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Lead	22	F1		30.4	F3	mg/Kg				30	20

Lab Sample ID: MB 580-232180/21-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232365 — **Prep Batch: 232180**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.105	J	1.5	0.096	mg/Kg		11/11/16 10:02	11/14/16 11:45	1

Lab Sample ID: LCS 580-232180/22-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232365 — **Prep Batch: 232180**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead			50.0	49.2		mg/Kg		98	80 - 120		

Lab Sample ID: LCSD 580-232180/23-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232365 — **Prep Batch: 232180**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead			50.0	49.3		mg/Kg		99	80 - 120	0	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 580-63706-246 MS — **Client Sample ID: 4206 P3 0-6"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232365 — **Prep Batch: 232180**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead	24	B	46.0	66.9		mg/Kg		94	80 - 120		

Lab Sample ID: 580-63706-246 MSD — **Client Sample ID: 4206 P3 0-6"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232365 — **Prep Batch: 232180**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	24	B	46.3	68.2		mg/Kg		96	80 - 120	2	20

Lab Sample ID: 580-63706-246 DU — **Client Sample ID: 4206 P3 0-6"**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 232365 — **Prep Batch: 232180**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Lead	24	B		21.6		mg/Kg				8	20

Lab Sample ID: MB 580-231681/17-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 231810 — **Prep Batch: 231681**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.030	0.0026	mg/L		11/05/16 12:05	11/07/16 20:55	1

Lab Sample ID: LCS 580-231681/18-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 231810 — **Prep Batch: 231681**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead			1.00	1.01		mg/L		101	80 - 120		

Lab Sample ID: LCSD 580-231681/19-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 231810 — **Prep Batch: 231681**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead			1.00	1.01		mg/L		101	80 - 120	0	20

Lab Sample ID: 580-63738-B-1-G MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 231810 — **Prep Batch: 231681**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead	ND		1.00	0.976		mg/L		98	75 - 125		

Lab Sample ID: 580-63738-B-1-H MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 231810 — **Prep Batch: 231681**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	ND		1.00	0.977		mg/L		98	75 - 125	0	20

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Lab Sample ID: 580-63738-C-1-F DU
Matrix: Water
Analysis Batch: 231810

Client Sample ID: Duplicate
Prep Type: Dissolved
Prep Batch: 231681

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Lead	ND			ND		mg/L				NC	20

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S1123 P100 0-2"
Lab Sample ID: 580-63706-1
Date Collected: 09/23/16 13:10
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231635	11/04/16 14:37	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231747	11/04/16 23:34	HJM	TAL SEA

Client Sample ID: S1123 P100 0-2" DUP
Lab Sample ID: 580-63706-2
Date Collected: 09/23/16 13:10
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231635	11/04/16 14:37	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231747	11/05/16 00:05	HJM	TAL SEA

Client Sample ID: S1123 P101 0-2"
Lab Sample ID: 580-63706-3
Date Collected: 09/23/16 13:15
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231635	11/04/16 14:37	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231747	11/05/16 00:09	HJM	TAL SEA

Client Sample ID: S1123 P101 0-2" DUP
Lab Sample ID: 580-63706-4
Date Collected: 09/23/16 13:15
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231635	11/04/16 14:37	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231747	11/05/16 00:13	HJM	TAL SEA

Client Sample ID: S1119 P100 0-2"
Lab Sample ID: 580-63706-5
Date Collected: 09/23/16 14:30
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231635	11/04/16 14:37	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231747	11/05/16 00:16	HJM	TAL SEA

Client Sample ID: S1119 P100 0-2" DUP
Lab Sample ID: 580-63706-6
Date Collected: 09/23/16 14:30
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231635	11/04/16 14:37	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231747	11/05/16 00:20	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S1119 P101 0-2"

Lab Sample ID: 580-63706-7
Date Collected: 09/23/16 14:36
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231635	11/04/16 14:37	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231747	11/05/16 00:33	HJM	TAL SEA

Client Sample ID: S1119 P101 0-2" DUP

Lab Sample ID: 580-63706-8
Date Collected: 09/23/16 14:36
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231635	11/04/16 14:37	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231747	11/05/16 00:37	HJM	TAL SEA

Client Sample ID: 180 P100 0-2"

Lab Sample ID: 580-63706-9
Date Collected: 09/23/16 15:10
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231635	11/04/16 14:37	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231747	11/05/16 00:41	HJM	TAL SEA

Client Sample ID: 180 P100 0-2" DUP

Lab Sample ID: 580-63706-10
Date Collected: 09/23/16 15:10
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231635	11/04/16 14:37	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231747	11/05/16 00:44	HJM	TAL SEA

Client Sample ID: 180 P101 0-2"

Lab Sample ID: 580-63706-11
Date Collected: 09/23/16 15:17
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231635	11/04/16 14:37	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231747	11/05/16 00:48	HJM	TAL SEA

Client Sample ID: 180 P101 0-2" DUP

Lab Sample ID: 580-63706-12
Date Collected: 09/23/16 15:17
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231635	11/04/16 14:37	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231747	11/05/16 00:52	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 170 P100 0-2"
Lab Sample ID: 580-63706-13
Date Collected: 09/23/16 15:55
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231635	11/04/16 14:37	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231747	11/05/16 00:56	HJM	TAL SEA

Client Sample ID: 170 P100 0-2" DUP
Lab Sample ID: 580-63706-14
Date Collected: 09/23/16 15:55
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231696	11/05/16 14:54	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 19:29	HJM	TAL SEA

Client Sample ID: 170 P101 0-2"
Lab Sample ID: 580-63706-15
Date Collected: 09/23/16 16:01
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231685	11/05/16 13:26	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 21:26	HJM	TAL SEA

Client Sample ID: 170 P101 0-2" DUP
Lab Sample ID: 580-63706-16
Date Collected: 09/23/16 16:01
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231685	11/05/16 13:26	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 21:54	HJM	TAL SEA

Client Sample ID: 2127 P100 0-2"
Lab Sample ID: 580-63706-17
Date Collected: 10/04/16 14:04
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231696	11/05/16 14:54	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 19:58	HJM	TAL SEA

Client Sample ID: 2127 P100 0-2" DUP
Lab Sample ID: 580-63706-18
Date Collected: 10/04/16 14:04
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231788	11/07/16 14:44	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232060	11/09/16 18:14	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 2127 P101 0-2"

Lab Sample ID: 580-63706-19
Date Collected: 10/04/16 14:10
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231788	11/07/16 14:44	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232060	11/09/16 18:18	HJM	TAL SEA

Client Sample ID: 2127 P101 0-2" DUP

Lab Sample ID: 580-63706-20
Date Collected: 10/04/16 14:10
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231696	11/05/16 14:54	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 20:02	HJM	TAL SEA

Client Sample ID: 2127 P102 0-2"

Lab Sample ID: 580-63706-21
Date Collected: 10/04/16 14:18
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231696	11/05/16 14:54	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 20:05	HJM	TAL SEA

Client Sample ID: 2127 P102 0-2" DUP

Lab Sample ID: 580-63706-22
Date Collected: 10/04/16 14:18
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231788	11/07/16 14:44	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232060	11/09/16 18:22	HJM	TAL SEA

Client Sample ID: 300 P100 0-2"

Lab Sample ID: 580-63706-23
Date Collected: 10/04/16 14:46
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231685	11/05/16 13:26	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 21:58	HJM	TAL SEA

Client Sample ID: 300 P100 0-2" DUP

Lab Sample ID: 580-63706-24
Date Collected: 10/04/16 14:46
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231788	11/07/16 14:44	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232060	11/09/16 18:25	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 300 P101 0-2"

Lab Sample ID: 580-63706-25
Matrix: Solid
Date Collected: 10/04/16 14:59
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231685	11/05/16 13:26	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 22:01	HJM	TAL SEA

Client Sample ID: 300 P101 0-2" DUP

Lab Sample ID: 580-63706-26
Matrix: Solid
Date Collected: 10/04/16 14:59
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231788	11/07/16 14:44	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232060	11/09/16 18:29	HJM	TAL SEA

Client Sample ID: S464 P100 0-2"

Lab Sample ID: 580-63706-27
Matrix: Solid
Date Collected: 10/04/16 15:40
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231696	11/05/16 14:54	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 20:09	HJM	TAL SEA

Client Sample ID: S464 P100 0-2" DUP

Lab Sample ID: 580-63706-28
Matrix: Solid
Date Collected: 10/04/16 15:40
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231685	11/05/16 13:26	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 22:05	HJM	TAL SEA

Client Sample ID: S464 P101 0-2"

Lab Sample ID: 580-63706-29
Matrix: Solid
Date Collected: 10/04/16 15:52
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231792	11/07/16 15:27	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232060	11/09/16 19:09	HJM	TAL SEA

Client Sample ID: S464 P101 0-2" DUP

Lab Sample ID: 580-63706-30
Matrix: Solid
Date Collected: 10/04/16 15:52
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231788	11/07/16 14:44	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232060	11/09/16 18:33	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S464 P102 0-2"

Lab Sample ID: 580-63706-31
Date Collected: 10/04/16 16:02
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231788	11/07/16 14:44	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232060	11/09/16 18:36	HJM	TAL SEA

Client Sample ID: S464 P102 0-2" DUP

Lab Sample ID: 580-63706-32
Date Collected: 10/04/16 16:02
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231788	11/07/16 14:44	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232060	11/09/16 18:40	HJM	TAL SEA

Client Sample ID: S464 P103 0-2"

Lab Sample ID: 580-63706-33
Date Collected: 10/04/16 16:09
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231792	11/07/16 15:27	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232060	11/09/16 19:37	HJM	TAL SEA

Client Sample ID: S464 P103 0-2" DUP

Lab Sample ID: 580-63706-34
Date Collected: 10/04/16 16:09
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231792	11/07/16 15:27	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232060	11/09/16 19:41	HJM	TAL SEA

Client Sample ID: S464 P104 0-2"

Lab Sample ID: 580-63706-35
Date Collected: 10/04/16 16:14
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231792	11/07/16 15:27	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232060	11/09/16 19:45	HJM	TAL SEA

Client Sample ID: S464 P104 0-2" DUP

Lab Sample ID: 580-63706-36
Date Collected: 10/04/16 16:14
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231792	11/07/16 15:27	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232060	11/09/16 19:48	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 520 P100 0-2"
Lab Sample ID: 580-63706-37
Date Collected: 10/07/16 12:50
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231696	11/05/16 14:54	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 20:13	HJM	TAL SEA

Client Sample ID: 520 P100 0-2" DUP
Lab Sample ID: 580-63706-38
Date Collected: 10/07/16 12:50
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231792	11/07/16 15:27	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232060	11/09/16 19:52	HJM	TAL SEA

Client Sample ID: 520 P101 0-2"
Lab Sample ID: 580-63706-39
Date Collected: 10/07/16 13:05
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231792	11/07/16 15:27	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232060	11/09/16 19:56	HJM	TAL SEA

Client Sample ID: 520 P101 0-2" DUP
Lab Sample ID: 580-63706-40
Date Collected: 10/07/16 13:05
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231792	11/07/16 15:27	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232060	11/09/16 19:59	HJM	TAL SEA

Client Sample ID: 520 P102 0-2"
Lab Sample ID: 580-63706-41
Date Collected: 10/07/16 13:13
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231792	11/07/16 15:27	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232060	11/09/16 20:03	HJM	TAL SEA

Client Sample ID: 520 P102 0-2" DUP
Lab Sample ID: 580-63706-42
Date Collected: 10/07/16 13:13
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231696	11/05/16 14:54	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 20:16	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 520 P103 0-2"
Lab Sample ID: 580-63706-43
Date Collected: 10/07/16 13:17
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231685	11/05/16 13:26	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 22:09	HJM	TAL SEA

Client Sample ID: 520 P103 0-2" DUP
Lab Sample ID: 580-63706-44
Date Collected: 10/07/16 13:17
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231685	11/05/16 13:26	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 22:12	HJM	TAL SEA

Client Sample ID: 520 P104 0-2"
Lab Sample ID: 580-63706-45
Date Collected: 10/07/16 13:24
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231696	11/05/16 14:54	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 20:20	HJM	TAL SEA

Client Sample ID: 520 P104 0-2" DUP
Lab Sample ID: 580-63706-46
Date Collected: 10/07/16 13:24
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231696	11/05/16 14:54	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 20:24	HJM	TAL SEA

Client Sample ID: 520 P105 0-2"
Lab Sample ID: 580-63706-47
Date Collected: 10/07/16 13:28
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231792	11/07/16 15:27	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232060	11/09/16 20:13	HJM	TAL SEA

Client Sample ID: 520 P105 0-2" DUP
Lab Sample ID: 580-63706-48
Date Collected: 10/07/16 13:28
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231792	11/07/16 15:27	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232060	11/09/16 20:17	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5295 P100 0-2"
Lab Sample ID: 580-63706-49
Date Collected: 10/07/16 14:43
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231792	11/07/16 15:27	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232060	11/09/16 20:20	HJM	TAL SEA

Client Sample ID: 5295 P100 0-2" DUP
Lab Sample ID: 580-63706-50
Date Collected: 10/07/16 14:43
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231685	11/05/16 13:26	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 22:16	HJM	TAL SEA

Client Sample ID: 5295 P101 0-2"
Lab Sample ID: 580-63706-51
Date Collected: 10/07/16 14:56
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231685	11/05/16 13:26	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 22:20	HJM	TAL SEA

Client Sample ID: 5295 P101 0-2" DUP
Lab Sample ID: 580-63706-52
Date Collected: 10/07/16 14:56
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231685	11/05/16 13:26	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 22:23	HJM	TAL SEA

Client Sample ID: 5295 P102 0-2"
Lab Sample ID: 580-63706-53
Date Collected: 10/07/16 15:03
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231792	11/07/16 15:27	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232060	11/09/16 20:24	HJM	TAL SEA

Client Sample ID: 5295 P102 0-2" DUP
Lab Sample ID: 580-63706-54
Date Collected: 10/07/16 15:03
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231685	11/05/16 13:26	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 22:33	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5295 P103 0-2"

Lab Sample ID: 580-63706-55
Date Collected: 10/07/16 15:11
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231685	11/05/16 13:26	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 22:37	HJM	TAL SEA

Client Sample ID: 5295 P103 0-2" DUP

Lab Sample ID: 580-63706-56
Date Collected: 10/07/16 15:11
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231792	11/07/16 15:27	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232060	11/09/16 20:28	HJM	TAL SEA

Client Sample ID: 5295 P104 0-2"

Lab Sample ID: 580-63706-57
Date Collected: 10/07/16 15:18
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231792	11/07/16 15:27	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232060	11/09/16 20:31	HJM	TAL SEA

Client Sample ID: 5295 P104 0-2" DUP

Lab Sample ID: 580-63706-58
Date Collected: 10/07/16 15:18
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231792	11/07/16 15:27	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232060	11/09/16 20:35	HJM	TAL SEA

Client Sample ID: 5295 P105 0-2"

Lab Sample ID: 580-63706-59
Date Collected: 10/07/16 15:28
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231792	11/07/16 15:27	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232060	11/09/16 20:39	HJM	TAL SEA

Client Sample ID: 5295 P105 0-2" DUP

Lab Sample ID: 580-63706-60
Date Collected: 10/07/16 15:28
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231685	11/05/16 13:26	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 22:40	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4201 P100 0-2"
Lab Sample ID: 580-63706-61
Date Collected: 10/08/16 08:27
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231696	11/05/16 14:54	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 20:28	HJM	TAL SEA

Client Sample ID: 4201 P100 0-2" DUP
Lab Sample ID: 580-63706-62
Date Collected: 10/08/16 08:27
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231696	11/05/16 14:54	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 20:38	HJM	TAL SEA

Client Sample ID: 4201 P101 0-2"
Lab Sample ID: 580-63706-63
Date Collected: 10/08/16 08:31
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231696	11/05/16 14:54	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 20:41	HJM	TAL SEA

Client Sample ID: 4201 P101 0-2" DUP
Lab Sample ID: 580-63706-64
Date Collected: 10/08/16 08:31
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231882	11/08/16 14:24	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232060	11/09/16 21:01	HJM	TAL SEA

Client Sample ID: 4201 P102 0-2"
Lab Sample ID: 580-63706-65
Date Collected: 10/08/16 08:36
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231696	11/05/16 14:54	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 20:45	HJM	TAL SEA

Client Sample ID: 4201 P102 0-2" DUP
Lab Sample ID: 580-63706-66
Date Collected: 10/08/16 08:36
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231685	11/05/16 13:26	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 22:44	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4201 P103 0-2"
Lab Sample ID: 580-63706-67
Date Collected: 10/08/16 08:39
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231696	11/05/16 14:54	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 20:49	HJM	TAL SEA

Client Sample ID: 4201 P103 0-2" DUP
Lab Sample ID: 580-63706-68
Date Collected: 10/08/16 08:39
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231685	11/05/16 13:26	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 22:48	HJM	TAL SEA

Client Sample ID: 4201 P104 0-2"
Lab Sample ID: 580-63706-69
Date Collected: 10/08/16 08:43
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231882	11/08/16 14:24	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232116	11/10/16 10:37	HJM	TAL SEA

Client Sample ID: 4201 P104 0-2" DUP
Lab Sample ID: 580-63706-70
Date Collected: 10/08/16 08:43
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231696	11/05/16 14:54	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 20:52	HJM	TAL SEA

Client Sample ID: 5360 P100 0-2"
Lab Sample ID: 580-63706-71
Date Collected: 10/08/16 15:48
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231685	11/05/16 13:26	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 22:51	HJM	TAL SEA

Client Sample ID: 5360 P100 0-2" DUP
Lab Sample ID: 580-63706-72
Date Collected: 10/08/16 15:48
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231696	11/05/16 14:54	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 20:56	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5360 P101 0-2"

Lab Sample ID: 580-63706-73
Date Collected: 10/08/16 15:56
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231696	11/05/16 14:54	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 21:00	HJM	TAL SEA

Client Sample ID: 5360 P101 0-2" DUP

Lab Sample ID: 580-63706-74
Date Collected: 10/08/16 15:56
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231882	11/08/16 14:24	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232116	11/10/16 10:41	HJM	TAL SEA

Client Sample ID: 5361 P100 0-2"

Lab Sample ID: 580-63706-75
Date Collected: 10/08/16 16:15
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231685	11/05/16 13:26	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 22:55	HJM	TAL SEA

Client Sample ID: 5361 P100 0-2" DUP

Lab Sample ID: 580-63706-76
Date Collected: 10/08/16 16:15
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231685	11/05/16 13:26	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 22:59	HJM	TAL SEA

Client Sample ID: 5361 P101 0-2"

Lab Sample ID: 580-63706-77
Date Collected: 10/08/16 16:22
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231696	11/05/16 14:54	R1K	TAL SEA
Total/NA	Analysis	6010C		1	231916	11/08/16 21:03	HJM	TAL SEA

Client Sample ID: 5361 P101 0-2" DUP

Lab Sample ID: 580-63706-78
Date Collected: 10/08/16 16:22
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231882	11/08/16 14:24	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232116	11/10/16 10:45	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3127W P6 0-6"
Lab Sample ID: 580-63706-79
Date Collected: 10/09/16 08:45
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231882	11/08/16 14:24	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232116	11/10/16 10:48	HJM	TAL SEA

Client Sample ID: 3127W P6 12-18"
Lab Sample ID: 580-63706-80
Date Collected: 10/09/16 08:45
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231882	11/08/16 14:24	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232116	11/10/16 10:53	HJM	TAL SEA

Client Sample ID: 3127W P6 24-30"
Lab Sample ID: 580-63706-81
Date Collected: 10/09/16 08:45
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231882	11/08/16 14:24	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232116	11/10/16 10:57	HJM	TAL SEA

Client Sample ID: 347 P9 0-6"
Lab Sample ID: 580-63706-82
Date Collected: 10/09/16 09:05
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231894	11/08/16 15:28	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 17:08	HJM	TAL SEA

Client Sample ID: 347 P9 12-18"
Lab Sample ID: 580-63706-83
Date Collected: 10/09/16 09:05
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231894	11/08/16 15:28	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 17:36	HJM	TAL SEA

Client Sample ID: 347 P9 24-30"
Lab Sample ID: 580-63706-84
Date Collected: 10/09/16 09:05
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231894	11/08/16 15:28	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 17:39	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3501 P8 0-6"

Lab Sample ID: 580-63706-85
Date Collected: 10/09/16 09:34
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231894	11/08/16 15:28	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 17:43	HJM	TAL SEA

Client Sample ID: 3501 P8 12-18"

Lab Sample ID: 580-63706-86
Date Collected: 10/09/16 09:34
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231894	11/08/16 15:28	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 17:47	HJM	TAL SEA

Client Sample ID: 3501 P8 24-30"

Lab Sample ID: 580-63706-87
Date Collected: 10/09/16 09:34
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231894	11/08/16 15:28	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 17:50	HJM	TAL SEA

Client Sample ID: 3501 P9 0-6"

Lab Sample ID: 580-63706-88
Date Collected: 10/09/16 09:52
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231894	11/08/16 15:28	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 17:54	HJM	TAL SEA

Client Sample ID: 3501 P9 12-18"

Lab Sample ID: 580-63706-89
Date Collected: 10/09/16 09:52
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231978	11/09/16 13:03	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 19:00	HJM	TAL SEA

Client Sample ID: 3501 P9 24-30"

Lab Sample ID: 580-63706-90
Date Collected: 10/09/16 09:52
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231894	11/08/16 15:28	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 17:58	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3501 P10 0-6"

Lab Sample ID: 580-63706-91
Date Collected: 10/09/16 10:20
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231894	11/08/16 15:28	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 18:01	HJM	TAL SEA

Client Sample ID: 3501 P10 12-18"

Lab Sample ID: 580-63706-92
Date Collected: 10/09/16 10:20
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231894	11/08/16 15:28	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 18:12	HJM	TAL SEA

Client Sample ID: 3501 P10 24-30"

Lab Sample ID: 580-63706-93
Date Collected: 10/09/16 10:20
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231894	11/08/16 15:28	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 18:15	HJM	TAL SEA

Client Sample ID: 3501 P11 0-6"

Lab Sample ID: 580-63706-94
Date Collected: 10/09/16 10:45
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231894	11/08/16 15:28	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 18:19	HJM	TAL SEA

Client Sample ID: 3501 P11 12-18"

Lab Sample ID: 580-63706-95
Date Collected: 10/09/16 10:45
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231894	11/08/16 15:28	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 18:23	HJM	TAL SEA

Client Sample ID: 3501 P11 24-30"

Lab Sample ID: 580-63706-96
Date Collected: 10/09/16 10:45
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231894	11/08/16 15:28	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 18:26	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5267 P100 0-2"
Lab Sample ID: 580-63706-97
Date Collected: 10/09/16 12:05
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231894	11/08/16 15:28	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 18:30	HJM	TAL SEA

Client Sample ID: 5267 P100 0-2" DUP
Lab Sample ID: 580-63706-98
Date Collected: 10/09/16 12:05
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231894	11/08/16 15:28	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 18:34	HJM	TAL SEA

Client Sample ID: 5267 P101 0-2"
Lab Sample ID: 580-63706-99
Date Collected: 10/09/16 12:11
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231894	11/08/16 15:28	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 18:37	HJM	TAL SEA

Client Sample ID: 5267 P101 0-2" DUP
Lab Sample ID: 580-63706-100
Date Collected: 10/09/16 12:11
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231992	11/09/16 13:58	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 20:53	HJM	TAL SEA

Client Sample ID: 502 P100 0-2"
Lab Sample ID: 580-63706-101
Date Collected: 10/09/16 12:33
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231992	11/09/16 13:58	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 21:21	HJM	TAL SEA

Client Sample ID: 502 P100 0-2" DUP
Lab Sample ID: 580-63706-102
Date Collected: 10/09/16 12:33
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231992	11/09/16 13:58	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 21:24	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 502 P101 0-2"
Lab Sample ID: 580-63706-103
Date Collected: 10/09/16 12:40
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231992	11/09/16 13:58	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 21:28	HJM	TAL SEA

Client Sample ID: 502 P101 0-2" DUP
Lab Sample ID: 580-63706-104
Date Collected: 10/09/16 12:40
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231992	11/09/16 13:58	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 21:32	HJM	TAL SEA

Client Sample ID: 502 P102 0-2"
Lab Sample ID: 580-63706-105
Date Collected: 10/09/16 12:51
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231992	11/09/16 13:58	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 21:35	HJM	TAL SEA

Client Sample ID: 502 P102 0-2" DUP
Lab Sample ID: 580-63706-106
Date Collected: 10/09/16 12:51
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231992	11/09/16 13:58	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 21:39	HJM	TAL SEA

Client Sample ID: 502 P103 0-2"
Lab Sample ID: 580-63706-107
Date Collected: 10/09/16 13:02
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231992	11/09/16 13:58	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 21:43	HJM	TAL SEA

Client Sample ID: 502 P103 0-2" DUP
Lab Sample ID: 580-63706-108
Date Collected: 10/09/16 13:02
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231992	11/09/16 13:58	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 21:46	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 2411 P100 0-2"
Lab Sample ID: 580-63706-109
Date Collected: 10/09/16 14:01
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231992	11/09/16 13:58	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 21:56	HJM	TAL SEA

Client Sample ID: 2411 P100 0-2" DUP
Lab Sample ID: 580-63706-110
Date Collected: 10/09/16 14:01
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231992	11/09/16 13:58	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 22:00	HJM	TAL SEA

Client Sample ID: 2411 P101 0-2"
Lab Sample ID: 580-63706-111
Date Collected: 10/09/16 14:08
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231992	11/09/16 13:58	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 22:04	HJM	TAL SEA

Client Sample ID: 2411 P101 0-2" DUP
Lab Sample ID: 580-63706-112
Date Collected: 10/09/16 14:08
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231992	11/09/16 13:58	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 22:08	HJM	TAL SEA

Client Sample ID: 3509 P100 0-2"
Lab Sample ID: 580-63706-113
Date Collected: 10/09/16 15:07
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231992	11/09/16 13:58	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 22:11	HJM	TAL SEA

Client Sample ID: 3509 P100 0-2" DUP
Lab Sample ID: 580-63706-114
Date Collected: 10/09/16 15:07
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231992	11/09/16 13:58	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 22:15	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3509 P101 0-2"

Lab Sample ID: 580-63706-115
Date Collected: 10/09/16 15:12
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231992	11/09/16 13:58	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 22:19	HJM	TAL SEA

Client Sample ID: 3509 P101 0-2" DUP

Lab Sample ID: 580-63706-116
Date Collected: 10/09/16 15:12
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232014	11/09/16 15:29	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/11/16 00:00	HJM	TAL SEA

Client Sample ID: 3511 P100 0-2"

Lab Sample ID: 580-63706-117
Date Collected: 10/09/16 15:41
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232014	11/09/16 15:29	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/11/16 00:27	HJM	TAL SEA

Client Sample ID: 3511 P100 0-2" DUP

Lab Sample ID: 580-63706-118
Date Collected: 10/09/16 15:41
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232014	11/09/16 15:29	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/11/16 00:31	HJM	TAL SEA

Client Sample ID: 3511 P101 0-2"

Lab Sample ID: 580-63706-119
Date Collected: 10/09/16 15:50
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232014	11/09/16 15:29	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/11/16 00:35	HJM	TAL SEA

Client Sample ID: 3511 P101 0-2" DUP

Lab Sample ID: 580-63706-120
Date Collected: 10/09/16 15:50
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232014	11/09/16 15:29	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/11/16 00:38	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5340 P100 0-2"

Lab Sample ID: 580-63706-121
Date Collected: 10/12/16 14:45
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232014	11/09/16 15:29	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/11/16 00:42	HJM	TAL SEA

Client Sample ID: 5340 P100 0-2" DUP

Lab Sample ID: 580-63706-122
Date Collected: 10/12/16 14:45
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232014	11/09/16 15:29	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/11/16 00:46	HJM	TAL SEA

Client Sample ID: 5340 P101 0-2"

Lab Sample ID: 580-63706-123
Date Collected: 10/12/16 14:52
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232014	11/09/16 15:29	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/11/16 00:50	HJM	TAL SEA

Client Sample ID: 5340 P101 0-2" DUP

Lab Sample ID: 580-63706-124
Date Collected: 10/12/16 14:52
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231964	11/09/16 12:10	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 15:44	HJM	TAL SEA

Client Sample ID: 5350 P100 0-2"

Lab Sample ID: 580-63706-125
Date Collected: 10/12/16 15:15
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231964	11/09/16 12:10	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 15:48	HJM	TAL SEA

Client Sample ID: 5350 P100 0-2" DUP

Lab Sample ID: 580-63706-126
Date Collected: 10/12/16 15:15
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231964	11/09/16 12:10	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 15:51	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5350 P101 0-2"

Lab Sample ID: 580-63706-127
Date Collected: 10/12/16 15:23
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231964	11/09/16 12:10	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 15:55	HJM	TAL SEA

Client Sample ID: 5350 P101 0-2" DUP

Lab Sample ID: 580-63706-128
Date Collected: 10/12/16 15:23
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231964	11/09/16 12:10	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 15:59	HJM	TAL SEA

Client Sample ID: 200 P100 0-2"

Lab Sample ID: 580-63706-129
Date Collected: 10/12/16 15:43
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231964	11/09/16 12:10	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 16:02	HJM	TAL SEA

Client Sample ID: 200 P100 0-2" DUP

Lab Sample ID: 580-63706-130
Date Collected: 10/12/16 15:43
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231964	11/09/16 12:10	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 16:06	HJM	TAL SEA

Client Sample ID: 200 P101 0-2"

Lab Sample ID: 580-63706-131
Date Collected: 10/12/16 15:51
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231964	11/09/16 12:10	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 16:10	HJM	TAL SEA

Client Sample ID: 200 P101 0-2" DUP

Lab Sample ID: 580-63706-132
Date Collected: 10/12/16 15:51
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231964	11/09/16 12:10	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 16:20	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3506 P100 0-2"

Lab Sample ID: 580-63706-133
Date Collected: 10/12/16 16:31
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231964	11/09/16 12:10	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 16:24	HJM	TAL SEA

Client Sample ID: 3506 P100 0-2" DUP

Lab Sample ID: 580-63706-134
Date Collected: 10/12/16 16:31
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231964	11/09/16 12:10	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 16:27	HJM	TAL SEA

Client Sample ID: 3506 P101 0-2"

Lab Sample ID: 580-63706-135
Date Collected: 10/12/16 16:40
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231964	11/09/16 12:10	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 16:31	HJM	TAL SEA

Client Sample ID: 3506 P101 0-2" DUP

Lab Sample ID: 580-63706-136
Date Collected: 10/12/16 16:40
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231964	11/09/16 12:10	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 16:35	HJM	TAL SEA

Client Sample ID: 503 P100 0-2"

Lab Sample ID: 580-63706-137
Date Collected: 10/14/16 08:46
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231964	11/09/16 12:10	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 16:39	HJM	TAL SEA

Client Sample ID: 503 P100 0-2" DUP

Lab Sample ID: 580-63706-138
Date Collected: 10/14/16 08:46
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231964	11/09/16 12:10	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 16:42	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 503 P101 0-2"

Lab Sample ID: 580-63706-139
Date Collected: 10/14/16 08:51
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231964	11/09/16 12:10	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 16:46	HJM	TAL SEA

Client Sample ID: 503 P101 0-2" DUP

Lab Sample ID: 580-63706-140
Date Collected: 10/14/16 08:51
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231882	11/08/16 14:24	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232116	11/10/16 11:01	HJM	TAL SEA

Client Sample ID: 9149 P100 0-2"

Lab Sample ID: 580-63706-141
Date Collected: 10/15/16 08:05
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231882	11/08/16 14:24	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232116	11/10/16 11:04	HJM	TAL SEA

Client Sample ID: 9149 P100 0-2" DUP

Lab Sample ID: 580-63706-142
Date Collected: 10/15/16 08:05
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231882	11/08/16 14:24	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232116	11/10/16 10:02	HJM	TAL SEA

Client Sample ID: 9149 P101 0-2"

Lab Sample ID: 580-63706-143
Date Collected: 10/15/16 08:12
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231882	11/08/16 14:24	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232116	11/10/16 10:05	HJM	TAL SEA

Client Sample ID: 9149 P101 0-2" DUP

Lab Sample ID: 580-63706-144
Date Collected: 10/15/16 08:12
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231882	11/08/16 14:24	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232116	11/10/16 10:09	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 9149 P102 0-2"
Lab Sample ID: 580-63706-145
Date Collected: 10/15/16 08:21
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231882	11/08/16 14:24	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232116	11/10/16 10:13	HJM	TAL SEA

Client Sample ID: 9149 P102 0-2" DUP
Lab Sample ID: 580-63706-146
Date Collected: 10/15/16 08:21
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231882	11/08/16 14:24	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232116	11/10/16 10:16	HJM	TAL SEA

Client Sample ID: 4214 P100 0-2"
Lab Sample ID: 580-63706-147
Date Collected: 10/15/16 15:10
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231882	11/08/16 14:24	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232116	11/10/16 10:20	HJM	TAL SEA

Client Sample ID: 4214 P100 0-2" DUP
Lab Sample ID: 580-63706-148
Date Collected: 10/15/16 15:10
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231882	11/08/16 14:24	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232116	11/10/16 10:24	HJM	TAL SEA

Client Sample ID: 4214 P1 0-6"
Lab Sample ID: 580-63706-149
Date Collected: 10/15/16 15:17
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231882	11/08/16 14:24	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232116	11/10/16 10:27	HJM	TAL SEA

Client Sample ID: 4214 P2 0-6"
Lab Sample ID: 580-63706-150
Date Collected: 10/15/16 15:26
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232153	11/10/16 17:09	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 18:22	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S29 P1 0-6"

Lab Sample ID: 580-63706-151
Date Collected: 10/16/16 07:25
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232136	11/10/16 15:30	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 17:45	HJM	TAL SEA

Client Sample ID: S29 P2 0-6"

Lab Sample ID: 580-63706-152
Date Collected: 10/16/16 07:36
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232136	11/10/16 15:30	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 22:29	HJM	TAL SEA

Client Sample ID: S29 P3 0-6"

Lab Sample ID: 580-63706-153
Date Collected: 10/16/16 07:44
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232136	11/10/16 15:30	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 22:33	HJM	TAL SEA

Client Sample ID: S29 P4 0-6"

Lab Sample ID: 580-63706-154
Date Collected: 10/16/16 07:54
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232136	11/10/16 15:30	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 22:46	HJM	TAL SEA

Client Sample ID: S29 P5 0-6"

Lab Sample ID: 580-63706-155
Date Collected: 10/16/16 08:01
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232136	11/10/16 15:30	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 22:50	HJM	TAL SEA

Client Sample ID: S29 P6 0-6"

Lab Sample ID: 580-63706-156
Date Collected: 10/16/16 08:11
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232153	11/10/16 17:09	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 23:49	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S29 P7 0-6"
Lab Sample ID: 580-63706-157
Date Collected: 10/16/16 08:20
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232153	11/10/16 17:09	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 23:52	HJM	TAL SEA

Client Sample ID: S29 P8 0-6"
Lab Sample ID: 580-63706-158
Date Collected: 10/16/16 08:28
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232153	11/10/16 17:09	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 23:56	HJM	TAL SEA

Client Sample ID: S29 P8 0-6" DUP
Lab Sample ID: 580-63706-159
Date Collected: 10/16/16 08:28
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232153	11/10/16 17:09	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/12/16 00:00	HJM	TAL SEA

Client Sample ID: S29 P9 0-6"
Lab Sample ID: 580-63706-160
Date Collected: 10/16/16 08:45
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232153	11/10/16 17:09	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/12/16 00:03	HJM	TAL SEA

Client Sample ID: PIPE P1 0-6"
Lab Sample ID: 580-63706-161
Date Collected: 10/16/16 10:15
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232153	11/10/16 17:09	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/12/16 00:07	HJM	TAL SEA

Client Sample ID: PIPE P2 0-6"
Lab Sample ID: 580-63706-162
Date Collected: 10/16/16 10:21
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232153	11/10/16 17:09	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/12/16 00:21	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P3 0-6"
Lab Sample ID: 580-63706-163
Date Collected: 10/16/16 10:30
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232153	11/10/16 17:09	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/12/16 00:24	HJM	TAL SEA

Client Sample ID: PIPE P4 0-6"
Lab Sample ID: 580-63706-164
Date Collected: 10/16/16 10:45
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231978	11/09/16 13:03	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 19:28	HJM	TAL SEA

Client Sample ID: PIPE P5 0-6"
Lab Sample ID: 580-63706-165
Date Collected: 10/16/16 10:56
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231978	11/09/16 13:03	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 19:32	HJM	TAL SEA

Client Sample ID: PIPE P6 0-6"
Lab Sample ID: 580-63706-166
Date Collected: 10/16/16 11:05
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231978	11/09/16 13:03	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 19:35	HJM	TAL SEA

Client Sample ID: PIPE P7 0-6"
Lab Sample ID: 580-63706-167
Date Collected: 10/16/16 11:15
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231978	11/09/16 13:03	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 19:39	HJM	TAL SEA

Client Sample ID: PIPE P8 0-6"
Lab Sample ID: 580-63706-168
Date Collected: 10/16/16 11:22
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231978	11/09/16 13:03	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 19:43	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P9 0-6"
Lab Sample ID: 580-63706-169
Date Collected: 10/16/16 11:31
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231978	11/09/16 13:03	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 19:46	HJM	TAL SEA

Client Sample ID: PIPE P10 0-6"
Lab Sample ID: 580-63706-170
Date Collected: 10/16/16 11:42
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231978	11/09/16 13:03	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 19:50	HJM	TAL SEA

Client Sample ID: PIPE P11 0-6"
Lab Sample ID: 580-63706-171
Date Collected: 10/16/16 11:51
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231978	11/09/16 13:03	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 19:54	HJM	TAL SEA

Client Sample ID: PIPE P12 0-6"
Lab Sample ID: 580-63706-172
Date Collected: 10/16/16 11:59
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231978	11/09/16 13:03	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 20:04	HJM	TAL SEA

Client Sample ID: PIPE P13 0-6"
Lab Sample ID: 580-63706-173
Date Collected: 10/16/16 12:11
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231978	11/09/16 13:03	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 20:08	HJM	TAL SEA

Client Sample ID: PIPE P14 0-6"
Lab Sample ID: 580-63706-174
Date Collected: 10/16/16 12:20
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231978	11/09/16 13:03	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 20:11	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P15 0-6"

Lab Sample ID: 580-63706-175
Date Collected: 10/16/16 12:29
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231978	11/09/16 13:03	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 20:15	HJM	TAL SEA

Client Sample ID: PIPE P16 0-6"

Lab Sample ID: 580-63706-176
Date Collected: 10/16/16 12:36
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231978	11/09/16 13:03	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 20:19	HJM	TAL SEA

Client Sample ID: PIPE P17 0-6"

Lab Sample ID: 580-63706-177
Date Collected: 10/16/16 12:44
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231978	11/09/16 13:03	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 20:22	HJM	TAL SEA

Client Sample ID: PIPE P18 0-6"

Lab Sample ID: 580-63706-178
Date Collected: 10/16/16 12:53
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231978	11/09/16 13:03	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 20:26	HJM	TAL SEA

Client Sample ID: PIPE P19 0-6"

Lab Sample ID: 580-63706-179
Date Collected: 10/16/16 13:06
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			231978	11/09/16 13:03	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/10/16 20:30	HJM	TAL SEA

Client Sample ID: PIPE P20 0-6"

Lab Sample ID: 580-63706-180
Date Collected: 10/16/16 13:15
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232136	11/10/16 15:30	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 22:54	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: PIPE P21 0-6"

Lab Sample ID: 580-63706-181
Date Collected: 10/16/16 13:24
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232136	11/10/16 15:30	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 22:58	HJM	TAL SEA

Client Sample ID: PIPE P22 0-6"

Lab Sample ID: 580-63706-182
Date Collected: 10/16/16 13:37
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232136	11/10/16 15:30	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 23:02	HJM	TAL SEA

Client Sample ID: PIPE P23 0-6"

Lab Sample ID: 580-63706-183
Date Collected: 10/16/16 13:45
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232136	11/10/16 15:30	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 23:05	HJM	TAL SEA

Client Sample ID: PIPE P24 0-6"

Lab Sample ID: 580-63706-184
Date Collected: 10/16/16 13:53
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232136	11/10/16 15:30	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 23:09	HJM	TAL SEA

Client Sample ID: PIPE P24 0-6" DUP

Lab Sample ID: 580-63706-185
Date Collected: 10/16/16 13:53
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232136	11/10/16 15:30	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 23:13	HJM	TAL SEA

Client Sample ID: Bollard P1 MID 0-6"

Lab Sample ID: 580-63706-186
Date Collected: 10/16/16 14:15
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232136	11/10/16 15:30	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 23:17	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: Bollard P2 NEAR 0-6"

Lab Sample ID: 580-63706-187
Date Collected: 10/16/16 14:21
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232136	11/10/16 15:30	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 23:20	HJM	TAL SEA

Client Sample ID: 3127W P7 0-6"

Lab Sample ID: 580-63706-188
Date Collected: 10/16/16 15:40
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232136	11/10/16 15:30	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 23:34	HJM	TAL SEA

Client Sample ID: 3127W P7 12-18"

Lab Sample ID: 580-63706-189
Date Collected: 10/16/16 15:40
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232136	11/10/16 15:30	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 23:37	HJM	TAL SEA

Client Sample ID: 3127W P7 24-30"

Lab Sample ID: 580-63706-190
Date Collected: 10/16/16 15:40
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232136	11/10/16 15:30	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 23:41	HJM	TAL SEA

Client Sample ID: 3127W P8 0-6"

Lab Sample ID: 580-63706-191
Date Collected: 10/16/16 16:17
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232136	11/10/16 15:30	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 23:45	HJM	TAL SEA

Client Sample ID: 3127W P8 12-18"

Lab Sample ID: 580-63706-192
Date Collected: 10/16/16 16:17
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232129	11/10/16 14:48	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 17:08	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3127W P8 24-30"
Lab Sample ID: 580-63706-193
Date Collected: 10/16/16 16:17
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232129	11/10/16 14:48	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 21:20	HJM	TAL SEA

Client Sample ID: 340 P100 0-2"
Lab Sample ID: 580-63706-194
Date Collected: 10/17/16 10:40
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232129	11/10/16 14:48	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 21:24	HJM	TAL SEA

Client Sample ID: 340 P100 0-2" DUP
Lab Sample ID: 580-63706-195
Date Collected: 10/17/16 10:40
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232129	11/10/16 14:48	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 21:28	HJM	TAL SEA

Client Sample ID: 340 P101 0-2"
Lab Sample ID: 580-63706-196
Date Collected: 10/17/16 10:45
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232129	11/10/16 14:48	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 21:31	HJM	TAL SEA

Client Sample ID: 340 P101 0-2" DUP
Lab Sample ID: 580-63706-197
Date Collected: 10/17/16 10:45
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232129	11/10/16 14:48	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 21:35	HJM	TAL SEA

Client Sample ID: 5301 P100 0-2"
Lab Sample ID: 580-63706-198
Date Collected: 10/17/16 13:50
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232129	11/10/16 14:48	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 21:39	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5301 P100 0-2" DUP — Lab Sample ID: 580-63706-199

Date Collected: 10/17/16 13:50 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232129	11/10/16 14:48	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 21:42	HJM	TAL SEA

Client Sample ID: 5301 P101 0-2" — Lab Sample ID: 580-63706-200

Date Collected: 10/17/16 14:01 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232129	11/10/16 14:48	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 21:46	HJM	TAL SEA

Client Sample ID: 5301 P101 0-2" DUP — Lab Sample ID: 580-63706-201

Date Collected: 10/17/16 14:01 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232129	11/10/16 14:48	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 22:00	HJM	TAL SEA

Client Sample ID: 5301 P102 0-2" — Lab Sample ID: 580-63706-202

Date Collected: 10/17/16 14:09 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232129	11/10/16 14:48	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 22:03	HJM	TAL SEA

Client Sample ID: 5301 P102 0-2" DUP — Lab Sample ID: 580-63706-203

Date Collected: 10/17/16 14:09 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232129	11/10/16 14:48	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 22:07	HJM	TAL SEA

Client Sample ID: 5301 P103 0-2" — Lab Sample ID: 580-63706-204

Date Collected: 10/17/16 14:16 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232129	11/10/16 14:48	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 22:11	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5301 P103 0-2" DUP — Lab Sample ID: 580-63706-205

Date Collected: 10/17/16 14:16 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232129	11/10/16 14:48	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 22:14	HJM	TAL SEA

Client Sample ID: 4213 P1 0-6" — Lab Sample ID: 580-63706-206

Date Collected: 10/19/16 13:30 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232129	11/10/16 14:48	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 22:18	HJM	TAL SEA

Client Sample ID: 4213 P1 12-18" — Lab Sample ID: 580-63706-207

Date Collected: 10/19/16 13:30 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232153	11/10/16 17:09	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/12/16 00:28	HJM	TAL SEA

Client Sample ID: 4213 P1 24-30" — Lab Sample ID: 580-63706-208

Date Collected: 10/19/16 13:00 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232153	11/10/16 17:09	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/12/16 00:32	HJM	TAL SEA

Client Sample ID: 4213 P2 0-6" — Lab Sample ID: 580-63706-209

Date Collected: 10/19/16 14:20 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232153	11/10/16 17:09	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/12/16 00:35	HJM	TAL SEA

Client Sample ID: 4213 P2 12-18" — Lab Sample ID: 580-63706-210

Date Collected: 10/19/16 14:20 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232129	11/10/16 14:48	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 22:22	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4213 P2 24-30"
Lab Sample ID: 580-63706-211
Date Collected: 10/19/16 14:20
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232129	11/10/16 14:48	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 22:25	HJM	TAL SEA

Client Sample ID: 4213 P3 0-6"
Lab Sample ID: 580-63706-212
Date Collected: 10/19/16 14:50
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232117	11/10/16 13:44	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 21:16	HJM	TAL SEA

Client Sample ID: 4213 P3 12-18"
Lab Sample ID: 580-63706-213
Date Collected: 10/19/16 14:50
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232117	11/10/16 13:44	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232294	11/11/16 15:44	HJM	TAL SEA

Client Sample ID: 4213 P3 24-30"
Lab Sample ID: 580-63706-214
Date Collected: 10/19/16 14:50
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232117	11/10/16 13:44	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 20:01	HJM	TAL SEA

Client Sample ID: 4213 P3 0-6" DUP
Lab Sample ID: 580-63706-215
Date Collected: 10/19/16 14:50
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232117	11/10/16 13:44	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 20:05	HJM	TAL SEA

Client Sample ID: 4213 P3 12-18" DUP
Lab Sample ID: 580-63706-216
Date Collected: 10/19/16 14:50
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232117	11/10/16 13:44	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 20:08	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4213 P3 24-30" DUP — Lab Sample ID: 580-63706-217

Date Collected: 10/19/16 14:50 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232117	11/10/16 13:44	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 20:12	HJM	TAL SEA

Client Sample ID: 4213 P4 0-6" — Lab Sample ID: 580-63706-218

Date Collected: 10/19/16 15:40 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232117	11/10/16 13:44	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 20:26	HJM	TAL SEA

Client Sample ID: 4213 P4 12-18" — Lab Sample ID: 580-63706-219

Date Collected: 10/19/16 15:40 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232117	11/10/16 13:44	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 20:29	HJM	TAL SEA

Client Sample ID: 4213 P4 24-30" — Lab Sample ID: 580-63706-220

Date Collected: 10/19/16 15:40 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232117	11/10/16 13:44	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 20:33	HJM	TAL SEA

Client Sample ID: 4213 P5 0-6" — Lab Sample ID: 580-63706-221

Date Collected: 10/19/16 16:15 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232117	11/10/16 13:44	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 20:37	HJM	TAL SEA

Client Sample ID: 4213 P5 12-18" — Lab Sample ID: 580-63706-222

Date Collected: 10/19/16 16:15 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232117	11/10/16 13:44	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 20:40	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4213 P5 24-30"
Lab Sample ID: 580-63706-223
Date Collected: 10/19/16 16:15
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232117	11/10/16 13:44	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 20:44	HJM	TAL SEA

Client Sample ID: 4213 P6 0-6"
Lab Sample ID: 580-63706-224
Date Collected: 10/19/16 16:55
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232117	11/10/16 13:44	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 20:48	HJM	TAL SEA

Client Sample ID: 4213 P6 12-18"
Lab Sample ID: 580-63706-225
Date Collected: 10/19/16 16:55
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232117	11/10/16 13:44	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 20:51	HJM	TAL SEA

Client Sample ID: 4213 P6 24-30"
Lab Sample ID: 580-63706-226
Date Collected: 10/19/16 16:55
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232117	11/10/16 13:44	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 20:55	HJM	TAL SEA

Client Sample ID: 4205 P1 0-6"
Lab Sample ID: 580-63706-227
Date Collected: 10/20/16 14:50
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232117	11/10/16 13:44	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 20:59	HJM	TAL SEA

Client Sample ID: 4205 P1 12-18"
Lab Sample ID: 580-63706-228
Date Collected: 10/20/16 14:50
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232117	11/10/16 13:44	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 21:12	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4205 P1 24-30"

Lab Sample ID: 580-63706-229
Date Collected: 10/20/16 14:50
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232102	11/10/16 12:49	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232294	11/11/16 15:07	HJM	TAL SEA

Client Sample ID: 4205 P1 30-36"

Lab Sample ID: 580-63706-230
Date Collected: 10/20/16 14:50
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232102	11/10/16 12:49	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 18:53	HJM	TAL SEA

Client Sample ID: 4205 P2 0-6"

Lab Sample ID: 580-63706-231
Date Collected: 10/20/16 15:31
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232102	11/10/16 12:49	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 18:56	HJM	TAL SEA

Client Sample ID: 4205 P2 12-18"

Lab Sample ID: 580-63706-232
Date Collected: 10/20/16 15:31
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232102	11/10/16 12:49	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 19:00	HJM	TAL SEA

Client Sample ID: 4205 P2 24-30"

Lab Sample ID: 580-63706-233
Date Collected: 10/20/16 15:31
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232102	11/10/16 12:49	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 19:04	HJM	TAL SEA

Client Sample ID: 4205 P3 0-6"

Lab Sample ID: 580-63706-234
Date Collected: 10/20/16 16:15
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232102	11/10/16 12:49	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 19:07	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4205 P3 12-18"
Lab Sample ID: 580-63706-235
Date Collected: 10/20/16 16:15
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232102	11/10/16 12:49	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 19:11	HJM	TAL SEA

Client Sample ID: 4205 P3 24-30"
Lab Sample ID: 580-63706-236
Date Collected: 10/20/16 16:15
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232102	11/10/16 12:49	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 19:15	HJM	TAL SEA

Client Sample ID: 4205 P4 0-6"
Lab Sample ID: 580-63706-237
Date Collected: 10/20/16 16:44
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232102	11/10/16 12:49	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 19:18	HJM	TAL SEA

Client Sample ID: 4205 P4 12-18"
Lab Sample ID: 580-63706-238
Date Collected: 10/20/16 16:44
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232102	11/10/16 12:49	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 19:22	HJM	TAL SEA

Client Sample ID: 4205 P4 24-30"
Lab Sample ID: 580-63706-239
Date Collected: 10/20/16 16:44
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232102	11/10/16 12:49	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 19:26	HJM	TAL SEA

Client Sample ID: 4206 P1 0-6"
Lab Sample ID: 580-63706-240
Date Collected: 10/21/16 11:06
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232102	11/10/16 12:49	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 19:39	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4206 P1 12-18"
Lab Sample ID: 580-63706-241
Date Collected: 10/21/16 11:06
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232102	11/10/16 12:49	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 19:43	HJM	TAL SEA

Client Sample ID: 4206 P1 24-30"
Lab Sample ID: 580-63706-242
Date Collected: 10/21/16 11:06
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232102	11/10/16 12:49	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 19:46	HJM	TAL SEA

Client Sample ID: 4206 P2 0-6"
Lab Sample ID: 580-63706-243
Date Collected: 10/21/16 12:25
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232102	11/10/16 12:49	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 19:50	HJM	TAL SEA

Client Sample ID: 4206 P2 12-18"
Lab Sample ID: 580-63706-244
Date Collected: 10/21/16 12:25
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232102	11/10/16 12:49	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 19:54	HJM	TAL SEA

Client Sample ID: 4206 P2 24-30"
Lab Sample ID: 580-63706-245
Date Collected: 10/21/16 12:25
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232102	11/10/16 12:49	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/11/16 19:57	HJM	TAL SEA

Client Sample ID: 4206 P3 0-6"
Lab Sample ID: 580-63706-246
Date Collected: 10/21/16 13:10
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232180	11/11/16 10:02	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 11:54	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4206 P3 12-18"
Lab Sample ID: 580-63706-247
Date Collected: 10/21/16 13:10
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232180	11/11/16 10:02	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 14:45	HJM	TAL SEA

Client Sample ID: 4206 P3 24-30"
Lab Sample ID: 580-63706-248
Date Collected: 10/21/16 13:10
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232180	11/11/16 10:02	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 14:48	HJM	TAL SEA

Client Sample ID: 4206 P4 0-6"
Lab Sample ID: 580-63706-249
Date Collected: 10/21/16 13:56
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232180	11/11/16 10:02	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 14:52	HJM	TAL SEA

Client Sample ID: 4206 P4 12-18"
Lab Sample ID: 580-63706-250
Date Collected: 10/21/16 13:56
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232180	11/11/16 10:02	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 14:56	HJM	TAL SEA

Client Sample ID: 4206 P4 24-30"
Lab Sample ID: 580-63706-251
Date Collected: 10/21/16 13:56
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232180	11/11/16 10:02	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 14:59	HJM	TAL SEA

Client Sample ID: 4207 P1 0-6"
Lab Sample ID: 580-63706-252
Date Collected: 10/21/16 14:49
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232180	11/11/16 10:02	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 15:03	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4207 P1 12-18"

Lab Sample ID: 580-63706-253
Date Collected: 10/21/16 14:49
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232180	11/11/16 10:02	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 15:07	HJM	TAL SEA

Client Sample ID: 4207 P1 24-30"

Lab Sample ID: 580-63706-254
Date Collected: 10/21/16 14:49
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232180	11/11/16 10:02	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 15:24	HJM	TAL SEA

Client Sample ID: 4207 P2 0-6"

Lab Sample ID: 580-63706-255
Date Collected: 10/22/16 08:56
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232180	11/11/16 10:02	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 15:27	HJM	TAL SEA

Client Sample ID: 4207 P2 12-18"

Lab Sample ID: 580-63706-256
Date Collected: 10/22/16 08:56
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232180	11/11/16 10:02	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 15:31	HJM	TAL SEA

Client Sample ID: 4207 P2 24-30"

Lab Sample ID: 580-63706-257
Date Collected: 10/22/16 08:56
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232180	11/11/16 10:02	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 15:35	HJM	TAL SEA

Client Sample ID: 4207 P3 0-6"

Lab Sample ID: 580-63706-258
Date Collected: 10/22/16 10:11
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232180	11/11/16 10:02	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 15:38	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4207 P3 12-18"

Lab Sample ID: 580-63706-259
Date Collected: 10/22/16 10:11
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232180	11/11/16 10:02	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 15:42	HJM	TAL SEA

Client Sample ID: 4207 P3 24-30"

Lab Sample ID: 580-63706-260
Date Collected: 10/22/16 10:11
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232180	11/11/16 10:02	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 15:45	HJM	TAL SEA

Client Sample ID: 4207 P3 0-6" DUP

Lab Sample ID: 580-63706-261
Date Collected: 10/22/16 10:11
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232180	11/11/16 10:02	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 15:49	HJM	TAL SEA

Client Sample ID: 4207 P3 12-18" DUP

Lab Sample ID: 580-63706-262
Date Collected: 10/22/16 10:11
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232180	11/11/16 10:02	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 15:53	HJM	TAL SEA

Client Sample ID: 4207 P3 24-30" DUP

Lab Sample ID: 580-63706-263
Date Collected: 10/22/16 10:11
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232173	11/11/16 08:49	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 11:17	HJM	TAL SEA

Client Sample ID: 4207 P4 0-6"

Lab Sample ID: 580-63706-264
Date Collected: 10/22/16 10:42
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232173	11/11/16 08:49	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 13:29	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 4207 P4 12-18"

Lab Sample ID: 580-63706-265
Date Collected: 10/22/16 10:42
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232173	11/11/16 08:49	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 13:33	HJM	TAL SEA

Client Sample ID: 4207 P4 24-30"

Lab Sample ID: 580-63706-266
Date Collected: 10/22/16 10:42
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232173	11/11/16 08:49	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 13:36	HJM	TAL SEA

Client Sample ID: 5303 NW A 0-2"

Lab Sample ID: 580-63706-267
Date Collected: 10/21/16 15:59
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232173	11/11/16 08:49	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 13:40	HJM	TAL SEA

Client Sample ID: 5303 NW A 0-2" DUP

Lab Sample ID: 580-63706-268
Date Collected: 10/21/16 15:59
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232173	11/11/16 08:49	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 13:53	HJM	TAL SEA

Client Sample ID: 5303 NW B 0-2"

Lab Sample ID: 580-63706-269
Date Collected: 10/21/16 16:11
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232173	11/11/16 08:49	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 13:57	HJM	TAL SEA

Client Sample ID: 5303 NW B 0-2" DUP

Lab Sample ID: 580-63706-270
Date Collected: 10/21/16 16:11
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232180	11/11/16 10:11	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 15:56	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5303 NW C 0-2"

Lab Sample ID: 580-63706-271
Date Collected: 10/21/16 16:20
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232173	11/11/16 08:49	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 14:00	HJM	TAL SEA

Client Sample ID: 5303 NW C 0-2" DUP

Lab Sample ID: 580-63706-272
Date Collected: 10/21/16 16:20
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232173	11/11/16 08:49	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 14:04	HJM	TAL SEA

Client Sample ID: 5303 NW D 0-2"

Lab Sample ID: 580-63706-273
Date Collected: 10/21/16 16:30
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232173	11/11/16 08:49	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 14:08	HJM	TAL SEA

Client Sample ID: 5303 NW D 0-2" DUP

Lab Sample ID: 580-63706-274
Date Collected: 10/21/16 16:30
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232173	11/11/16 08:49	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 14:12	HJM	TAL SEA

Client Sample ID: 5303 E A 0-2"

Lab Sample ID: 580-63706-275
Date Collected: 10/22/16 07:49
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232173	11/11/16 08:49	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 14:17	HJM	TAL SEA

Client Sample ID: 5303 E A 0-2" DUP

Lab Sample ID: 580-63706-276
Date Collected: 10/22/16 07:49
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232173	11/11/16 08:49	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 14:20	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5303 E B 0-2"

Lab Sample ID: 580-63706-277
Date Collected: 10/22/16 07:56
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232173	11/11/16 08:49	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 14:24	HJM	TAL SEA

Client Sample ID: 5303 E B 0-2" DUP

Lab Sample ID: 580-63706-278
Date Collected: 10/22/16 07:56
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232173	11/11/16 08:49	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 14:28	HJM	TAL SEA

Client Sample ID: 5303 E C 0-2"

Lab Sample ID: 580-63706-279
Date Collected: 10/22/16 08:01
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232157	11/10/16 19:26	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 10:41	HJM	TAL SEA

Client Sample ID: 5303 E C 0-2" DUP

Lab Sample ID: 580-63706-280
Date Collected: 10/22/16 08:01
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232157	11/10/16 19:26	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 12:24	HJM	TAL SEA

Client Sample ID: 5303 E D 0-2"

Lab Sample ID: 580-63706-281
Date Collected: 10/22/16 08:10
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232173	11/11/16 08:49	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 14:37	HJM	TAL SEA

Client Sample ID: 5303 E D 0-2" DUP

Lab Sample ID: 580-63706-282
Date Collected: 10/22/16 08:10
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232173	11/11/16 08:49	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 14:41	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S28 P12 0-6"
Lab Sample ID: 580-63706-283
Date Collected: 10/22/16 14:50
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232157	11/10/16 19:26	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 12:28	HJM	TAL SEA

Client Sample ID: S28 P13 0-6"
Lab Sample ID: 580-63706-284
Date Collected: 10/22/16 15:25
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232157	11/10/16 19:26	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 12:32	HJM	TAL SEA

Client Sample ID: S28 P14 0-6"
Lab Sample ID: 580-63706-285
Date Collected: 10/22/16 15:31
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232157	11/10/16 19:26	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 12:35	HJM	TAL SEA

Client Sample ID: S30 P11 0-6"
Lab Sample ID: 580-63706-286
Date Collected: 10/22/16 15:50
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232157	11/10/16 19:26	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 12:39	HJM	TAL SEA

Client Sample ID: S30 P12 0-6"
Lab Sample ID: 580-63706-287
Date Collected: 10/22/16 15:58
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232157	11/10/16 19:26	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 12:43	HJM	TAL SEA

Client Sample ID: S30 P13 0-6"
Lab Sample ID: 580-63706-288
Date Collected: 10/22/16 16:05
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232157	11/10/16 19:26	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 12:46	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: S30 P14 0-6"
Lab Sample ID: 580-63706-289
Date Collected: 10/23/16 08:10
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232157	11/10/16 19:26	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 12:50	HJM	TAL SEA

Client Sample ID: S30 P15 0-6"
Lab Sample ID: 580-63706-290
Date Collected: 10/23/16 08:15
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232157	11/10/16 19:26	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 12:53	HJM	TAL SEA

Client Sample ID: S30 P16 0-6"
Lab Sample ID: 580-63706-291
Date Collected: 10/23/16 08:19
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232153	11/10/16 17:09	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/12/16 00:39	HJM	TAL SEA

Client Sample ID: 5304 WT P1 0-6"
Lab Sample ID: 580-63706-292
Date Collected: 10/23/16 11:46
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232153	11/10/16 17:09	PAB	TAL SEA
Total/NA	Analysis	6010C		10	232365	11/14/16 15:10	HJM	TAL SEA

Client Sample ID: 5304 WT P1 12-18"
Lab Sample ID: 580-63706-293
Date Collected: 10/23/16 11:46
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232153	11/10/16 17:09	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/12/16 00:46	HJM	TAL SEA

Client Sample ID: 5304 WT P1 24-30"
Lab Sample ID: 580-63706-294
Date Collected: 10/23/16 11:46
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232153	11/10/16 17:09	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/12/16 00:50	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 5304 WT P2 0-6"

Lab Sample ID: 580-63706-295
Date Collected: 10/23/16 12:31
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232153	11/10/16 17:09	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232283	11/12/16 00:54	HJM	TAL SEA

Client Sample ID: 5304 WT P2 12-18"

Lab Sample ID: 580-63706-296
Date Collected: 10/23/16 12:31
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232157	11/10/16 19:26	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 12:57	HJM	TAL SEA

Client Sample ID: 5304 WT P2 24-30"

Lab Sample ID: 580-63706-297
Date Collected: 10/23/16 12:31
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232157	11/10/16 19:26	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 13:07	HJM	TAL SEA

Client Sample ID: 5305 WT P1 0-6"

Lab Sample ID: 580-63706-298
Date Collected: 10/23/16 13:36
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232157	11/10/16 19:26	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 13:11	HJM	TAL SEA

Client Sample ID: 5305 WT P1 12-18"

Lab Sample ID: 580-63706-299
Date Collected: 10/23/16 13:36
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232157	11/10/16 19:26	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 13:15	HJM	TAL SEA

Client Sample ID: 5305 WT P1 24-30"

Lab Sample ID: 580-63706-300
Date Collected: 10/23/16 13:36
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232157	11/10/16 19:26	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 13:18	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3126E P7 0-6"

Lab Sample ID: 580-63706-301
Date Collected: 10/23/16 10:01
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232157	11/10/16 19:26	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 13:22	HJM	TAL SEA

Client Sample ID: 3126E P7 12-18"

Lab Sample ID: 580-63706-302
Date Collected: 10/23/16 10:01
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232157	11/10/16 19:26	PAB	TAL SEA
Total/NA	Analysis	6010C		1	232365	11/14/16 13:26	HJM	TAL SEA

Client Sample ID: 3126E P7 24-30"

Lab Sample ID: 580-63706-303
Date Collected: 10/23/16 10:01
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232014	11/09/16 15:29	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/11/16 01:00	HJM	TAL SEA

Client Sample ID: 3126E P8 0-6"

Lab Sample ID: 580-63706-304
Date Collected: 10/23/16 10:17
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232014	11/09/16 15:29	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/11/16 01:04	HJM	TAL SEA

Client Sample ID: 3126E P8 12-18"

Lab Sample ID: 580-63706-305
Date Collected: 10/23/16 10:17
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232014	11/09/16 15:29	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/11/16 01:07	HJM	TAL SEA

Client Sample ID: 3126E P8 24-30"

Lab Sample ID: 580-63706-306
Date Collected: 10/23/16 10:17
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232014	11/09/16 15:29	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/11/16 01:11	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: 3126E P6 0-6"

Lab Sample ID: 580-63706-307
Date Collected: 10/23/16 10:32
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232014	11/09/16 15:29	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/11/16 01:14	HJM	TAL SEA

Client Sample ID: 3126E P6 12-18"

Lab Sample ID: 580-63706-308
Date Collected: 10/23/16 10:32
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232014	11/09/16 15:29	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/11/16 01:18	HJM	TAL SEA

Client Sample ID: 3126E P6 24-30"

Lab Sample ID: 580-63706-309
Date Collected: 10/23/16 10:32
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232014	11/09/16 15:29	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/11/16 01:22	HJM	TAL SEA

Client Sample ID: R2 Cell 3 0-6"

Lab Sample ID: 580-63706-310
Date Collected: 10/23/16 07:25
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232014	11/09/16 15:29	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/11/16 01:26	HJM	TAL SEA

Client Sample ID: R2 Cell 4 0-6"

Lab Sample ID: 580-63706-311
Date Collected: 10/23/16 07:39
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			232014	11/09/16 15:29	MKN	TAL SEA
Total/NA	Analysis	6010C		1	232158	11/11/16 01:29	HJM	TAL SEA

Client Sample ID: Equipment Rinsate

Lab Sample ID: 580-63706-312
Date Collected: 10/23/16 14:05
Matrix: Water
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			231681	11/05/16 12:05	PAB	TAL SEA
Total Recoverable	Analysis	6010C		1	231810	11/07/16 22:00	HJM	TAL SEA

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Client Sample ID: Trip Blank

Lab Sample ID: 580-63706-313

Date Collected: 10/23/16 00:00

Matrix: Water

Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			231681	11/05/16 12:05	PAB	TAL SEA
Total Recoverable	Analysis	6010C		1	231810	11/07/16 22:03	HJM	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-02-17
California	State Program	9	2901	01-31-18
L-A-B	DoD ELAP		L2236	01-19-19
L-A-B	ISO/IEC 17025		L2236	01-19-19
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-05-17
US Fish & Wildlife	Federal		LE058448-0	10-31-17
USDA	Federal		P330-14-00126	04-08-17
Washington	State Program	10	C553	02-17-17

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-63706-1	S1123 P100 0-2"	Solid	09/23/16 13:10	10/28/16 09:25
580-63706-2	S1123 P100 0-2" DUP	Solid	09/23/16 13:10	10/28/16 09:25
580-63706-3	S1123 P101 0-2"	Solid	09/23/16 13:15	10/28/16 09:25
580-63706-4	S1123 P101 0-2" DUP	Solid	09/23/16 13:15	10/28/16 09:25
580-63706-5	S1119 P100 0-2"	Solid	09/23/16 14:30	10/28/16 09:25
580-63706-6	S1119 P100 0-2" DUP	Solid	09/23/16 14:30	10/28/16 09:25
580-63706-7	S1119 P101 0-2"	Solid	09/23/16 14:36	10/28/16 09:25
580-63706-8	S1119 P101 0-2" DUP	Solid	09/23/16 14:36	10/28/16 09:25
580-63706-9	180 P100 0-2"	Solid	09/23/16 15:10	10/28/16 09:25
580-63706-10	180 P100 0-2" DUP	Solid	09/23/16 15:10	10/28/16 09:25
580-63706-11	180 P101 0-2"	Solid	09/23/16 15:17	10/28/16 09:25
580-63706-12	180 P101 0-2" DUP	Solid	09/23/16 15:17	10/28/16 09:25
580-63706-13	170 P100 0-2"	Solid	09/23/16 15:55	10/28/16 09:25
580-63706-14	170 P100 0-2" DUP	Solid	09/23/16 15:55	10/28/16 09:25
580-63706-15	170 P101 0-2"	Solid	09/23/16 16:01	10/28/16 09:25
580-63706-16	170 P101 0-2" DUP	Solid	09/23/16 16:01	10/28/16 09:25
580-63706-17	2127 P100 0-2"	Solid	10/04/16 14:04	10/28/16 09:25
580-63706-18	2127 P100 0-2" DUP	Solid	10/04/16 14:04	10/28/16 09:25
580-63706-19	2127 P101 0-2"	Solid	10/04/16 14:10	10/28/16 09:25
580-63706-20	2127 P101 0-2" DUP	Solid	10/04/16 14:10	10/28/16 09:25
580-63706-21	2127 P102 0-2"	Solid	10/04/16 14:18	10/28/16 09:25
580-63706-22	2127 P102 0-2" DUP	Solid	10/04/16 14:18	10/28/16 09:25
580-63706-23	300 P100 0-2"	Solid	10/04/16 14:46	10/28/16 09:25
580-63706-24	300 P100 0-2" DUP	Solid	10/04/16 14:46	10/28/16 09:25
580-63706-25	300 P101 0-2"	Solid	10/04/16 14:59	10/28/16 09:25
580-63706-26	300 P101 0-2" DUP	Solid	10/04/16 14:59	10/28/16 09:25
580-63706-27	S464 P100 0-2"	Solid	10/04/16 15:40	10/28/16 09:25
580-63706-28	S464 P100 0-2" DUP	Solid	10/04/16 15:40	10/28/16 09:25
580-63706-29	S464 P101 0-2"	Solid	10/04/16 15:52	10/28/16 09:25
580-63706-30	S464 P101 0-2" DUP	Solid	10/04/16 15:52	10/28/16 09:25
580-63706-31	S464 P102 0-2"	Solid	10/04/16 16:02	10/28/16 09:25
580-63706-32	S464 P102 0-2" DUP	Solid	10/04/16 16:02	10/28/16 09:25
580-63706-33	S464 P103 0-2"	Solid	10/04/16 16:09	10/28/16 09:25
580-63706-34	S464 P103 0-2" DUP	Solid	10/04/16 16:09	10/28/16 09:25
580-63706-35	S464 P104 0-2"	Solid	10/04/16 16:14	10/28/16 09:25
580-63706-36	S464 P104 0-2" DUP	Solid	10/04/16 16:14	10/28/16 09:25
580-63706-37	520 P100 0-2"	Solid	10/07/16 12:50	10/28/16 09:25
580-63706-38	520 P100 0-2" DUP	Solid	10/07/16 12:50	10/28/16 09:25
580-63706-39	520 P101 0-2"	Solid	10/07/16 13:05	10/28/16 09:25
580-63706-40	520 P101 0-2" DUP	Solid	10/07/16 13:05	10/28/16 09:25
580-63706-41	520 P102 0-2"	Solid	10/07/16 13:13	10/28/16 09:25
580-63706-42	520 P102 0-2" DUP	Solid	10/07/16 13:13	10/28/16 09:25
580-63706-43	520 P103 0-2"	Solid	10/07/16 13:17	10/28/16 09:25
580-63706-44	520 P103 0-2" DUP	Solid	10/07/16 13:17	10/28/16 09:25
580-63706-45	520 P104 0-2"	Solid	10/07/16 13:24	10/28/16 09:25
580-63706-46	520 P104 0-2" DUP	Solid	10/07/16 13:24	10/28/16 09:25
580-63706-47	520 P105 0-2"	Solid	10/07/16 13:28	10/28/16 09:25
580-63706-48	520 P105 0-2" DUP	Solid	10/07/16 13:28	10/28/16 09:25
580-63706-49	5295 P100 0-2"	Solid	10/07/16 14:43	10/28/16 09:25
580-63706-50	5295 P100 0-2" DUP	Solid	10/07/16 14:43	10/28/16 09:25
580-63706-51	5295 P101 0-2"	Solid	10/07/16 14:56	10/28/16 09:25
580-63706-52	5295 P101 0-2" DUP	Solid	10/07/16 14:56	10/28/16 09:25
580-63706-53	5295 P102 0-2"	Solid	10/07/16 15:03	10/28/16 09:25

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-63706-54	5295 P102 0-2" DUP	Solid	10/07/16 15:03	10/28/16 09:25
580-63706-55	5295 P103 0-2"	Solid	10/07/16 15:11	10/28/16 09:25
580-63706-56	5295 P103 0-2" DUP	Solid	10/07/16 15:11	10/28/16 09:25
580-63706-57	5295 P104 0-2"	Solid	10/07/16 15:18	10/28/16 09:25
580-63706-58	5295 P104 0-2" DUP	Solid	10/07/16 15:18	10/28/16 09:25
580-63706-59	5295 P105 0-2"	Solid	10/07/16 15:28	10/28/16 09:25
580-63706-60	5295 P105 0-2" DUP	Solid	10/07/16 15:28	10/28/16 09:25
580-63706-61	4201 P100 0-2"	Solid	10/08/16 08:27	10/28/16 09:25
580-63706-62	4201 P100 0-2" DUP	Solid	10/08/16 08:27	10/28/16 09:25
580-63706-63	4201 P101 0-2"	Solid	10/08/16 08:31	10/28/16 09:25
580-63706-64	4201 P101 0-2" DUP	Solid	10/08/16 08:31	10/28/16 09:25
580-63706-65	4201 P102 0-2"	Solid	10/08/16 08:36	10/28/16 09:25
580-63706-66	4201 P102 0-2" DUP	Solid	10/08/16 08:36	10/28/16 09:25
580-63706-67	4201 P103 0-2"	Solid	10/08/16 08:39	10/28/16 09:25
580-63706-68	4201 P103 0-2" DUP	Solid	10/08/16 08:39	10/28/16 09:25
580-63706-69	4201 P104 0-2"	Solid	10/08/16 08:43	10/28/16 09:25
580-63706-70	4201 P104 0-2" DUP	Solid	10/08/16 08:43	10/28/16 09:25
580-63706-71	5360 P100 0-2"	Solid	10/08/16 15:48	10/28/16 09:25
580-63706-72	5360 P100 0-2" DUP	Solid	10/08/16 15:48	10/28/16 09:25
580-63706-73	5360 P101 0-2"	Solid	10/08/16 15:56	10/28/16 09:25
580-63706-74	5360 P101 0-2" DUP	Solid	10/08/16 15:56	10/28/16 09:25
580-63706-75	5361 P100 0-2"	Solid	10/08/16 16:15	10/28/16 09:25
580-63706-76	5361 P100 0-2" DUP	Solid	10/08/16 16:15	10/28/16 09:25
580-63706-77	5361 P101 0-2"	Solid	10/08/16 16:22	10/28/16 09:25
580-63706-78	5361 P101 0-2" DUP	Solid	10/08/16 16:22	10/28/16 09:25
580-63706-79	3127W P6 0-6"	Solid	10/09/16 08:45	10/28/16 09:25
580-63706-80	3127W P6 12-18"	Solid	10/09/16 08:45	10/28/16 09:25
580-63706-81	3127W P6 24-30"	Solid	10/09/16 08:45	10/28/16 09:25
580-63706-82	347 P9 0-6"	Solid	10/09/16 09:05	10/28/16 09:25
580-63706-83	347 P9 12-18"	Solid	10/09/16 09:05	10/28/16 09:25
580-63706-84	347 P9 24-30"	Solid	10/09/16 09:05	10/28/16 09:25
580-63706-85	3501 P8 0-6"	Solid	10/09/16 09:34	10/28/16 09:25
580-63706-86	3501 P8 12-18"	Solid	10/09/16 09:34	10/28/16 09:25
580-63706-87	3501 P8 24-30"	Solid	10/09/16 09:34	10/28/16 09:25
580-63706-88	3501 P9 0-6"	Solid	10/09/16 09:52	10/28/16 09:25
580-63706-89	3501 P9 12-18"	Solid	10/09/16 09:52	10/28/16 09:25
580-63706-90	3501 P9 24-30"	Solid	10/09/16 09:52	10/28/16 09:25
580-63706-91	3501 P10 0-6"	Solid	10/09/16 10:20	10/28/16 09:25
580-63706-92	3501 P10 12-18"	Solid	10/09/16 10:20	10/28/16 09:25
580-63706-93	3501 P10 24-30"	Solid	10/09/16 10:20	10/28/16 09:25
580-63706-94	3501 P11 0-6"	Solid	10/09/16 10:45	10/28/16 09:25
580-63706-95	3501 P11 12-18"	Solid	10/09/16 10:45	10/28/16 09:25
580-63706-96	3501 P11 24-30"	Solid	10/09/16 10:45	10/28/16 09:25
580-63706-97	5267 P100 0-2"	Solid	10/09/16 12:05	10/28/16 09:25
580-63706-98	5267 P100 0-2" DUP	Solid	10/09/16 12:05	10/28/16 09:25
580-63706-99	5267 P101 0-2"	Solid	10/09/16 12:11	10/28/16 09:25
580-63706-100	5267 P101 0-2" DUP	Solid	10/09/16 12:11	10/28/16 09:25
580-63706-101	502 P100 0-2"	Solid	10/09/16 12:33	10/28/16 09:25
580-63706-102	502 P100 0-2" DUP	Solid	10/09/16 12:33	10/28/16 09:25
580-63706-103	502 P101 0-2"	Solid	10/09/16 12:40	10/28/16 09:25
580-63706-104	502 P101 0-2" DUP	Solid	10/09/16 12:40	10/28/16 09:25
580-63706-105	502 P102 0-2"	Solid	10/09/16 12:51	10/28/16 09:25
580-63706-106	502 P102 0-2" DUP	Solid	10/09/16 12:51	10/28/16 09:25

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-63706-107	502 P103 0-2"	Solid	10/09/16 13:02	10/28/16 09:25
580-63706-108	502 P103 0-2" DUP	Solid	10/09/16 13:02	10/28/16 09:25
580-63706-109	2411 P100 0-2"	Solid	10/09/16 14:01	10/28/16 09:25
580-63706-110	2411 P100 0-2" DUP	Solid	10/09/16 14:01	10/28/16 09:25
580-63706-111	2411 P101 0-2"	Solid	10/09/16 14:08	10/28/16 09:25
580-63706-112	2411 P101 0-2" DUP	Solid	10/09/16 14:08	10/28/16 09:25
580-63706-113	3509 P100 0-2"	Solid	10/09/16 15:07	10/28/16 09:25
580-63706-114	3509 P100 0-2" DUP	Solid	10/09/16 15:07	10/28/16 09:25
580-63706-115	3509 P101 0-2"	Solid	10/09/16 15:12	10/28/16 09:25
580-63706-116	3509 P101 0-2" DUP	Solid	10/09/16 15:12	10/28/16 09:25
580-63706-117	3511 P100 0-2"	Solid	10/09/16 15:41	10/28/16 09:25
580-63706-118	3511 P100 0-2" DUP	Solid	10/09/16 15:41	10/28/16 09:25
580-63706-119	3511 P101 0-2"	Solid	10/09/16 15:50	10/28/16 09:25
580-63706-120	3511 P101 0-2" DUP	Solid	10/09/16 15:50	10/28/16 09:25
580-63706-121	5340 P100 0-2"	Solid	10/12/16 14:45	10/28/16 09:25
580-63706-122	5340 P100 0-2" DUP	Solid	10/12/16 14:45	10/28/16 09:25
580-63706-123	5340 P101 0-2"	Solid	10/12/16 14:52	10/28/16 09:25
580-63706-124	5340 P101 0-2" DUP	Solid	10/12/16 14:52	10/28/16 09:25
580-63706-125	5350 P100 0-2"	Solid	10/12/16 15:15	10/28/16 09:25
580-63706-126	5350 P100 0-2" DUP	Solid	10/12/16 15:15	10/28/16 09:25
580-63706-127	5350 P101 0-2"	Solid	10/12/16 15:23	10/28/16 09:25
580-63706-128	5350 P101 0-2" DUP	Solid	10/12/16 15:23	10/28/16 09:25
580-63706-129	200 P100 0-2"	Solid	10/12/16 15:43	10/28/16 09:25
580-63706-130	200 P100 0-2" DUP	Solid	10/12/16 15:43	10/28/16 09:25
580-63706-131	200 P101 0-2"	Solid	10/12/16 15:51	10/28/16 09:25
580-63706-132	200 P101 0-2" DUP	Solid	10/12/16 15:51	10/28/16 09:25
580-63706-133	3506 P100 0-2"	Solid	10/12/16 16:31	10/28/16 09:25
580-63706-134	3506 P100 0-2" DUP	Solid	10/12/16 16:31	10/28/16 09:25
580-63706-135	3506 P101 0-2"	Solid	10/12/16 16:40	10/28/16 09:25
580-63706-136	3506 P101 0-2" DUP	Solid	10/12/16 16:40	10/28/16 09:25
580-63706-137	503 P100 0-2"	Solid	10/14/16 08:46	10/28/16 09:25
580-63706-138	503 P100 0-2" DUP	Solid	10/14/16 08:46	10/28/16 09:25
580-63706-139	503 P101 0-2"	Solid	10/14/16 08:51	10/28/16 09:25
580-63706-140	503 P101 0-2" DUP	Solid	10/14/16 08:51	10/28/16 09:25
580-63706-141	9149 P100 0-2"	Solid	10/15/16 08:05	10/28/16 09:25
580-63706-142	9149 P100 0-2" DUP	Solid	10/15/16 08:05	10/28/16 09:25
580-63706-143	9149 P101 0-2"	Solid	10/15/16 08:12	10/28/16 09:25
580-63706-144	9149 P101 0-2" DUP	Solid	10/15/16 08:12	10/28/16 09:25
580-63706-145	9149 P102 0-2"	Solid	10/15/16 08:21	10/28/16 09:25
580-63706-146	9149 P102 0-2" DUP	Solid	10/15/16 08:21	10/28/16 09:25
580-63706-147	4214 P100 0-2"	Solid	10/15/16 15:10	10/28/16 09:25
580-63706-148	4214 P100 0-2" DUP	Solid	10/15/16 15:10	10/28/16 09:25
580-63706-149	4214 P1 0-6"	Solid	10/15/16 15:17	10/28/16 09:25
580-63706-150	4214 P2 0-6"	Solid	10/15/16 15:26	10/28/16 09:25
580-63706-151	S29 P1 0-6"	Solid	10/16/16 07:25	10/28/16 09:25
580-63706-152	S29 P2 0-6"	Solid	10/16/16 07:36	10/28/16 09:25
580-63706-153	S29 P3 0-6"	Solid	10/16/16 07:44	10/28/16 09:25
580-63706-154	S29 P4 0-6"	Solid	10/16/16 07:54	10/28/16 09:25
580-63706-155	S29 P5 0-6"	Solid	10/16/16 08:01	10/28/16 09:25
580-63706-156	S29 P6 0-6"	Solid	10/16/16 08:11	10/28/16 09:25
580-63706-157	S29 P7 0-6"	Solid	10/16/16 08:20	10/28/16 09:25
580-63706-158	S29 P8 0-6"	Solid	10/16/16 08:28	10/28/16 09:25
580-63706-159	S29 P8 0-6" DUP	Solid	10/16/16 08:28	10/28/16 09:25

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-63706-160	S29 P9 0-6"	Solid	10/16/16 08:45	10/28/16 09:25
580-63706-161	PIPE P1 0-6"	Solid	10/16/16 10:15	10/28/16 09:25
580-63706-162	PIPE P2 0-6"	Solid	10/16/16 10:21	10/28/16 09:25
580-63706-163	PIPE P3 0-6"	Solid	10/16/16 10:30	10/28/16 09:25
580-63706-164	PIPE P4 0-6"	Solid	10/16/16 10:45	10/28/16 09:25
580-63706-165	PIPE P5 0-6"	Solid	10/16/16 10:56	10/28/16 09:25
580-63706-166	PIPE P6 0-6"	Solid	10/16/16 11:05	10/28/16 09:25
580-63706-167	PIPE P7 0-6"	Solid	10/16/16 11:15	10/28/16 09:25
580-63706-168	PIPE P8 0-6"	Solid	10/16/16 11:22	10/28/16 09:25
580-63706-169	PIPE P9 0-6"	Solid	10/16/16 11:31	10/28/16 09:25
580-63706-170	PIPE P10 0-6"	Solid	10/16/16 11:42	10/28/16 09:25
580-63706-171	PIPE P11 0-6"	Solid	10/16/16 11:51	10/28/16 09:25
580-63706-172	PIPE P12 0-6"	Solid	10/16/16 11:59	10/28/16 09:25
580-63706-173	PIPE P13 0-6"	Solid	10/16/16 12:11	10/28/16 09:25
580-63706-174	PIPE P14 0-6"	Solid	10/16/16 12:20	10/28/16 09:25
580-63706-175	PIPE P15 0-6"	Solid	10/16/16 12:29	10/28/16 09:25
580-63706-176	PIPE P16 0-6"	Solid	10/16/16 12:36	10/28/16 09:25
580-63706-177	PIPE P17 0-6"	Solid	10/16/16 12:44	10/28/16 09:25
580-63706-178	PIPE P18 0-6"	Solid	10/16/16 12:53	10/28/16 09:25
580-63706-179	PIPE P19 0-6"	Solid	10/16/16 13:06	10/28/16 09:25
580-63706-180	PIPE P20 0-6"	Solid	10/16/16 13:15	10/28/16 09:25
580-63706-181	PIPE P21 0-6"	Solid	10/16/16 13:24	10/28/16 09:25
580-63706-182	PIPE P22 0-6"	Solid	10/16/16 13:37	10/28/16 09:25
580-63706-183	PIPE P23 0-6"	Solid	10/16/16 13:45	10/28/16 09:25
580-63706-184	PIPE P24 0-6"	Solid	10/16/16 13:53	10/28/16 09:25
580-63706-185	PIPE P24 0-6" DUP	Solid	10/16/16 13:53	10/28/16 09:25
580-63706-186	Bollard P1 MID 0-6"	Solid	10/16/16 14:15	10/28/16 09:25
580-63706-187	Bollard P2 NEAR 0-6"	Solid	10/16/16 14:21	10/28/16 09:25
580-63706-188	3127W P7 0-6"	Solid	10/16/16 15:40	10/28/16 09:25
580-63706-189	3127W P7 12-18"	Solid	10/16/16 15:40	10/28/16 09:25
580-63706-190	3127W P7 24-30"	Solid	10/16/16 15:40	10/28/16 09:25
580-63706-191	3127W P8 0-6"	Solid	10/16/16 16:17	10/28/16 09:25
580-63706-192	3127W P8 12-18"	Solid	10/16/16 16:17	10/28/16 09:25
580-63706-193	3127W P8 24-30"	Solid	10/16/16 16:17	10/28/16 09:25
580-63706-194	340 P100 0-2"	Solid	10/17/16 10:40	10/28/16 09:25
580-63706-195	340 P100 0-2" DUP	Solid	10/17/16 10:40	10/28/16 09:25
580-63706-196	340 P101 0-2"	Solid	10/17/16 10:45	10/28/16 09:25
580-63706-197	340 P101 0-2" DUP	Solid	10/17/16 10:45	10/28/16 09:25
580-63706-198	5301 P100 0-2"	Solid	10/17/16 13:50	10/28/16 09:25
580-63706-199	5301 P100 0-2" DUP	Solid	10/17/16 13:50	10/28/16 09:25
580-63706-200	5301 P101 0-2"	Solid	10/17/16 14:01	10/28/16 09:25
580-63706-201	5301 P101 0-2" DUP	Solid	10/17/16 14:01	10/28/16 09:25
580-63706-202	5301 P102 0-2"	Solid	10/17/16 14:09	10/28/16 09:25
580-63706-203	5301 P102 0-2" DUP	Solid	10/17/16 14:09	10/28/16 09:25
580-63706-204	5301 P103 0-2"	Solid	10/17/16 14:16	10/28/16 09:25
580-63706-205	5301 P103 0-2" DUP	Solid	10/17/16 14:16	10/28/16 09:25
580-63706-206	4213 P1 0-6"	Solid	10/19/16 13:30	10/28/16 09:25
580-63706-207	4213 P1 12-18"	Solid	10/19/16 13:30	10/28/16 09:25
580-63706-208	4213 P1 24-30"	Solid	10/19/16 13:00	10/28/16 09:25
580-63706-209	4213 P2 0-6"	Solid	10/19/16 14:20	10/28/16 09:25
580-63706-210	4213 P2 12-18"	Solid	10/19/16 14:20	10/28/16 09:25
580-63706-211	4213 P2 24-30"	Solid	10/19/16 14:20	10/28/16 09:25
580-63706-212	4213 P3 0-6"	Solid	10/19/16 14:50	10/28/16 09:25

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-63706-213	4213 P3 12-18"	Solid	10/19/16 14:50	10/28/16 09:25
580-63706-214	4213 P3 24-30"	Solid	10/19/16 14:50	10/28/16 09:25
580-63706-215	4213 P3 0-6" DUP	Solid	10/19/16 14:50	10/28/16 09:25
580-63706-216	4213 P3 12-18" DUP	Solid	10/19/16 14:50	10/28/16 09:25
580-63706-217	4213 P3 24-30" DUP	Solid	10/19/16 14:50	10/28/16 09:25
580-63706-218	4213 P4 0-6"	Solid	10/19/16 15:40	10/28/16 09:25
580-63706-219	4213 P4 12-18"	Solid	10/19/16 15:40	10/28/16 09:25
580-63706-220	4213 P4 24-30"	Solid	10/19/16 15:40	10/28/16 09:25
580-63706-221	4213 P5 0-6"	Solid	10/19/16 16:15	10/28/16 09:25
580-63706-222	4213 P5 12-18"	Solid	10/19/16 16:15	10/28/16 09:25
580-63706-223	4213 P5 24-30"	Solid	10/19/16 16:15	10/28/16 09:25
580-63706-224	4213 P6 0-6"	Solid	10/19/16 16:55	10/28/16 09:25
580-63706-225	4213 P6 12-18"	Solid	10/19/16 16:55	10/28/16 09:25
580-63706-226	4213 P6 24-30"	Solid	10/19/16 16:55	10/28/16 09:25
580-63706-227	4205 P1 0-6"	Solid	10/20/16 14:50	10/28/16 09:25
580-63706-228	4205 P1 12-18"	Solid	10/20/16 14:50	10/28/16 09:25
580-63706-229	4205 P1 24-30"	Solid	10/20/16 14:50	10/28/16 09:25
580-63706-230	4205 P1 30-36"	Solid	10/20/16 14:50	10/28/16 09:25
580-63706-231	4205 P2 0-6"	Solid	10/20/16 15:31	10/28/16 09:25
580-63706-232	4205 P2 12-18"	Solid	10/20/16 15:31	10/28/16 09:25
580-63706-233	4205 P2 24-30"	Solid	10/20/16 15:31	10/28/16 09:25
580-63706-234	4205 P3 0-6"	Solid	10/20/16 16:15	10/28/16 09:25
580-63706-235	4205 P3 12-18"	Solid	10/20/16 16:15	10/28/16 09:25
580-63706-236	4205 P3 24-30"	Solid	10/20/16 16:15	10/28/16 09:25
580-63706-237	4205 P4 0-6"	Solid	10/20/16 16:44	10/28/16 09:25
580-63706-238	4205 P4 12-18"	Solid	10/20/16 16:44	10/28/16 09:25
580-63706-239	4205 P4 24-30"	Solid	10/20/16 16:44	10/28/16 09:25
580-63706-240	4206 P1 0-6"	Solid	10/21/16 11:06	10/28/16 09:25
580-63706-241	4206 P1 12-18"	Solid	10/21/16 11:06	10/28/16 09:25
580-63706-242	4206 P1 24-30"	Solid	10/21/16 11:06	10/28/16 09:25
580-63706-243	4206 P2 0-6"	Solid	10/21/16 12:25	10/28/16 09:25
580-63706-244	4206 P2 12-18"	Solid	10/21/16 12:25	10/28/16 09:25
580-63706-245	4206 P2 24-30"	Solid	10/21/16 12:25	10/28/16 09:25
580-63706-246	4206 P3 0-6"	Solid	10/21/16 13:10	10/28/16 09:25
580-63706-247	4206 P3 12-18"	Solid	10/21/16 13:10	10/28/16 09:25
580-63706-248	4206 P3 24-30"	Solid	10/21/16 13:10	10/28/16 09:25
580-63706-249	4206 P4 0-6"	Solid	10/21/16 13:56	10/28/16 09:25
580-63706-250	4206 P4 12-18"	Solid	10/21/16 13:56	10/28/16 09:25
580-63706-251	4206 P4 24-30"	Solid	10/21/16 13:56	10/28/16 09:25
580-63706-252	4207 P1 0-6"	Solid	10/21/16 14:49	10/28/16 09:25
580-63706-253	4207 P1 12-18"	Solid	10/21/16 14:49	10/28/16 09:25
580-63706-254	4207 P1 24-30"	Solid	10/21/16 14:49	10/28/16 09:25
580-63706-255	4207 P2 0-6"	Solid	10/22/16 08:56	10/28/16 09:25
580-63706-256	4207 P2 12-18"	Solid	10/22/16 08:56	10/28/16 09:25
580-63706-257	4207 P2 24-30"	Solid	10/22/16 08:56	10/28/16 09:25
580-63706-258	4207 P3 0-6"	Solid	10/22/16 10:11	10/28/16 09:25
580-63706-259	4207 P3 12-18"	Solid	10/22/16 10:11	10/28/16 09:25
580-63706-260	4207 P3 24-30"	Solid	10/22/16 10:11	10/28/16 09:25
580-63706-261	4207 P3 0-6" DUP	Solid	10/22/16 10:11	10/28/16 09:25
580-63706-262	4207 P3 12-18" DUP	Solid	10/22/16 10:11	10/28/16 09:25
580-63706-263	4207 P3 24-30" DUP	Solid	10/22/16 10:11	10/28/16 09:25
580-63706-264	4207 P4 0-6"	Solid	10/22/16 10:42	10/28/16 09:25
580-63706-265	4207 P4 12-18"	Solid	10/22/16 10:42	10/28/16 09:25

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-63706-266	4207 P4 24-30"	Solid	10/22/16 10:42	10/28/16 09:25
580-63706-267	5303 NW A 0-2"	Solid	10/21/16 15:59	10/28/16 09:25
580-63706-268	5303 NW A 0-2" DUP	Solid	10/21/16 15:59	10/28/16 09:25
580-63706-269	5303 NW B 0-2"	Solid	10/21/16 16:11	10/28/16 09:25
580-63706-270	5303 NW B 0-2" DUP	Solid	10/21/16 16:11	10/28/16 09:25
580-63706-271	5303 NW C 0-2"	Solid	10/21/16 16:20	10/28/16 09:25
580-63706-272	5303 NW C 0-2" DUP	Solid	10/21/16 16:20	10/28/16 09:25
580-63706-273	5303 NW D 0-2"	Solid	10/21/16 16:30	10/28/16 09:25
580-63706-274	5303 NW D 0-2" DUP	Solid	10/21/16 16:30	10/28/16 09:25
580-63706-275	5303 E A 0-2"	Solid	10/22/16 07:49	10/28/16 09:25
580-63706-276	5303 E A 0-2" DUP	Solid	10/22/16 07:49	10/28/16 09:25
580-63706-277	5303 E B 0-2"	Solid	10/22/16 07:56	10/28/16 09:25
580-63706-278	5303 E B 0-2" DUP	Solid	10/22/16 07:56	10/28/16 09:25
580-63706-279	5303 E C 0-2"	Solid	10/22/16 08:01	10/28/16 09:25
580-63706-280	5303 E C 0-2" DUP	Solid	10/22/16 08:01	10/28/16 09:25
580-63706-281	5303 E D 0-2"	Solid	10/22/16 08:10	10/28/16 09:25
580-63706-282	5303 E D 0-2" DUP	Solid	10/22/16 08:10	10/28/16 09:25
580-63706-283	S28 P12 0-6"	Solid	10/22/16 14:50	10/28/16 09:25
580-63706-284	S28 P13 0-6"	Solid	10/22/16 15:25	10/28/16 09:25
580-63706-285	S28 P14 0-6"	Solid	10/22/16 15:31	10/28/16 09:25
580-63706-286	S30 P11 0-6"	Solid	10/22/16 15:50	10/28/16 09:25
580-63706-287	S30 P12 0-6"	Solid	10/22/16 15:58	10/28/16 09:25
580-63706-288	S30 P13 0-6"	Solid	10/22/16 16:05	10/28/16 09:25
580-63706-289	S30 P14 0-6"	Solid	10/23/16 08:10	10/28/16 09:25
580-63706-290	S30 P15 0-6"	Solid	10/23/16 08:15	10/28/16 09:25
580-63706-291	S30 P16 0-6"	Solid	10/23/16 08:19	10/28/16 09:25
580-63706-292	5304 WT P1 0-6"	Solid	10/23/16 11:46	10/28/16 09:25
580-63706-293	5304 WT P1 12-18"	Solid	10/23/16 11:46	10/28/16 09:25
580-63706-294	5304 WT P1 24-30"	Solid	10/23/16 11:46	10/28/16 09:25
580-63706-295	5304 WT P2 0-6"	Solid	10/23/16 12:31	10/28/16 09:25
580-63706-296	5304 WT P2 12-18"	Solid	10/23/16 12:31	10/28/16 09:25
580-63706-297	5304 WT P2 24-30"	Solid	10/23/16 12:31	10/28/16 09:25
580-63706-298	5305 WT P1 0-6"	Solid	10/23/16 13:36	10/28/16 09:25
580-63706-299	5305 WT P1 12-18"	Solid	10/23/16 13:36	10/28/16 09:25
580-63706-300	5305 WT P1 24-30"	Solid	10/23/16 13:36	10/28/16 09:25
580-63706-301	3126E P7 0-6"	Solid	10/23/16 10:01	10/28/16 09:25
580-63706-302	3126E P7 12-18"	Solid	10/23/16 10:01	10/28/16 09:25
580-63706-303	3126E P7 24-30"	Solid	10/23/16 10:01	10/28/16 09:25
580-63706-304	3126E P8 0-6"	Solid	10/23/16 10:17	10/28/16 09:25
580-63706-305	3126E P8 12-18"	Solid	10/23/16 10:17	10/28/16 09:25
580-63706-306	3126E P8 24-30"	Solid	10/23/16 10:17	10/28/16 09:25
580-63706-307	3126E P6 0-6"	Solid	10/23/16 10:32	10/28/16 09:25
580-63706-308	3126E P6 12-18"	Solid	10/23/16 10:32	10/28/16 09:25
580-63706-309	3126E P6 24-30"	Solid	10/23/16 10:32	10/28/16 09:25
580-63706-310	R2 Cell 3 0-6"	Solid	10/23/16 07:25	10/28/16 09:25
580-63706-311	R2 Cell 4 0-6"	Solid	10/23/16 07:39	10/28/16 09:25
580-63706-312	Equipment Rinsate	Water	10/23/16 14:05	10/28/16 09:25
580-63706-313	Trip Blank	Water	10/23/16 00:00	10/28/16 09:25

SW **TestAmerica Seattle**
5755 8th Street East

Tacoma, WA 98424
phone 253.922.2310 fax

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Joey Hickey	Site Contact: Scott Wakefield	Date: 10/24/2016	COC No:
Geosyntec Consultants	Tel/Fax: 971-271-5897	Lab Contact:	Carrier:	1 of 13 COCs
621 SW Morrison Street, Suite 600	Analysis Turnaround Time			Sampler: SWakefield
Portland, Oregon 97205	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
(971) 271-5897 Phone	TAT if different from Below _____			Walk-in Client:
(971) 271-5884 FAX	☑ 2 weeks			Lab Sampling:
Project Name: Midway Soil Sampling 2016	☐ 1 week			
Site: Midway Atoll	☐ 2 days			Job / SDG No.:
P O # PNG0710	☐ 1 day			

	CLIENT SAMPLE IDENTIFICATION	SAMPLE DEPTH	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	EPA 6010 (Pb)	Sample Specific Notes:
1	S1123 P100 0-2"	0-2"	9/23/16	1310	C	Soil	1			X	No preservative. Soil analyzed wet weight
2	S1123 P100 0-2" DUP	0-2"	9/23/16	1310	C	Soil	1			X	No preservative. Soil analyzed wet weight
3	S1123 P101 0-2"	0-2"	9/23/16	1315	C	Soil	1			X	No preservative. Soil analyzed wet weight
4	S1123 P101 0-2" DUP	0-2"	9/23/16	1315	C	Soil	1			X	No preservative. Soil analyzed wet weight
5	S1119 P100 0-2"	0-2"	9/23/16	1430	C	Soil	1			X	No preservative. Soil analyzed wet weight
6	S1119 P100 0-2" DUP	0-2"	9/23/16	1430	C	Soil	1			X	No preservative. Soil analyzed wet weight
7	S1119 P101 0-2"	0-2"	9/23/16	1436	C	Soil	1			X	No preservative. Soil analyzed wet weight
8	S1119 P101 0-2" DUP	0-2"	9/23/16	1436	C	Soil	1			X	No preservative. Soil analyzed wet weight
9	180 P100 0-2"	0-2"	9/23/16	1510	C	Soil	1			X	No preservative. Soil analyzed wet weight
10	180 P100 0-2" DUP	0-2"	9/23/16	1510	C	Soil	1			X	No preservative. Soil analyzed wet weight
11	180 P101 0-2"	0-2"	9/23/16	1517	C	Soil	1			X	No preservative. Soil analyzed wet weight
12	180 P101 0-2" DUP	0-2"	9/23/16	1517	C	Soil	1			X	No preservative. Soil analyzed wet weight
13	170 P100 0-2"	0-2"	9/23/16	1555	C	Soil	1			X	No preservative. Soil analyzed wet weight
14	170 P100 0-2" DUP	0-2"	9/23/16	1555	C	Soil	1			X	No preservative. Soil analyzed wet weight
15	170 P101 0-2"	0-2"	9/23/16	1601	C	Soil	1			X	No preservative. Soil analyzed wet weight
16	170 P101 0-2" DUP	0-2"	9/23/16	1601	C	Soil	1			X	No preservative. Soil analyzed wet weight
17	2127 P100 0-2"	0-2"	10//4/16	1404	C	Soil	1			X	No preservative. Soil analyzed wet weight
18	2127 P100 0-2" DUP	0-2"	10/4/16	1404	C	Soil	1			X	No preservative. Soil analyzed wet weight
19	2127 P101 0-2"	0-2"	10/4/16	1410	C	Soil	1			X	No preservative. Soil analyzed wet weight
20	2127 P101 0-2" DUP	0-2"	10/4/16	1410	C	Soil	1			X	No preservative. Soil analyzed wet weight
21	2127 P102 0-2"	0-2"	10/4/16	1418	C	Soil	1			X	No preservative. Soil analyzed wet weight
22	2127 P102 0-2" DUP	0-2"	10/4/16	1418	C	Soil	1			X	No preservative. Soil analyzed wet weight
23	300 P100 0-2"	0-2"	10/4/16	1446	C	Soil	1			X	No preservative. Soil analyzed wet weight
24	300 P100 0-2" DUP	0-2"	10/4/16	1446	C	Soil	1			X	No preservative. Soil analyzed wet weight
25	300 P101 0-2"	0-2"	10/4/16	1459	C	Soil	1			X	No preservative. Soil analyzed wet weight
26	300 P101 0-2" DUP	0-2"	10/4/16	1459	C	Soil	1			X	No preservative. Soil analyzed wet weight

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sar
Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Poison B ☐ Skin Irritant ☐ Flammable ☐ Unknown

y be assessed if samples are retained longer than 1 month)

Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments: Rate is per previous contract

580-63706 Chain of Custody

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Scott Wakefield	GEOSYNTEC	10/24/16 1201	Tom	TA-Sea	10/28/16 0925
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Company:	Date/Time:		ny:	Date/Time:
					Date/Time:

TB____ Cooler IR2 Cor 14.2 Unc 14.3 w/cs
Cooler Dsc Bucket @Lab_____
Wet/Packs Packing_____

TB____ Cooler IR2 Cor 16.2 Unc 16.3 w/cs
Cooler Dsc Bucket @Lab_____
Wet/Packs Packing_____

TB____ Cooler IR2 Cor 15.0 Unc 15.1 w/cs
Cooler Dsc Bucket @Lab_____
Wet/Packs Packing_____

Fed 2nd Day

TestAmerica Seattle
5755 8th Street East

Tacoma, WA 98424
phone 253.922.2310 fax

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Joey Hickey	Site Contact: Scott Wakefield	Date: 10/24/2016	COC No:
Geosyntec Consultants	Tel/Fax: 971-271-5897	Lab Contact:	Carrier:	2 of 13 COCs
621 SW Morrison Street, Suite 600	Analysis Turnaround Time			Sampler: SWakefield
Portland, Oregon 97205	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
(971) 271-5897 Phone	TAT if different from Below _____			Walk-in Client:
(971) 271-5884 FAX	☑ 2 weeks			Lab Sampling:
Project Name: Midway Soil Sampling 2016	☐ 1 week			
Site: Midway Atoll	☐ 2 days			Job / SDG No.:
P O # PNG0710	☐ 1 day			

	CLIENT SAMPLE IDENTIFICATION	SAMPLE DEPTH	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 6010 (Pb)	Sample Specific Notes:
27	S464 P100 0-2"	0-2"	10/4/16	1540	C	Soil	1			x	No preservative. Soil analyzed wet weight
28	S464 P100 0-2" DUP	0-2"	10/4/16	1540	C	Soil	1			x	No preservative. Soil analyzed wet weight
29	S464 P101 0-2"	0-2"	10/4/16	1552	C	Soil	1			x	No preservative. Soil analyzed wet weight
30	S464 P101 0-2" DUP	0-2"	10/4/16	1552	C	Soil	1			x	No preservative. Soil analyzed wet weight
31	S464 P102 0-2"	0-2"	10/4/16	1602	C	Soil	1			x	No preservative. Soil analyzed wet weight
32	S464 P102 0-2" DUP	0-2"	10/4/16	1602	C	Soil	1			x	No preservative. Soil analyzed wet weight
33	S464 P103 0-2"	0-2"	10/4/16	1609	C	Soil	1			x	No preservative. Soil analyzed wet weight
34	S464 P103 0-2" DUP	0-2"	10/4/16	1609	C	Soil	1			x	No preservative. Soil analyzed wet weight
35	S464 P104 0-2"	0-2"	10/4/16	1614	C	Soil	1			x	No preservative. Soil analyzed wet weight
36	S464 P104 0-2" DUP	0-2"	10/4/16	1614	C	Soil	1			x	No preservative. Soil analyzed wet weight
37	520 P100 0-2"	0-2"	10/7/16	1250	C	Soil	1			x	No preservative. Soil analyzed wet weight
38	520 P100 0-2" DUP	0-2"	10/7/16	1250	C	Soil	1			x	No preservative. Soil analyzed wet weight
39	520 P101 0-2"	0-2"	10/7/16	1305	C	Soil	1			x	No preservative. Soil analyzed wet weight
40	520 P101 0-2" DUP	0-2"	10/7/16	1305	C	Soil	1			x	No preservative. Soil analyzed wet weight
41	520 P102 0-2"	0-2"	10/7/16	1313	C	Soil	1			x	No preservative. Soil analyzed wet weight
42	520 P102 0-2" DUP	0-2"	10/7/16	1313	C	Soil	1			x	No preservative. Soil analyzed wet weight
43	520 P103 0-2"	0-2"	10/7/16	1317	C	Soil	1			x	No preservative. Soil analyzed wet weight
44	520 P103 0-2" DUP	0-2"	10/7/16	1317	C	Soil	1			x	No preservative. Soil analyzed wet weight
45	520 P104 0-2"	0-2"	10/7/16	1324	C	Soil	1			x	No preservative. Soil analyzed wet weight
46	520 P104 0-2" DUP	0-2"	10/7/16	1324	C	Soil	1			x	No preservative. Soil analyzed wet weight
47	520 P105 0-2"	0-2"	10/7/16	1328	C	Soil	1			x	No preservative. Soil analyzed wet weight
48	520 P105 0-2" DUP	0-2"	10/7/16	1328	C	Soil	1			x	No preservative. Soil analyzed wet weight
49	5295 P100 0-2"	0-2"	10/7/16	1443	C	Soil	1			x	No preservative. Soil analyzed wet weight
50	5295 P100 0-2" DUP	0-2"	10/7/16	1443	C	Soil	1			x	No preservative. Soil analyzed wet weight
51	5295 P101 0-2"	0-2"	10/7/16	1456	C	Soil	1			x	No preservative. Soil analyzed wet weight
52	5295 P101 0-2" DUP	0-2"	10/7/16	1456	C	Soil	1			x	No preservative. Soil analyzed wet weight

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Poison B ☐ Skin Irritant ☐ Flammable ☐ Flammable ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments: Rate is per previous contract

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	GEOSYNTEC	10-26-16 1201	Tom [signature]		10/28/16 0925
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Seattle
5755 8th Street East

Tacoma, WA 98424
phone 253.922.2310 fax

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Joey Hickey	Site Contact: Scott Wakefield	Date: 10/24/2016	COC No:
Geosyntec Consultants	Tel/Fax: 971-271-5897	Lab Contact:	Carrier:	3 of 13 COCs
621 SW Morrison Street, Suite 600	Analysis Turnaround Time			Sampler: SWakefield
Portland, Oregon 97205	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
(971) 271-5897 Phone	TAT if different from Below _____			Walk-in Client:
(971) 271-5884 FAX	☑ 2 weeks			Lab Sampling:
Project Name: Midway Soil Sampling 2016	☐ 1 week			
Site: Midway Atoll	☐ 2 days			Job / SDG No.:
P O # PNG0710	☐ 1 day			

	CLIENT SAMPLE IDENTIFICATION	SAMPLE DEPTH	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	EPA 6010 (Pb)	Sample Specific Notes:
53	5295 P102 0-2"	0-2"	10/7/16	1503	C	Soil	1			X	No preservative. Soil analyzed wet weight
54	5295 P102 0-2" DUP	0-2"	10/7/16	1503	C	Soil	1			X	No preservative. Soil analyzed wet weight
55	5295 P103 0-2"	0-2"	10/7/16	1511	C	Soil	1			X	No preservative. Soil analyzed wet weight
56	5295 P103 0-2" DUP	0-2"	10/7/16	1511	C	Soil	1			X	No preservative. Soil analyzed wet weight
57	5295 P104 0-2"	0-2"	10/7/16	1518	C	Soil	1			X	No preservative. Soil analyzed wet weight
58	5295 P104 0-2" DUP	0-2"	10/7/16	1518	C	Soil	1			X	No preservative. Soil analyzed wet weight
59	5295 P105 0-2"	0-2"	10/7/16	1528	C	Soil	1			X	No preservative. Soil analyzed wet weight
60	5295 P105 0-2" DUP	0-2"	10/7/16	1528	C	Soil	1			X	No preservative. Soil analyzed wet weight
61	4201 P100 0-2"	0-2"	10/8/16	0827	C	Soil	1			X	No preservative. Soil analyzed wet weight
62	4201 P100 0-2" DUP	0-2"	10/8/16	0827	C	Soil	1			X	No preservative. Soil analyzed wet weight
63	4201 P101 0-2"	0-2"	10/8/16	0831	C	Soil	1			X	No preservative. Soil analyzed wet weight
64	4201 P101 0-2" DUP	0-2"	10/8/16	0831	C	Soil	1			X	No preservative. Soil analyzed wet weight
65	4201 P102 0-2"	0-2"	10/8/16	0836	C	Soil	1			X	No preservative. Soil analyzed wet weight
66	4201 P102 0-2" DUP	0-2"	10/8/16	0836	C	Soil	1			X	No preservative. Soil analyzed wet weight
67	4201 P103 0-2"	0-2"	10/8/16	0839	C	Soil	1			X	No preservative. Soil analyzed wet weight
68	4201 P103 0-2" DUP	0-2"	10/8/16	0839	C	Soil	1			X	No preservative. Soil analyzed wet weight
69	4201 P104 0-2"	0-2"	10/8/16	0843	C	Soil	1			X	No preservative. Soil analyzed wet weight
70	4201 P104 0-2" DUP	0-2"	10/8/16	0843	C	Soil	1			X	No preservative. Soil analyzed wet weight
71	5360 P100 0-2"	0-2"	10/8/16	1548	C	Soil	1			X	No preservative. Soil analyzed wet weight
72	5360 P100 0-2" DUP	0-2"	10/8/16	1548	C	Soil	1			X	No preservative. Soil analyzed wet weight
73	5360 P101 0-2"	0-2"	10/8/16	1556	C	Soil	1			X	No preservative. Soil analyzed wet weight
74	5360 P101 0-2" DUP	0-2"	10/8/16	1556	C	Soil	1			X	No preservative. Soil analyzed wet weight
75	5361 P100 0-2"	0-2"	10/8/16	1615	C	Soil	1			X	No preservative. Soil analyzed wet weight
76	5361 P100 0-2" DUP	0-2"	10/8/16	1615	C	Soil	1			X	No preservative. Soil analyzed wet weight
77	5361 P101 0-2"	0-2"	10/8/16	1622	C	Soil	1			X	No preservative. Soil analyzed wet weight
78	5361 P101 0-2" DUP	0-2"	10/8/16	1622	C	Soil	1			X	No preservative. Soil analyzed wet weight

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Poison B ☐ Skin Irritant ☐ Flammable ☐ Flammable ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments: Rate is per previous contract

Custody Seals Intact: ☐ Yes ☐ No

Custody Seal No.:

Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Scott Wakefield	GEOSYNTEC	10-26-16 1201	Tom Blank		10/28/16 0925
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Seattle
5755 8th Street East

Tacoma, WA 98424
phone 253.922.2310 fax

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Joey Hickey	Site Contact: Scott Wakefield	Date: 10/24/2016	COC No:
Geosyntec Consultants	Tel/Fax: 971-271-5897	Lab Contact:	Carrier:	4 of 13 COCs
621 SW Morrison Street, Suite 600	**Analysis Turnaround Time**			Sampler: SWakefield
Portland, Oregon 97205	☐ CALENDAR DAYS ☑ WORKING DAYS			**For Lab Use Only:**
(971) 271-5897 Phone	TAT if different from Below _____			Walk-in Client:
(971) 271-5884 FAX	☑ 2 weeks			Lab Sampling:
Project Name: Midway Soil Sampling 2016	☐ 1 week			
Site: Midway Atoll	☐ 2 days			Job / SDG No.:
P O # PNG0710	☐ 1 day			

	CLIENT SAMPLE IDENTIFICATION	SAMPLE DEPTH	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 6010 (Pb)	Sample Specific Notes:
79	3127W P6 0-6"	0-6"	10/9/16	0845	C	Soil	1			X	No preservative. Soil analyzed wet weight
80	3127W P6 12-18"	12-18"	10/9/16	0845	G	Soil	1			X	No preservative. Soil analyzed wet weight
81	3127W P6 24-30"	24-30"	10/9/16	0845	G	Soil	1			X	No preservative. Soil analyzed wet weight
82	347 P9 0-6"	0-6"	10/9/16	0905	C	Soil	1			X	No preservative. Soil analyzed wet weight
83	347 P9 12-18"	12-18"	10/9/16	0905	G	Soil	1			X	No preservative. Soil analyzed wet weight
84	347 P9 24-30"	24-30"	10/9/16	0905	G	Soil	1			X	No preservative. Soil analyzed wet weight
85	3501 P8 0-6"	0-6"	10/9/16	0934	C	Soil	1			X	No preservative. Soil analyzed wet weight
86	3501 P8 12-18"	12-18"	10/9/16	0934	G	Soil	1			X	No preservative. Soil analyzed wet weight
87	3501 P8 24-30"	24-30"	10/9/16	0934	G	Soil	1			X	No preservative. Soil analyzed wet weight
88	3501 P9 0-6"	0-6"	10/9/16	0952	C	Soil	1			X	No preservative. Soil analyzed wet weight
89	3501 P9 12-18"	12-18"	10/9/16	0952	G	Soil	1			X	No preservative. Soil analyzed wet weight
90	3501 P9 24-30"	24-30"	10/9/16	0952	G	Soil	1			X	No preservative. Soil analyzed wet weight
91	3501 P10 0-6"	0-6"	10/9/16	1020	C	Soil	1			X	No preservative. Soil analyzed wet weight
92	3501 P10 12-18"	12-18"	10/9/16	1020	G	Soil	1			X	No preservative. Soil analyzed wet weight
93	3501 P10 24-30"	24-30"	10/9/16	1020	G	Soil	1			X	No preservative. Soil analyzed wet weight
94	3501 P11 0-6"	0-6"	10/9/16	1045	C	Soil	1			X	No preservative. Soil analyzed wet weight
95	3501 P11 12-18"	12-18"	10/9/16	1045	G	Soil	1			X	No preservative. Soil analyzed wet weight
96	3501 P11 24-30"	24-30"	10/9/16	1045	G	Soil	1			X	No preservative. Soil analyzed wet weight
97	5267 P100 0-2"	0-2"	10/9/16	1205	C	Soil	1			X	No preservative. Soil analyzed wet weight
98	5267 P100 0-2" DUP	0-2"	10/9/16	1205	C	Soil	1			X	No preservative. Soil analyzed wet weight
99	5267 P101 0-2"	0-2"	10/9/16	1211	C	Soil	1			X	No preservative. Soil analyzed wet weight
100	5267 P101 0-2" DUP	0-2"	10/9/16	1211	C	Soil	1			X	No preservative. Soil analyzed wet weight
101	502 P100 0-2"	0-2"	10/9/16	1233	C	Soil	1			X	No preservative. Soil analyzed wet weight
102	502 P100 0-2" DUP	0-2"	10/9/16	1233	C	Soil	1			X	No preservative. Soil analyzed wet weight
103	502 P101 0-2"	0-2"	10/9/16	1240	C	Soil	1			X	No preservative. Soil analyzed wet weight
104	502 P101 0-2" DUP	0-2"	10/9/16	1240	C	Soil	1			X	No preservative. Soil analyzed wet weight

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Poison B ☐ Skin Irritant ☐ Flammable ☐ Flammable ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments: Rate is per previous contract

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
SWakefield	GEOSYNTEC	10-24-16 1201	Tom [illegible]		10/28/16 0925
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Seattle
5755 8th Street East

Tacoma, WA 98424
phone 253.922.2310 fax

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Joey Hickey	Site Contact: Scott Wakefield	Date: 10/24/2016	COC No:
Geosyntec Consultants	Tel/Fax: 971-271-5897	Lab Contact:	Carrier:	5 of 13 COCs
621 SW Morrison Street, Suite 600	Analysis Turnaround Time			Sampler: SWakefield
Portland, Oregon 97205	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
(971) 271-5897 Phone	TAT if different from Below _____			Walk-in Client:
(971) 271-5884 FAX	☑ 2 weeks			Lab Sampling:
Project Name: Midway Soil Sampling 2016	☐ 1 week			
Site: Midway Atoll	☐ 2 days			Job / SDG No.:
P O # PNG0710	☐ 1 day			

	CLIENT SAMPLE IDENTIFICATION	SAMPLE DEPTH	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 6010 (Pb)	Sample Specific Notes:
105	502 P102 0-2"	0-2"	10/9/16	1251	C	Soil	1			x	No preservative. Soil analyzed wet weight
106	502 P102 0-2" DUP	0-2"	10/9/16	1251	C	Soil	1			x	No preservative. Soil analyzed wet weight
107	502 P103 0-2"	0-2"	10/9/16	1302	C	Soil	1			x	No preservative. Soil analyzed wet weight
108	502 P103 0-2" DUP	0-2"	10/9/16	1302	C	Soil	1			x	No preservative. Soil analyzed wet weight
109	2411 P100 0-2"	0-2"	10/9/16	1401	C	Soil	1			x	No preservative. Soil analyzed wet weight
110	2411 P100 0-2" DUP	0-2"	10/9/16	1401	C	Soil	1			x	No preservative. Soil analyzed wet weight
111	2411 P101 0-2"	0-2"	10/9/16	1408	C	Soil	1			x	No preservative. Soil analyzed wet weight
112	2411 P101 0-2" DUP	0-2"	10/9/16	1408	C	Soil	1			x	No preservative. Soil analyzed wet weight
113	3509 P100 0-2"	0-2"	10/9/16	1507	C	Soil	1			x	No preservative. Soil analyzed wet weight
114	3509 P100 0-2" DUP	0-2"	10/9/16	1507	C	Soil	1			x	No preservative. Soil analyzed wet weight
115	3509 P101 0-2"	0-2"	10/9/16	1512	C	Soil	1			x	No preservative. Soil analyzed wet weight
116	3509 P101 0-2" DUP	0-2"	10/9/16	1512	C	Soil	1			x	No preservative. Soil analyzed wet weight
117	3511 P100 0-2"	0-2"	10/9/16	1541	C	Soil	1			x	No preservative. Soil analyzed wet weight
118	3511 P100 0-2" DUP	0-2"	10/9/16	1541	C	Soil	1			x	No preservative. Soil analyzed wet weight
119	3511 P101 0-2"	0-2"	10/9/16	1550	C	Soil	1			x	No preservative. Soil analyzed wet weight
120	3511 P101 0-2" DUP	0-2"	10/9/16	1550	C	Soil	1			x	No preservative. Soil analyzed wet weight
121	5340 P100 0-2"	0-2"	10/12/16	1445	C	Soil	1			x	No preservative. Soil analyzed wet weight
122	5340 P100 0-2" DUP	0-2"	10/12/16	1445	C	Soil	1			x	No preservative. Soil analyzed wet weight
123	5340 P101 0-2"	0-2"	10/12/16	1452	C	Soil	1			x	No preservative. Soil analyzed wet weight
124	5340 P101 0-2" DUP	0-2"	10/12/16	1452	C	Soil	1			x	No preservative. Soil analyzed wet weight
125	5350 P100 0-2"	0-2"	10/12/16	1515	C	Soil	1			x	No preservative. Soil analyzed wet weight
126	5350 P100 0-2" DUP	0-2"	10/12/16	1515	C	Soil	1			x	No preservative. Soil analyzed wet weight
127	5350 P101 0-2"	0-2"	10/12/16	1523	C	Soil	1			x	No preservative. Soil analyzed wet weight
128	5350 P101 0-2" DUP	0-2"	10/12/16	1523	C	Soil	1			x	No preservative. Soil analyzed wet weight
129	200 P100 0-2"	0-2"	10/12/16	1543	C	Soil	1			x	No preservative. Soil analyzed wet weight
130	200 P100 0-2" DUP	0-2"	10/12/16	1543	C	Soil	1			x	No preservative. Soil analyzed wet weight

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Poison B ☐ Skin Irritant ☐ Flammable ☐ Flammable ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments: Rate is per previous contract

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Scott Wakefield	GEOSYNTEC	10-26-16 1201	Tom [illegible]		10/28/16 0925
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Seattle
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phone 253.922.2310 fax

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Joey Hickey	Site Contact: Scott Wakefield	Date: 10/24/2016	COC No:
Geosyntec Consultants	Tel/Fax: 971-271-5897	Lab Contact:	Carrier:	6 of 13 COCs
621 SW Morrison Street, Suite 600	Analysis Turnaround Time			Sampler: SWakefield
Portland, Oregon 97205	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
(971) 271-5897 Phone	TAT if different from Below _____			Walk-in Client:
(971) 271-5884 FAX	☑ 2 weeks			Lab Sampling:
Project Name: Midway Soil Sampling 2016	☐ 1 week			
Site: Midway Atoll	☐ 2 days			Job / SDG No.:
P O # PNG0710	☐ 1 day			

	CLIENT SAMPLE IDENTIFICATION	SAMPLE DEPTH	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 6010 (Pb)	Sample Specific Notes:
131	200 P101 0-2"	0-2"	10/12/16	1551	C	Soil	1			X	No preservative. Soil analyzed wet weight
132	200 P101 0-2" DUP	0-2"	10/12/16	1551	C	Soil	1			X	No preservative. Soil analyzed wet weight
133	3506 P100 0-2"	0-2"	10/12/16	1631	C	Soil	1			X	No preservative. Soil analyzed wet weight
134	3506 P100 0-2" DUP	0-2"	10/12/16	1631	C	Soil	1			X	No preservative. Soil analyzed wet weight
135	3506 P101 0-2"	0-2"	10/12/16	1640	C	Soil	1			X	No preservative. Soil analyzed wet weight
136	3506 P101 0-2" DUP	0-2"	10/12/16	1640	C	Soil	1			X	No preservative. Soil analyzed wet weight
137	503 P100 0-2"	0-2"	10/14/16	0846	C	Soil	1			X	No preservative. Soil analyzed wet weight
138	503 P100 0-2" DUP	0-2"	10/14/16	0846	C	Soil	1			X	No preservative. Soil analyzed wet weight
139	503 P101 0-2"	0-2"	10/14/16	0851	C	Soil	1			X	No preservative. Soil analyzed wet weight
140	503 P101 0-2" DUP	0-2"	10/14/16	0851	C	Soil	1			X	No preservative. Soil analyzed wet weight
141	9149 P100 0-2"	0-2"	10/15/16	0805	C	Soil	1			X	No preservative. Soil analyzed wet weight
142	9149 P100 0-2" DUP	0-2"	10/15/16	0805	C	Soil	1			X	No preservative. Soil analyzed wet weight
143	9149 P101 0-2"	0-2"	10/15/16	0812	C	Soil	1			X	No preservative. Soil analyzed wet weight
144	9149 P101 0-2" DUP	0-2"	10/15/16	0812	C	Soil	1			X	No preservative. Soil analyzed wet weight
145	9149 P102 0-2"	0-2"	10/15/16	0821	C	Soil	1			X	No preservative. Soil analyzed wet weight
146	9149 P102 0-2" DUP	0-2"	10/15/16	0821	C	Soil	1			X	No preservative. Soil analyzed wet weight
147	4212 P100 0-2"	0-2"	10/15/16	1510	C	Soil	1			X	No preservative. Soil analyzed wet weight
148	4214 P100 0-2" DUP	0-2"	10/15/16	1510	C	Soil	1			X	No preservative. Soil analyzed wet weight
149	4214 P1 0-6"	0-6"	10/15/16	1517	C	Soil	1			X	No preservative. Soil analyzed wet weight
150	4214 P2 0-6"	0-6"	10/15/16	1526	C	Soil	1			X	No preservative. Soil analyzed wet weight
151	S29 P1 0-6"	0-6"	10/16/16	0725	C	Soil	1			X	No preservative. Soil analyzed wet weight
152	S29 P2 0-6"	0-6"	10/16/16	0736	C	Soil	1			X	No preservative. Soil analyzed wet weight
153	S29 P3 0-6"	0-6"	10/16/16	0744	C	Soil	1			X	No preservative. Soil analyzed wet weight
154	S29 P4 0-6"	0-6"	10/16/16	0754	C	Soil	1			X	No preservative. Soil analyzed wet weight
155	S29 P5 0-6"	0-6"	10/16/16	0801	C	Soil	1			X	No preservative. Soil analyzed wet weight
156	S29 P6 0-6"	0-6"	10/16/16	0811	C	Soil	1			X	No preservative. Soil analyzed wet weight

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Poison B ☐ Skin Irritant ☐ Flammable ☐ Flammable ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments: Rate is per previous contract

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
S. Wakefield	GEOSYNTEC	10/24/16 1201	Tom Blankenship		10/28/16 0925
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Joey Hickey	Site Contact: Scott Wakefield	Date: 10/24/2016	COC No:
Geosyntec Consultants	Tel/Fax: 971-271-5897	Lab Contact:	Carrier:	7 of 13 COCs
621 SW Morrison Street, Suite 600	Analysis Turnaround Time			Sampler: Swakefield
Portland, Oregon 97205	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
(971) 271-5897 Phone	TAT if different from Below _____			Walk-in Client:
(971) 271-5884 FAX	☑ 2 weeks			Lab Sampling:
Project Name: Midway Soil Sampling 2016	☐ 1 week			
Site: Midway Atoll	☐ 2 days			Job / SDG No.:
P O # PNG0710	☐ 1 day			

	CLIENT SAMPLE IDENTIFICATION	SAMPLE DEPTH	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 6010 (Pb)	Sample Specific Notes:
157	S29 P7 0-6"	0-6"	10/16/16	0820	C	Soil	1			X	No preservative. Soil analyzed wet weight
158	S29 P8 0-6"	0-6"	10/16/16	0828	C	Soil	1			X	No preservative. Soil analyzed wet weight
159	S29 P8 0-6" DUP	0-6"	10/16/16	0828	C	Soil	1			X	No preservative. Soil analyzed wet weight
160	S29 P9 0-6"	0-6"	10/16/16	0845	C	Soil	1			X	No preservative. Soil analyzed wet weight
161	PIPE P1 0-6"	0-6"	10/16/16	1015	C	Soil	1			X	No preservative. Soil analyzed wet weight
162	PIPE P2 0-6"	0-6"	10/16/16	1021	C	Soil	1			X	No preservative. Soil analyzed wet weight
163	PIPE P3 0-6"	0-6"	10/16/16	1030	C	Soil	1			X	No preservative. Soil analyzed wet weight
164	PIPE P4 0-6"	0-6"	10/16/16	1045	C	Soil	1			X	No preservative. Soil analyzed wet weight
165	PIPE P5 0-6"	0-6"	10/16/16	1056	C	Soil	1			X	No preservative. Soil analyzed wet weight
166	PIPE P6 0-6"	0-6"	10/16/16	1105	C	Soil	1			X	No preservative. Soil analyzed wet weight
167	PIPE P7 0-6"	0-6"	10/16/16	1115	C	Soil	1			X	No preservative. Soil analyzed wet weight
168	PIPE P8 0-6"	0-6"	10/16/16	1122	C	Soil	1			X	No preservative. Soil analyzed wet weight
169	PIPE P9 0-6"	0-6"	10/16/16	1131	C	Soil	1			X	No preservative. Soil analyzed wet weight
170	PIPE P10 0-6"	0-6"	10/16/16	1142	C	Soil	1			X	No preservative. Soil analyzed wet weight
171	PIPE P11 0-6"	0-6"	10/16/16	1151	C	Soil	1			X	No preservative. Soil analyzed wet weight
172	PIPE P12 0-6"	0-6"	10/16/16	1159	C	Soil	1			X	No preservative. Soil analyzed wet weight
173	PIPE P13 0-6"	0-6"	10/16/16	1211	C	Soil	1			X	No preservative. Soil analyzed wet weight
174	PIPE P14 0-6"	0-6"	10/16/16	1220	C	Soil	1			X	No preservative. Soil analyzed wet weight
175	PIPE P15 0-6"	0-6"	10/16/16	1229	C	Soil	1			X	No preservative. Soil analyzed wet weight
176	PIPE P16 0-6"	0-6"	10/16/16	1236	C	Soil	1			X	No preservative. Soil analyzed wet weight
177	PIPE P17 0-6"	0-6"	10/16/16	1244	C	Soil	1			X	No preservative. Soil analyzed wet weight
178	PIPE P18 0-6"	0-6"	10/16/16	1253	C	Soil	1			X	No preservative. Soil analyzed wet weight
179	PIPE P19 0-6"	0-6"	10/16/16	1306	C	Soil	1			X	No preservative. Soil analyzed wet weight
180	PIPE P20 0-6"	0-6"	10/16/16	1315	C	Soil	1			X	No preservative. Soil analyzed wet weight
181	PIPE P21 0-6"	0-6"	10/16/16	1324	C	Soil	1			X	No preservative. Soil analyzed wet weight
182	PIPE P22 0-6"	0-6"	10/16/16	1337	C	Soil	1			X	No preservative. Soil analyzed wet weight

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Poison B ☐ Skin Irritant ☐ Flammable ☐ Flammable ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments: Rate is per previous contract

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Scott Wakefield	GEOSYNTEC	10-24-16 1201	Tom Blanton		10/28/16 0925
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Joey Hickey	Site Contact: Scott Wakefield	Date: 10/24/2016	COC No:
Geosyntec Consultants	Tel/Fax: 971-271-5897	Lab Contact:	Carrier:	8 of 13 COCs
621 SW Morrison Street, Suite 600	Analysis Turnaround Time			Sampler: SWakefield
Portland, Oregon 97205	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
(971) 271-5897 Phone	TAT if different from Below _____			Walk-in Client:
(971) 271-5884 FAX	☑ 2 weeks			Lab Sampling:
Project Name: Midway Soil Sampling 2016	☐ 1 week			
Site: Midway Atoll	☐ 2 days			Job / SDG No.:
P O # PNG0710	☐ 1 day			

	CLIENT SAMPLE IDENTIFICATION	SAMPLE DEPTH	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	EPA 6010 (Pb)	Sample Specific Notes:
183	PIPE P23 0-6"	0-6"	10/16/16	1345	C	Soil	1			X	No preservative. Soil analyzed wet weight
184	PIPE P24 0-6"	0-6"	10/16/16	1353	C	Soil	1			X	No preservative. Soil analyzed wet weight
185	PIPE P24 0-6" DUP	0-6"	10/16/16	1353	C	Soil	1			X	No preservative. Soil analyzed wet weight
186	Bollard P1 MID 0-6"	0-6"	10/16/16	1415	C	Soil	1			X	No preservative. Soil analyzed wet weight
187	Bollard P2 NEAR 0-6"	0-6"	10/16/16	1421	C	Soil	1			X	No preservative. Soil analyzed wet weight
188	3127W P7 0-6"	0-6"	10/16/16	1540	C	Soil	1			X	No preservative. Soil analyzed wet weight
189	3127W P7 12-18"	12-18"	10/16/16	1540	G	Soil	1			X	No preservative. Soil analyzed wet weight
190	3127W P7 24-30"	24-30"	10/16/16	1540	G	Soil	1			X	No preservative. Soil analyzed wet weight
191	3127W P8 0-6"	0-6"	10/16/16	1617	C	Soil	1			X	No preservative. Soil analyzed wet weight
192	3127W P8 12-18"	12-18"	10/16/16	1617	G	Soil	1			X	No preservative. Soil analyzed wet weight
193	3127W P8 24-30"	24-30"	10/16/16	1617	G	Soil	1			X	No preservative. Soil analyzed wet weight
194	340 P100 0-2"	0-2"	10/17/16	1040	C	Soil	1			X	No preservative. Soil analyzed wet weight
195	340 P100 0-2" DUP	0-2"	10/17/16	1040	C	Soil	1			X	No preservative. Soil analyzed wet weight
196	340 P101 0-2"	0-2"	10/17/16	1045	C	Soil	1			X	No preservative. Soil analyzed wet weight
197	340 P101 0-2" DUP	0-2"	10/17/16	1045	C	Soil	1			X	No preservative. Soil analyzed wet weight
198	5301 P100 0-2"	0-2"	10/17/16	1350	C	Soil	1			X	No preservative. Soil analyzed wet weight
199	5301 P100 0-2" DUP	0-2"	10/17/16	1350	C	Soil	1			X	No preservative. Soil analyzed wet weight
200	5301 P101 0-2"	0-2"	10/17/16	1401	C	Soil	1			X	No preservative. Soil analyzed wet weight
201	5301 P101 0-2" DUP	0-2"	10/17/16	1401	C	Soil	1			X	No preservative. Soil analyzed wet weight
202	5301 P102 0-2"	0-2"	10/17/16	1409	C	Soil	1			X	No preservative. Soil analyzed wet weight
203	5301 P102 0-2" DUP	0-2"	10/17/16	1409	C	Soil	1			X	No preservative. Soil analyzed wet weight
204	5301 P103 0-2"	0-2"	10/17/16	1416	C	Soil	1			X	No preservative. Soil analyzed wet weight
205	5301 P103 0-2" DUP	0-2"	10/17/16	1416	C	Soil	1			X	No preservative. Soil analyzed wet weight
206	4213 P1 0-6"	0-6"	10/19/16	1330	C	Soil	1			X	No preservative. Soil analyzed wet weight
207	4213 P1 12-18"	12-18"	10/19/16	1330	G	Soil	1			X	No preservative. Soil analyzed wet weight
208	4213 P1 24-30"	24-30"	10/19/16	1300	G	Soil	1			X	No preservative. Soil analyzed wet weight

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Poison B ☐ Skin Irritant ☐ Flammable ☐ Flammable ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments: Rate is per previous contract

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Scott Wakefield	Geosyntec	10-24-16 1701	Tom Blanton		10/28/16 0925
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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Tacoma, WA 98424
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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Joey Hickey	Site Contact: Scott Wakefield	Date: 10/24/2016	COC No:
Geosyntec Consultants	Tel/Fax: 971-271-5897	Lab Contact:	Carrier:	9 of 13 COCs
621 SW Morrison Street, Suite 600	Analysis Turnaround Time			Sampler: SWakefield
Portland, Oregon 97205	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
(971) 271-5897 Phone	TAT if different from Below _____			Walk-in Client:
(971) 271-5884 FAX	☑ 2 weeks			Lab Sampling:
Project Name: Midway Soil Sampling 2016	☐ 1 week			
Site: Midway Atoll	☐ 2 days			Job / SDG No.:
P O # PNG0710	☐ 1 day			

	CLIENT SAMPLE IDENTIFICATION	SAMPLE DEPTH	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	EPA 6010 (Pb)	Sample Specific Notes:
209	4213 P2 0-6"	0-6"	10/19/16	1420	C	Soil	1			X	No preservative. Soil analyzed wet weight
210	4213 P2 12-18"	12-18"	10/19/16	1420	G	Soil	1			X	No preservative. Soil analyzed wet weight
211	4213 P2 24-30"	24-30"	10/19/16	1420	G	Soil	1			X	No preservative. Soil analyzed wet weight
212	4213 P3 0-6"	0-6"	10/19/16	1450	C	Soil	1			X	No preservative. Soil analyzed wet weight
213	4213 P3 12-18"	12-18"	10/19/16	1450	G	Soil	1			X	No preservative. Soil analyzed wet weight
214	4213 P3 24-30"	24-30"	10/19/16	1450	G	Soil	1			X	No preservative. Soil analyzed wet weight
215	4213 P3 0-6" DUP	0-6"	10/19/16	1450	C	Soil	1			X	No preservative. Soil analyzed wet weight
216	4213 P3 12-18" DUP	12-18"	10/19/16	1450	G	Soil	1			X	No preservative. Soil analyzed wet weight
217	4213 P3 24-30" DUP	24-30"	10/19/16	1450	G	Soil	1			X	No preservative. Soil analyzed wet weight
218	4213 P4 0-6"	0-6"	10/19/16	1540	C	Soil	1			X	No preservative. Soil analyzed wet weight
219	4213 P4 12-18"	12-18"	10/19/16	1540	G	Soil	1			X	No preservative. Soil analyzed wet weight
220	4213 P4 24-30"	24-30"	10/19/16	1540	G	Soil	1			X	No preservative. Soil analyzed wet weight
221	4213 P5 0-6"	0-6"	10/19/16	1615	C	Soil	1			X	No preservative. Soil analyzed wet weight
222	4213 P5 12-18"	12-18"	10/19/16	1615	G	Soil	1			X	No preservative. Soil analyzed wet weight
223	4213 P5 24-30"	24-30"	10/19/16	1615	G	Soil	1			X	No preservative. Soil analyzed wet weight
224	4213 P6 0-6"	0-6"	10/19/16	1655	C	Soil	1			X	No preservative. Soil analyzed wet weight
225	4213 P6 12-18"	12-18"	10/19/16	1655	G	Soil	1			X	No preservative. Soil analyzed wet weight
226	4213 P6 24-30"	24-30"	10/19/16	1655	G	Soil	1			X	No preservative. Soil analyzed wet weight
227	4205 P1 0-6"	0-6"	10/20/16	1450	C	Soil	1			X	No preservative. Soil analyzed wet weight
228	4205 P1 12-18"	12-18"	10/20/16	1450	G	Soil	1			X	No preservative. Soil analyzed wet weight
229	4205 P1 24-30"	24-30"	10/20/16	1450	G	Soil	1			X	No preservative. Soil analyzed wet weight
230	4205 P1 30-36"	30-36"	10/20/16	1450	G	Soil	1			X	No preservative. Soil analyzed wet weight
231	4205 P2 0-6"	0-6"	10/20/16	1531	C	Soil	1			X	No preservative. Soil analyzed wet weight
232	4205 P2 12-18"	12-18"	10/20/16	1531	G	Soil	1			X	No preservative. Soil analyzed wet weight
233	4205 P2 24-30"	24-30"	10/20/16	1531	G	Soil	1			X	No preservative. Soil analyzed wet weight
234	4205 P3 0-6"	0-6"	10/20/16	1615	C	Soil	1			X	No preservative. Soil analyzed wet weight

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Poison B ☐ Skin Irritant ☐ Flammable ☐ Flammable ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments: Rate is per previous contract

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Scott Wakefield	GEOSYNTEC	10-24-16 1201	Tom Blanton		10/28/16 0925
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Seattle
5755 8th Street East

Tacoma, WA 98424
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Chain of Custody Record

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(971) 271-5884 FAX	☑ 2 weeks			Lab Sampling:
Project Name: Midway Soil Sampling 2016	☐ 1 week			
Site: Midway Atoll	☐ 2 days			Job / SDG No.:
P O # PNG0710	☐ 1 day			

	CLIENT SAMPLE IDENTIFICATION	SAMPLE DEPTH	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 6010 (Pb)	Sample Specific Notes:
235	4205 P3 12-18"	12-18"	10/20/16	1615	G	Soil	1			X	No preservative. Soil analyzed wet weight
236	4205 P3 24-30"	24-30"	10/20/16	1615	G	Soil	1			X	No preservative. Soil analyzed wet weight
237	4205 P4 0-6"	0-6"	10/20/16	1644	C	Soil	1			X	No preservative. Soil analyzed wet weight
238	4205 P4 12-18"	12-18"	10/20/16	1644	G	Soil	1			X	No preservative. Soil analyzed wet weight
239	4205 P4 24-30"	24-30"	10/20/16	1644	G	Soil	1			X	No preservative. Soil analyzed wet weight
240	4206 P1 0-6"	0-6"	10/21/16	1106	C	Soil	1			X	No preservative. Soil analyzed wet weight
241	4206 P1 12-18"	12-18"	10/21/16	1106	G	Soil	1			X	No preservative. Soil analyzed wet weight
242	4206 P1 24-30"	24-30"	10/21/16	1106	G	Soil	1			X	No preservative. Soil analyzed wet weight
243	4206 P2 0-6"	0-6"	10/21/16	1225	C	Soil	1			X	No preservative. Soil analyzed wet weight
244	4206 P2 12-18"	12-18"	10/21/16	1225	G	Soil	1			X	No preservative. Soil analyzed wet weight
245	4206 P2 24-30"	24-30"	10/21/16	1225	G	Soil	1			X	No preservative. Soil analyzed wet weight
246	4206 P3 0-6"	0-6"	10/21/16	1310	C	Soil	1			X	No preservative. Soil analyzed wet weight
247	4206 P3 12-18"	12-18"	10/21/16	1310	G	Soil	1			X	No preservative. Soil analyzed wet weight
248	4206 P3 24-30"	24-30"	10/21/16	1310	G	Soil	1			X	No preservative. Soil analyzed wet weight
249	4206 P4 0-6"	0-6"	10/21/16	1356	C	Soil	1			X	No preservative. Soil analyzed wet weight
250	4206 P4 12-18"	12-18"	10/21/16	1356	G	Soil	1			X	No preservative. Soil analyzed wet weight
251	4206 P4 24-30"	24-30"	10/21/16	1356	G	Soil	1			X	No preservative. Soil analyzed wet weight
252	4207 P1 0-6"	0-6"	10/21/16	1449	C	Soil	1			X	No preservative. Soil analyzed wet weight
253	4207 P1 12-18"	12-18"	10/21/16	1449	G	Soil	1			X	No preservative. Soil analyzed wet weight
254	4207 P1 24-30"	24-30"	10/21/16	1449	G	Soil	1			X	No preservative. Soil analyzed wet weight
255	4207 P2 0-6"	0-6"	10/22/16	0856	C	Soil	1			X	No preservative. Soil analyzed wet weight
256	4207 P2 12-18"	12-18"	10/22/16	0856	G	Soil	1			X	No preservative. Soil analyzed wet weight
257	4207 P2 24-30"	24-30"	10/22/16	0856	G	Soil	1			X	No preservative. Soil analyzed wet weight
258	4207 P3 0-6"	0-6"	10/22/16	1011	C	Soil	1			X	No preservative. Soil analyzed wet weight
259	4207 P3 12-18"	12-18"	10/22/16	1011	G	Soil	1			X	No preservative. Soil analyzed wet weight
260	4207 P3 24-30"	24-30"	10/22/16	1011	G	Soil	1			X	No preservative. Soil analyzed wet weight

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other _____

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Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	GEOSYNTEC	10-26-16 1201	[signature]		10/26/16 0925
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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Chain of Custody Record

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Client Contact	Project Manager: Joey Hickey	Site Contact: Scott Wakefield	Date: 10/24/2016	COC No:
Geosyntec Consultants	Tel/Fax: 971-271-5897	Lab Contact:	Carrier:	11 of 13 COCs
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(971) 271-5884 FAX	☑ 2 weeks			Lab Sampling:
Project Name: Midway Soil Sampling 2016	☐ 1 week			
Site: Midway Atoll	☐ 2 days			Job / SDG No.:
P O # PNG0710	☐ 1 day			

	CLIENT SAMPLE IDENTIFICATION	SAMPLE DEPTH	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 6010 (Pb)	Sample Specific Notes:
261	4207 P3 0-6" DUP	0-6"	10/22/16	1011	C	Soil	1			X	No preservative. Soil analyzed wet weight
262	4207 P3 12-18" DUP	12-18"	10/22/16	1011	G	Soil	1			X	No preservative. Soil analyzed wet weight
263	4207 P3 24-30" DUP	24-30"	10/22/16	1011	G	Soil	1			X	No preservative. Soil analyzed wet weight
264	4207 P4 0-6"	0-6"	10/22/16	1042	C	Soil	1			X	No preservative. Soil analyzed wet weight
265	4207 P4 12-18"	12-18"	10/22/16	1042	G	Soil	1			X	No preservative. Soil analyzed wet weight
266	4207 P4 24-30"	24-30"	10/22/16	1042	G	Soil	1			X	No preservative. Soil analyzed wet weight
267	5303 NW A 0-2"	0-2"	10/21/16	1559	C	Soil	1			X	No preservative. Soil analyzed wet weight
268	5303 NW A 0-2" DUP	0-2"	10/21/16	1559	C	Soil	1			X	No preservative. Soil analyzed wet weight
269	5303 NW B 0-2"	0-2"	10/21/16	1611	C	Soil	1			X	No preservative. Soil analyzed wet weight
270	5303 NW B 0-2" DUP	0-2"	10/21/16	1611	C	Soil	1			X	No preservative. Soil analyzed wet weight
271	5303 NW C 0-2"	0-2"	10/21/16	1620	C	Soil	1			X	No preservative. Soil analyzed wet weight
272	5303 NW C 0-2" DUP	0-2"	10/21/16	1620	C	Soil	1			X	No preservative. Soil analyzed wet weight
273	5303 NW D 0-2"	0-2"	10/21/16	1630	C	Soil	1			X	No preservative. Soil analyzed wet weight
274	5303 NW D 0-2" DUP	0-2"	10/21/16	1630	C	Soil	1			X	No preservative. Soil analyzed wet weight
275	5303 E A 0-2"	0-2"	10/22/16	0749	C	Soil	1			X	No preservative. Soil analyzed wet weight
276	5303 E A 0-2" DUP	0-2"	10/22/16	0749	C	Soil	1			X	No preservative. Soil analyzed wet weight
277	5303 E B 0-2"	0-2"	10/22/16	0756	C	Soil	1			X	No preservative. Soil analyzed wet weight
278	5303 E B 0-2" DUP	0-2"	10/22/16	0756	C	Soil	1			X	No preservative. Soil analyzed wet weight
279	5303 E C 0-2"	0-2"	10/22/16	0801	C	Soil	1			X	No preservative. Soil analyzed wet weight
280	5303 E C 0-2" DUP	0-2"	10/22/16	0801	C	Soil	1			X	No preservative. Soil analyzed wet weight
281	5303 E D 0-2"	0-2"	10/22/16	0810	C	Soil	1			X	No preservative. Soil analyzed wet weight
282	5303 E D 0-2" DUP	0-2"	10/22/16	0810	C	Soil	1			X	No preservative. Soil analyzed wet weight
283	S28 P12 0-6"	0-6"	10/22/16	1450	C	Soil	1			X	No preservative. Soil analyzed wet weight
284	S28 P13 0-6"	0-6"	10/22/16	1525	C	Soil	1			X	No preservative. Soil analyzed wet weight
285	S28 P14 0-6"	0-6"	10/22/16	1531	C	Soil	1			X	No preservative. Soil analyzed wet weight
286	S30 P11 0-6"	0-6"	10/22/16	1550	C	Soil	1			X	No preservative. Soil analyzed wet weight

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Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

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Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
SH Wilcox	GEOSYNTEC	10/26/16 1201	Tom Blank		10/28/16 0925
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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Chain of Custody Record

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Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Joey Hickey	Site Contact: Scott Wakefield	Date: 10/24/2016	COC No:
Geosyntec Consultants	Tel/Fax: 971-271-5897	Lab Contact:	Carrier:	12 of 13 COCs
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Portland, Oregon 97205	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
(971) 271-5897 Phone	TAT if different from Below _____			Walk-in Client:
(971) 271-5884 FAX	☑ 2 weeks			Lab Sampling:
Project Name: Midway Soil Sampling 2016	☐ 1 week			
Site: Midway Atoll	☐ 2 days			Job / SDG No.:
P O # PNG0710	☐ 1 day			

	CLIENT SAMPLE IDENTIFICATION	SAMPLE DEPTH	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 6010 (Pb)	Sample Specific Notes:
287	S30 P12 0-6"	0-6"	10/22/16	1558	C	Soil	1			X	No preservative. Soil analyzed wet weight
288	S30 P13 0-6"	0-6"	10/22/16	1605	C	Soil	1			X	No preservative. Soil analyzed wet weight
289	S30 P14 0-6"	0-6"	10/23/16	0810	C	Soil	1			X	No preservative. Soil analyzed wet weight
290	S30 P15 0-6"	0-6"	10/23/16	0815	C	Soil	1			X	No preservative. Soil analyzed wet weight
291	S30 P16 0-6"	0-6"	10/23/16	0819	C	Soil	1			X	No preservative. Soil analyzed wet weight
292	5304 WT P1 0-6"	0-6"	10/23/16	1146	C	Soil	1			X	No preservative. Soil analyzed wet weight
293	5304 WT P1 12-18"	12-18"	10/23/16	1146	G	Soil	1			X	No preservative. Soil analyzed wet weight
294	5304 WT P1 24-30"	24-30"	10/23/16	1146	G	Soil	1			X	No preservative. Soil analyzed wet weight
295	5304 WT P2 0-6"	0-6"	10/23/16	1231	C	Soil	1			X	No preservative. Soil analyzed wet weight
296	5304 WT P2 12-18"	12-18"	10/23/16	1231	G	Soil	1			X	No preservative. Soil analyzed wet weight
297	5304 WT P2 24-30"	24-30"	10/23/16	1231	G	Soil	1			X	No preservative. Soil analyzed wet weight
298	5305 WT P1 0-6"	0-6"	10/23/16	1336	C	Soil	1			X	No preservative. Soil analyzed wet weight
299	5305 WT P1 12-18"	12-18"	10/23/16	1336	G	Soil	1			X	No preservative. Soil analyzed wet weight
300	5305 WT P1 24-30"	24-30"	10/23/16	1336	G	Soil	1			X	No preservative. Soil analyzed wet weight
301	3126E P7 0-6"	0-6"	10/23/16	1001	C	Soil	1			X	No preservative. Soil analyzed wet weight
302	3126E P7 12-18"	12-18"	10/23/16	1001	G	Soil	1			X	No preservative. Soil analyzed wet weight
303	3126E P7 24-30"	24-30"	10/23/16	1001	G	Soil	1			X	No preservative. Soil analyzed wet weight
304	3126E P8 0-6"	0-6"	10/23/16	1017	C	Soil	1			X	No preservative. Soil analyzed wet weight
305	3126E P8 12-18"	12-18"	10/23/16	1017	G	Soil	1			X	No preservative. Soil analyzed wet weight
306	3126E P8 24-30"	24-30"	10/23/16	1017	G	Soil	1			X	No preservative. Soil analyzed wet weight
307	3126E P6 0-6"	0-6"	10/23/16	1032	C	Soil	1			X	No preservative. Soil analyzed wet weight
308	3126E P6 12-18"	12-18"	10/23/16	1032	G	Soil	1			X	No preservative. Soil analyzed wet weight
309	3126E P6 12-18"	24-30"	10/23/16	1032	G	Soil	1			X	No preservative. Soil analyzed wet weight
310	R2 Cell 3 0-6"	0-6"	10/23/16	0725	C	Soil	1			X	No preservative. Soil analyzed wet weight
311	R2 Cell 4 0-6"	0-6"	10/23/16	0739	C	Soil	1			X	No preservative. Soil analyzed wet weight
312	Equipment Rinsate	-	10/23/16	1405	500mL	Water	1			X	Nitric acid preserved

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☑ Non-Hazard ☐ Poison B ☐ Skin Irritant ☐ Flammable ☐ Unknown

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Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[illegible]	GEOSYTEC	102616 1200	Tom [illegible]		10/28/16 0925
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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Project Name: Midway Soil Sampling 2016	☐ 1 week			
Site: Midway Atoll	☐ 2 days			Job / SDG No.:
P O # PNG0710	☐ 1 day			

	CLIENT SAMPLE IDENTIFICATION	SAMPLE DEPTH	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 6010 (Pb)	Sample Specific Notes:
313	Trip Blank	-	-	-	VOA	Water	1			x	HLC preserved
314											
315											
316											
317											
318											
319											
320											
321											
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336											
337											
338											

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments

☑ Non-Hazard ☐ Poison B ☐ Skin Irritant ☐ Flammable ☐ Flammable ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments: Rate is per previous contract

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
SW Wakefield	GEOSYNTEC	10/26/16 1201	Tom [illegible]		10/28/16 0925
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 580-63706-1

Login Number: 63706
List Number: 1
Creator: Bean, Dennis L

List Source: TestAmerica Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-63706-2
Client Project/Site: PNG0515 - Midway

For:
Geosyntec Consultants, Inc.
621 Morrison Street
Suite 600
Portland, Oregon 97205

Attn: Joey Hickey

Authorized for release by:
1/9/2017 3:13:28 PM
Robert Greer, Project Manager II
(253)922-2310
robert.greer@testamericainc.com

Designee for

Sheri Cruz, Project Manager I
(253)922-2310
sheri.cruz@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Definitions 4
Client Sample Results 5
QC Sample Results 23
Chronicle 25
Certification Summary 29
Sample Summary 30
Receipt Checklists 31

Job ID: 580-63706-2

Laboratory: TestAmerica Seattle

Narrative

Job Narrative
580-63706-2

Receipt
The samples were received on 10/28/2016 9:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 14.2º C, 15.0º C and 16.2º C.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Geotechnical
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-2

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-2

Client Sample ID: R2 Cell 3 0-6" Day 1

Lab Sample ID: 580-63706-310

Date Collected: 10/23/16 07:25
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		100	31	ug/L		01/06/17 05:18	01/09/17 07:59	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-2

Client Sample ID: R2 Cell 4 0-6" Day 1

Lab Sample ID: 580-63706-311

Date Collected: 10/23/16 07:39
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		100	31	ug/L		01/06/17 05:18	01/09/17 08:10	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-2

Client Sample ID: R2 Cell 3 0-6" Day 2

Lab Sample ID: 580-63706-314

Date Collected: 10/23/16 07:25
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		100	31	ug/L		01/06/17 05:18	01/09/17 08:20	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-2

Client Sample ID: R2 Cell 3 0-6" Day 3

Lab Sample ID: 580-63706-315

Date Collected: 10/23/16 07:25
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		100	31	ug/L		01/06/17 05:18	01/09/17 08:46	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-2

Client Sample ID: R2 Cell 3 0-6" Day 4

Lab Sample ID: 580-63706-316

Date Collected: 10/23/16 07:25
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		100	31	ug/L		01/06/17 05:18	01/09/17 09:02	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-2

Client Sample ID: R2 Cell 3 0-6" Day 5

Lab Sample ID: 580-63706-317

Date Collected: 10/23/16 07:25
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		100	31	ug/L		01/06/17 05:18	01/09/17 09:18	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-2

Client Sample ID: R2 Cell 3 0-6" Day 6

Lab Sample ID: 580-63706-318

Date Collected: 10/23/16 07:25
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		100	31	ug/L		01/06/17 05:20	01/09/17 10:04	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-2

Client Sample ID: R2 Cell 3 0-6" Day 7

Lab Sample ID: 580-63706-319

Date Collected: 10/23/16 07:25
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		100	31	ug/L		01/06/17 05:20	01/09/17 10:35	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-2

Client Sample ID: R2 Cell 3 0-6" Day 8

Lab Sample ID: 580-63706-320

Date Collected: 10/23/16 07:25
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		100	31	ug/L		01/06/17 05:20	01/09/17 10:50	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-2

Client Sample ID: R2 Cell 3 0-6" Day 9

Lab Sample ID: 580-63706-321

Date Collected: 10/23/16 07:25
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		100	31	ug/L		01/06/17 05:20	01/09/17 11:06	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-2

Client Sample ID: R2 Cell 4 0-6" Day 2

Lab Sample ID: 580-63706-322

Date Collected: 10/23/16 07:39

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		100	31	ug/L		01/06/17 05:18	01/09/17 08:26	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-2

Client Sample ID: R2 Cell 4 0-6" Day 3

Lab Sample ID: 580-63706-323

Date Collected: 10/23/16 07:39
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		100	31	ug/L		01/06/17 05:18	01/09/17 08:51	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-2

Client Sample ID: R2 Cell 4 0-6" Day 4

Lab Sample ID: 580-63706-324

Date Collected: 10/23/16 07:39
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		100	31	ug/L		01/06/17 05:18	01/09/17 09:07	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-2

Client Sample ID: R2 Cell 4 0-6" Day 5

Lab Sample ID: 580-63706-325

Date Collected: 10/23/16 07:39

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		100	31	ug/L		01/06/17 05:18	01/09/17 09:23	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-2

Client Sample ID: R2 Cell 4 0-6" Day 6

Lab Sample ID: 580-63706-326

Date Collected: 10/23/16 07:39

Matrix: Solid

Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		100	31	ug/L		01/06/17 05:20	01/09/17 10:14	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-2

Client Sample ID: R2 Cell 4 0-6" Day 7

Lab Sample ID: 580-63706-327

Date Collected: 10/23/16 07:39
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		100	31	ug/L		01/06/17 05:20	01/09/17 10:40	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-2

Client Sample ID: R2 Cell 4 0-6" Day 8

Lab Sample ID: 580-63706-328

Date Collected: 10/23/16 07:39
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		100	31	ug/L		01/06/17 05:20	01/09/17 10:56	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-2

Client Sample ID: R2 Cell 4 0-6" Day 9

Lab Sample ID: 580-63706-329

Date Collected: 10/23/16 07:39
Matrix: Solid
Date Received: 10/28/16 09:25

Method: 6010C - Metals (ICP) - Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		100	31	ug/L		01/06/17 05:20	01/09/17 11:11	1

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-2

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 180-199158/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 199360 — **Prep Batch: 199158**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		10	3.1	ug/L		01/06/17 05:16	01/09/17 07:39	1

Lab Sample ID: LCS 180-199158/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 199360 — **Prep Batch: 199158**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	500	470		ug/L		94	80 - 120

Lab Sample ID: LCSD 180-199158/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 199360 — **Prep Batch: 199158**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	500	474		ug/L		95	80 - 120	1	20

Lab Sample ID: MB 180-199159/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 199360 — **Prep Batch: 199159**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		10	3.1	ug/L		01/06/17 05:20	01/09/17 09:43	1

Lab Sample ID: LCS 180-199159/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 199360 — **Prep Batch: 199159**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	500	460		ug/L		92	80 - 120

Lab Sample ID: LCSD 180-199159/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 199360 — **Prep Batch: 199159**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	500	461		ug/L		92	80 - 120	0	20

Lab Sample ID: LB 180-196346/1-B — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Leach**
Analysis Batch: 199360 — **Prep Batch: 199158**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		100	31	ug/L		01/06/17 05:18	01/09/17 07:54	1

Lab Sample ID: LB 180-199109/1-B — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Leach**
Analysis Batch: 199360 — **Prep Batch: 199158**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		100	31	ug/L		01/06/17 05:18	01/09/17 08:15	1

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-2

Lab Sample ID: LB 180-199112/1-B — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Leach**
Analysis Batch: 199360 — **Prep Batch: 199158**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		100	31	ug/L		01/06/17 05:18	01/09/17 08:41	1

Lab Sample ID: LB 180-199113/1-B — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Leach**
Analysis Batch: 199360 — **Prep Batch: 199158**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		100	31	ug/L		01/06/17 05:18	01/09/17 08:57	1

Lab Sample ID: LB 180-199114/1-B — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Leach**
Analysis Batch: 199360 — **Prep Batch: 199158**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		100	31	ug/L		01/06/17 05:18	01/09/17 09:12	1

Lab Sample ID: LB 180-199115/1-B — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Leach**
Analysis Batch: 199360 — **Prep Batch: 199159**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		100	31	ug/L		01/06/17 05:20	01/09/17 09:58	1

Lab Sample ID: LB 180-199117/1-B — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Leach**
Analysis Batch: 199360 — **Prep Batch: 199159**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		100	31	ug/L		01/06/17 05:20	01/09/17 10:29	1

Lab Sample ID: LB 180-199118/1-B — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Leach**
Analysis Batch: 199360 — **Prep Batch: 199159**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		100	31	ug/L		01/06/17 05:20	01/09/17 10:45	1

Lab Sample ID: LB 180-199120/1-B — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Leach**
Analysis Batch: 199360 — **Prep Batch: 199159**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		100	31	ug/L		01/06/17 05:20	01/09/17 11:01	1

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-2

Client Sample ID: R2 Cell 3 0-6" Day 1 — Lab Sample ID: 580-63706-310

Date Collected: 10/23/16 07:25 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1320			196346	12/05/16 12:32	JPM	TAL PIT
Leach	Prep	3010A			199158	01/06/17 05:18	RJR	TAL PIT
Leach	Analysis	6010C		1	199360	01/09/17 07:59	RJG	TAL PIT

Client Sample ID: R2 Cell 4 0-6" Day 1 — Lab Sample ID: 580-63706-311

Date Collected: 10/23/16 07:39 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1320			196346	12/05/16 12:32	JPM	TAL PIT
Leach	Prep	3010A			199158	01/06/17 05:18	RJR	TAL PIT
Leach	Analysis	6010C		1	199360	01/09/17 08:10	RJG	TAL PIT

Client Sample ID: R2 Cell 3 0-6" Day 2 — Lab Sample ID: 580-63706-314

Date Collected: 10/23/16 07:25 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1320			199109	12/06/16 14:00	JPM	TAL PIT
Leach	Prep	3010A			199158	01/06/17 05:18	RJR	TAL PIT
Leach	Analysis	6010C		1	199360	01/09/17 08:20	RJG	TAL PIT

Client Sample ID: R2 Cell 3 0-6" Day 3 — Lab Sample ID: 580-63706-315

Date Collected: 10/23/16 07:25 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1320			199112	12/07/16 14:00	JPM	TAL PIT
Leach	Prep	3010A			199158	01/06/17 05:18	RJR	TAL PIT
Leach	Analysis	6010C		1	199360	01/09/17 08:46	RJG	TAL PIT

Client Sample ID: R2 Cell 3 0-6" Day 4 — Lab Sample ID: 580-63706-316

Date Collected: 10/23/16 07:25 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1320			199113	12/08/16 15:00	JPM	TAL PIT
Leach	Prep	3010A			199158	01/06/17 05:18	RJR	TAL PIT
Leach	Analysis	6010C		1	199360	01/09/17 09:02	RJG	TAL PIT

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-2

Client Sample ID: R2 Cell 3 0-6" Day 5 — Lab Sample ID: 580-63706-317

Date Collected: 10/23/16 07:25 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1320			199114	12/09/16 14:00	JPM	TAL PIT
Leach	Prep	3010A			199158	01/06/17 05:18	RJR	TAL PIT
Leach	Analysis	6010C		1	199360	01/09/17 09:18	RJG	TAL PIT

Client Sample ID: R2 Cell 3 0-6" Day 6 — Lab Sample ID: 580-63706-318

Date Collected: 10/23/16 07:25 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1320			199115	12/12/16 14:00	JPM	TAL PIT
Leach	Prep	3010A			199159	01/06/17 05:20	RJR	TAL PIT
Leach	Analysis	6010C		1	199360	01/09/17 10:04	RJG	TAL PIT

Client Sample ID: R2 Cell 3 0-6" Day 7 — Lab Sample ID: 580-63706-319

Date Collected: 10/23/16 07:25 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1320			199117	12/13/16 15:00	JPM	TAL PIT
Leach	Prep	3010A			199159	01/06/17 05:20	RJR	TAL PIT
Leach	Analysis	6010C		1	199360	01/09/17 10:35	RJG	TAL PIT

Client Sample ID: R2 Cell 3 0-6" Day 8 — Lab Sample ID: 580-63706-320

Date Collected: 10/23/16 07:25 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1320			199118	12/14/16 14:00	JPM	TAL PIT
Leach	Prep	3010A			199159	01/06/17 05:20	RJR	TAL PIT
Leach	Analysis	6010C		1	199360	01/09/17 10:50	RJG	TAL PIT

Client Sample ID: R2 Cell 3 0-6" Day 9 — Lab Sample ID: 580-63706-321

Date Collected: 10/23/16 07:25 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1320			199120	12/15/16 15:30	JPM	TAL PIT
Leach	Prep	3010A			199159	01/06/17 05:20	RJR	TAL PIT
Leach	Analysis	6010C		1	199360	01/09/17 11:06	RJG	TAL PIT

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-2

Client Sample ID: R2 Cell 4 0-6" Day 2 — Lab Sample ID: 580-63706-322

Date Collected: 10/23/16 07:39 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1320			199109	12/06/16 14:00	JPM	TAL PIT
Leach	Prep	3010A			199158	01/06/17 05:18	RJR	TAL PIT
Leach	Analysis	6010C		1	199360	01/09/17 08:26	RJG	TAL PIT

Client Sample ID: R2 Cell 4 0-6" Day 3 — Lab Sample ID: 580-63706-323

Date Collected: 10/23/16 07:39 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1320			199112	12/07/16 14:00	JPM	TAL PIT
Leach	Prep	3010A			199158	01/06/17 05:18	RJR	TAL PIT
Leach	Analysis	6010C		1	199360	01/09/17 08:51	RJG	TAL PIT

Client Sample ID: R2 Cell 4 0-6" Day 4 — Lab Sample ID: 580-63706-324

Date Collected: 10/23/16 07:39 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1320			199113	12/08/16 15:00	JPM	TAL PIT
Leach	Prep	3010A			199158	01/06/17 05:18	RJR	TAL PIT
Leach	Analysis	6010C		1	199360	01/09/17 09:07	RJG	TAL PIT

Client Sample ID: R2 Cell 4 0-6" Day 5 — Lab Sample ID: 580-63706-325

Date Collected: 10/23/16 07:39 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1320			199114	12/09/16 14:00	JPM	TAL PIT
Leach	Prep	3010A			199158	01/06/17 05:18	RJR	TAL PIT
Leach	Analysis	6010C		1	199360	01/09/17 09:23	RJG	TAL PIT

Client Sample ID: R2 Cell 4 0-6" Day 6 — Lab Sample ID: 580-63706-326

Date Collected: 10/23/16 07:39 — **Matrix: Solid**
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1320			199115	12/12/16 14:00	JPM	TAL PIT
Leach	Prep	3010A			199159	01/06/17 05:20	RJR	TAL PIT
Leach	Analysis	6010C		1	199360	01/09/17 10:14	RJG	TAL PIT

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-2

Client Sample ID: R2 Cell 4 0-6" Day 7

Lab Sample ID: 580-63706-327
Date Collected: 10/23/16 07:39
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1320			199117	12/13/16 15:00	JPM	TAL PIT
Leach	Prep	3010A			199159	01/06/17 05:20	RJR	TAL PIT
Leach	Analysis	6010C		1	199360	01/09/17 10:40	RJG	TAL PIT

Client Sample ID: R2 Cell 4 0-6" Day 8

Lab Sample ID: 580-63706-328
Date Collected: 10/23/16 07:39
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1320			199118	12/14/16 14:00	JPM	TAL PIT
Leach	Prep	3010A			199159	01/06/17 05:20	RJR	TAL PIT
Leach	Analysis	6010C		1	199360	01/09/17 10:56	RJG	TAL PIT

Client Sample ID: R2 Cell 4 0-6" Day 9

Lab Sample ID: 580-63706-329
Date Collected: 10/23/16 07:39
Matrix: Solid
Date Received: 10/28/16 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Leach	Leach	1320			199120	12/15/16 15:30	JPM	TAL PIT
Leach	Prep	3010A			199159	01/06/17 05:20	RJR	TAL PIT
Leach	Analysis	6010C		1	199360	01/09/17 11:11	RJG	TAL PIT

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-2

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-02-17
California	State Program	9	2901	01-31-18
L-A-B	DoD ELAP		L2236	01-19-19
L-A-B	ISO/IEC 17025		L2236	01-19-19
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-05-17
US Fish & Wildlife	Federal		LE058448-0	10-31-17
USDA	Federal		P330-14-00126	04-08-17
Washington	State Program	10	C553	02-17-17

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-17
California	State Program	9	2891	03-31-18
Connecticut	State Program	1	PH-0688	09-30-18
Florida	NELAP	4	E871008	06-30-17
Illinois	NELAP	5	200005	06-30-17
Kansas	NELAP	7	E-10350	01-31-17 *
Louisiana	NELAP	6	04041	06-30-17
New Hampshire	NELAP	1	2030	04-04-17
New Jersey	NELAP	2	PA005	06-30-17
New York	NELAP	2	11182	03-31-17
North Carolina (WW/SW)	State Program	4	434	12-31-17
Pennsylvania	NELAP	3	02-00416	04-30-17
South Carolina	State Program	4	89014	04-30-17
Texas	NELAP	6	T104704528-15-2	03-31-17
US Fish & Wildlife	Federal		LE94312A-1	10-31-17
USDA	Federal		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-17
Virginia	NELAP	3	460189	09-14-17
West Virginia DEP	State Program	3	142	01-31-17
Wisconsin	State Program	5	998027800	08-31-17

* Certification renewal pending - certification considered valid.

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: PNG0515 - Midway

TestAmerica Job ID: 580-63706-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-63706-310	R2 Cell 3 0-6" Day 1	Solid	10/23/16 07:25	10/28/16 09:25
580-63706-311	R2 Cell 4 0-6" Day 1	Solid	10/23/16 07:39	10/28/16 09:25
580-63706-314	R2 Cell 3 0-6" Day 2	Solid	10/23/16 07:25	10/28/16 09:25
580-63706-315	R2 Cell 3 0-6" Day 3	Solid	10/23/16 07:25	10/28/16 09:25
580-63706-316	R2 Cell 3 0-6" Day 4	Solid	10/23/16 07:25	10/28/16 09:25
580-63706-317	R2 Cell 3 0-6" Day 5	Solid	10/23/16 07:25	10/28/16 09:25
580-63706-318	R2 Cell 3 0-6" Day 6	Solid	10/23/16 07:25	10/28/16 09:25
580-63706-319	R2 Cell 3 0-6" Day 7	Solid	10/23/16 07:25	10/28/16 09:25
580-63706-320	R2 Cell 3 0-6" Day 8	Solid	10/23/16 07:25	10/28/16 09:25
580-63706-321	R2 Cell 3 0-6" Day 9	Solid	10/23/16 07:25	10/28/16 09:25
580-63706-322	R2 Cell 4 0-6" Day 2	Solid	10/23/16 07:39	10/28/16 09:25
580-63706-323	R2 Cell 4 0-6" Day 3	Solid	10/23/16 07:39	10/28/16 09:25
580-63706-324	R2 Cell 4 0-6" Day 4	Solid	10/23/16 07:39	10/28/16 09:25
580-63706-325	R2 Cell 4 0-6" Day 5	Solid	10/23/16 07:39	10/28/16 09:25
580-63706-326	R2 Cell 4 0-6" Day 6	Solid	10/23/16 07:39	10/28/16 09:25
580-63706-327	R2 Cell 4 0-6" Day 7	Solid	10/23/16 07:39	10/28/16 09:25
580-63706-328	R2 Cell 4 0-6" Day 8	Solid	10/23/16 07:39	10/28/16 09:25
580-63706-329	R2 Cell 4 0-6" Day 9	Solid	10/23/16 07:39	10/28/16 09:25

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 580-63706-2

Login Number: 63706
List Number: 1
Creator: Bean, Dennis L

List Source: TestAmerica Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 580-63706-2

Login Number: 63706
List Number: 2
Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh
List Creation: 12/01/16 04:39 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

DATA VALIDATION CHECKLIST
Midway Soil Sampling 2016

Completed by: Joey Hickey
Validation Date 11/20/2016
Reviewed by: Sean Ragain
Review Date 12/5/2016
Lab Report No: TestAmerica Seattle 580-63706-1

Item	*Yes*	*No*	*N/A*	*Comments / Action Taken*
Chain of Custody				
Project name provided?	x			
Sample matrix specified?	x			soil
Date and time of sampling specified for each sample?	x			
Number and size/type of containers specified?		x		The container types were not specified. There was no impact on the data, so no qualifications were applied to the data.
Preservative(s) specified?	x			Chain of custody shows no preservation other than temperature preservation
Analyses required specified? (including site specific instructions)	x			
Method of shipment specified?	x			FedEx
Signature(s), name(s) and affiliation(s) of field staff provided?	x			
Signature(s) and name(s) of recipient for lab provided?	x			
Date & time of receipt by lab provided?	x			
Samples delivered to lab within 48 hours of collection?		x		The samples were collected over various times during the 2016 field season and delivered to the laboratory in November 2016. There was no impact on the data.
Sample Receipt and Log In				
Completed CoC and log-in sheets sent to Geosyntec within 24 hours of receipt by lab?	x			
Cooler temperature $\leq 4 \pm 2$ ºC?		x		Due to the remote nature of the site, the samples were not stored on ice during the project. They were shipped to the laboratory with ice and received by the laboratory at temperatures below <4 degrees C. However, no qualifications were applied to the total lead data based on professional and technical judgment.
Samples arrived intact and without air bubbles for VOC samples?			x	
Custody seal intact?	x			
Field sample IDs on log-in sheets match CoC?	x			
Analytical methods and analytes match those listed in QAP:	x			
List each analytical method here. Make sure that you have specified appropriate analyte list (e.g., PP, TAL, Site Specific, etc.)				
6010B (total lead)				
Sample Results				
Results provided for all samples and analyses on CoC?	x			
Date and time of analysis is reported for all samples and QA/QC samples?	x			
Samples were analyzed within the holding time: Metals (Lead) within 180 days	x			
Units specified with reported results?	x			
Dilutions specified?	x			
RLs adjusted for dilutions?		x		No sample dilutions were performed.
Are RLs less than or equal to QAPP specified RLs except for diluted samples?	x			
Detected concentrations less than RL are reported as estimated concentrations?	x			
QA/QC Results				
Analytes not detected in method blanks?		x		Method(s) 6010B: Multiple method blanks (7 total)contained Pb above the method detection limit. This target analyte concentration was less than half the reporting limit (1/2RL); therefore, re analysis of samples was not performed.
Compounds detected in method blanks are only detected in samples at concentrations > 5x method blank concentration?		x		The estimated concentrations of lead in 13 soil samples had lead detected at less than 5x the blank detection. However, each detection was below the reporting limit and were J flagged as estimates.
Surrogate recoveries meet lab QC acceptance criteria?			x	
MS/MSD meet frequency criteria in QAP (1 in 20)?		x		MS/MSD pairs were not reported.
MS/MSD pre-spike concentration, amount added, %R and RPD reported?			x	
MS/MSD meet QC acceptance criteria in QAP?			x	
LCS/LCSD meet lab QC acceptance criteria?	x			
Laboratory duplicates meet frequency criteria in QAPP (1 in 20)?	x			
Laboratory duplicates meet lab QC acceptance criteria?	x			
Field duplicates meet frequency criteria in QAP (1 in 20)?	x			
Field duplicates meet QC acceptance criteria in QAP?		x		RPDs exceeded 35% in limited samples. Not unexpected because of the potential nugget effect when sampling soils with lead based paint chips.
Trip blanks meet frequency criteria in QAP (1/day, VOCs only)?			x	A trip blank was anlayzed for lead. Results were below the method detection limit
VOCs not detected in trip blanks?			x	
Equipment rinse blanks meet frequency criteria in QAPP?			x	An equipment blank and trip blank were reported with the data set, however it is not a QAPP requirement.
Analytes not detected in equipment rinse blanks?	x			An equipment rinse blank and trip blank were reported. Lead was not detected above the MDL in the equipment rinse blank or the trip blank.

DATA VALIDATION CHECKLIST
Midway Soil Sampling 2016

Completed by: Joey Hickey
Validation Date 11/20/2016
Reviewed by: Sean Ragain
Review Date 12/5/2016
Lab Report No: TestAmerica Seattle 580-63706-1

Item	*Yes*	*No*	*N/A*	*Comments / Action Taken*
Case Narrative				
Completely addresses any lab QC results outside QC limits?			x	
Completeness for laboratory measurements is ≥ 90%?	x			
Overall completeness is ≥ 85%?	x			
Audit/Performance Evaluation Samples				
Performance evaluation samples meet frequency criteria in QAP?			x	
Performance evaluation samples meet QC acceptance criteria in			x	
Other				
Lab report number specified?	x			
Lab report signed by lab manager?	x			
Data qualifiers used in lab report are explained in lab report?	x			
Electronic data match the lab report?	x			

Chronology of Lab Report Revisions	
Date of first lab report:	11/20/2016
Revisions - Date and nature of revisions requested:	N/A
Revisions Received:	
Revisions - Date and nature of revisions requested:	
Revisions Received:	
Date of receipt of correct and complete lab report:	

Notes:
CoC - chain-of-custody
LCS/LCSD - laboratory control spike / laboratory control spike duplicate
MS/MSD - matrix spike/matrix spike duplicate
N/A - not applicable
QAP - quality assurance plan
RL - reporting limit (or quantitation limit)
RPD - relative percent difference
%R - percent recovery

DATA VALIDATION CHECKLIST
Midway Soil Sampling 201

Completed by: Joey Hickey
Validation Date 1/9/2017
Reviewed by: Sean Ragain
Review Date 1/9/2017
Lab Report No: TestAmerica Seattle 580-54921-1

Item	*Yes*	*No*	*N/A*	*Comments / Action Taken*
Chain of Custody				
Project name provided?	x			
Sample matrix specified?	x			Soil
Date and time of sampling specified for each sample?	x			
Number and size/type of containers specified?		x		The container types were not specified. There was no impact on the data, so no qualifications were applied to the data.
Preservative(s) specified?	x			Chain of custody shows no preservation other than temperature preservation
Analyses required specified? (including site specific instructions)	x			
Method of shipment specified?	x			FedEx
Signature(s), name(s) and affiliation(s) of field staff provided?	x			
Signature(s) and name(s) of recipient for lab provided?	x			
Date & time of receipt by lab provided?	x			
Samples delivered to lab within 48 hours of collection?		x		The samples were collected over various times during the 2016 field season and delivered to the laboratory in November 2016. There was no impact on the data.
Sample Receipt and Log In				
Completed CoC and log-in sheets sent to Geosyntec within 24 hours of receipt by lab?			x	Sending CoC and log sheets was not a QAP requirement.
Cooler temperature ≤ 4 ± 2 ºC?		x		Due to the remote nature of the site, the samples were not stored on ice during the project. They were shipped to the laboratory with ice and received by the laboratory at temperatures below <4 degrees C. However, no qualifications were applied to the total lead data based on professional and technical judgment.
Samples arrived intact and without air bubbles for VOC samples?			x	
Custody seal intact?	x			
Field sample IDs on log-in sheets match CoC?	x			
Analytical methods and analytes match those listed in QAP:	x			
List each analytical method here. Make sure that you have specified appropriate analyte list (e.g., PP, TAL, Site Specific, etc.)				
MEP Lead				
Sample Results				
Results provided for all samples and analyses on CoC?	x			
Date and time of analysis is reported for all samples and QA/QC samples?	x			
Samples were analyzed within the holding time: Metals (Lead) within 180 days	x			
Units specified with reported results?	x			
Dilutions specified?	x			
RLs adjusted for dilutions?		x		No sample dilutions were performed.
Are RLs less than or equal to QAPP specified RLs except for diluted samples?	x			
Detected concentrations less than RL are reported as estimated concentrations?	x			
QA/QC Results				
Analytes detected in method blanks?		x		
Compounds detected in method blanks are only detected in samples at concentrations > 5x method blank concentration?			x	
Surrogate recoveries meet lab QC acceptance criteria?			x	
MS/MSD meet frequency criteria in QAP (1 in 20)?		x		MS/MSD pairs were not reported.
MS/MSD pre-spike concentration, amount added, %R and RPD reported?			x	
MS/MSD meet QC acceptance criteria in QAP?			x	
LCS/LCSD meet lab QC acceptance criteria?	x			
Laboratory duplicates meet frequency criteria in QAPP (1 in 20)?	x			
Laboratory duplicates meet lab QC acceptance criteria?	x			
Field duplicates meet frequency criteria in QAP (1 in 20)?			x	
Field duplicates meet QC acceptance criteria in QAP?			x	
Trip blanks meet frequency criteria in QAP (1/day, VOCs only)?			x	
VOCs not detected in trip blanks?			x	
Equipment rinse blanks meet frequency criteria in QAPP?			x	
Analytes not detected in equipment rinse blanks?			x	

DATA VALIDATION CHECKLIST
Midway Soil Sampling 201

Completed by: Joey Hickey
Validation Date 1/9/2017
Reviewed by: Sean Ragain
Review Date 1/9/2017
Lab Report No: TestAmerica Seattle 580-54921-1

Item	*Yes*	*No*	*N/A*	*Comments / Action Taken*
Case Narrative				
Completely addresses any lab QC results outside QC limits?			x	
Completeness for laboratory measurements is ≥ 90%?	x			
Overall completeness is ≥ 85%?	x			
Audit/Performance Evaluation Samples				
Performance evaluation samples meet frequency criteria in QAP?			x	
Performance evaluation samples meet QC acceptance criteria in			x	
Other				
Lab report number specified?	x			
Lab report signed by lab manager?	x			
Data qualifiers used in lab report are explained in lab report?	x			
Electronic data match the lab report?	x			

Chronology of Lab Report Revisions	
Date of first lab report:	1/9/2017
Revisions - Date and nature of revisions requested:	N/A
Revisions Received:	
Revisions - Date and nature of revisions requested:	
Revisions Received:	
Date of receipt of correct and complete lab report:	

Notes:
CoC - chain-of-custody
LCS/LCSD - laboratory control spike / laboratory control spike duplicate
MS/MSD - matrix spike/matrix spike duplicate
N/A - not applicable
QAP - quality assurance plan
RL - reporting limit (or quantitation limit)
RPD - relative percent difference
%R - percent recovery

APPENDIX F

FIELD PROCEDURES

APPENDIX F

FIELD PROCEDURES

This appendix describes the field procedures, field quality assurance/quality control (QA/QC) protocol, and the chemical testing program to be implemented during site activities. The field activities included the following activities:

- Collection of soil samples from hand tools;
- Collection of soil from hand augers;
- Location control;
- Decontamination procedures; and
- Handling of Investigation Derived Waste (IDW).

Collection of Soil Samples Using Hand Tools

Soil samples were collected from near-surface using tools such as spades, shovels, trowels, and scoops. At each sample location, hand tools were used to remove surface soil until the desired sample depth interval was reached. At that depth, a sample was collected using a stainless steel or plastic scoop. Representative soil samples were collected using this procedure with proper care. Chrome-plated tools were not be used.

If soil sample was a discrete sample, the sample was collected soil using a clean/decontaminated stainless-steel or plastic spoon. Composite soil samples were collected using a stainless-steel or plastic spoon, and transferred to new 1 gallon Ziploc bag. The samples were mixed in the bowl to make a single sample.

Standard chain-of-custody procedures were observed during transport of the samples to the laboratory.

Collection of Soil Samples from Hand Augers

This system consists of an auger, a series of extensions, and a "T" handle. The auger is used to bore a hole to a desired sampling depth, and is then withdrawn. The sample is collected directly from the auger. The hand auger sampling procedure is summarized below:

- Attach the auger bit to a drill rod extension, and attach the "T" handle to the drill rod.
- Clear the area to be sampled of any surface debris (e.g., twigs, rocks, litter). It may be advisable to remove the first three to six inches of surface soil for an area approximately six inches in radius around the drilling location.

- Begin augering, periodically removing and depositing accumulated soils onto a plastic sheet near the hole. This prevents accidental brushing of loose material back down the borehole when removing the auger or adding drill rods. It also facilitates refilling the hole, and avoids possible contamination of the surrounding area.
- After reaching the desired depth, slowly and carefully remove the auger from the hole. When sampling directly from the auger, collect the sample after the auger is removed from the hole.
- Place the sample into a stainless steel, plastic, or other appropriate homogenization container, and mix thoroughly to obtain a homogenous sample representative of the entire sampling interval. Then, place the sample into appropriate, labeled containers and secure the caps tightly. If another sample is to be collected in the same hole, but at a greater depth, reattach the auger bit to the drill and assembly, and follow the steps above.
- Abandon the hole according to applicable regulations. Generally, shallow holes can simply be backfilled with the removed soil material.

Location Control

Geosyntec will record the position of each exploration by measuring the location to known site features.

Decontamination Procedures

The objective of the decontamination procedure was to minimize the potential for cross contamination between exploration locations and between individual samples within a specific exploration. Sampling equipment was decontaminated in accordance with the following procedures before each sampling attempt or measurement.

- Brush equipment with a wire brush, if necessary, to remove large particulate matter;
- Rinse with potable tap water;
- Wash with non-phosphate low pH solution of Citrinox® detergent and potable tap water; and
- Rinse with potable tap water.

Handling of Investigation-Derived Waste

IDW generated during the project included soil cuttings and decontamination water. Soil cuttings were placed back in the exploration in the order removed. Purge water was also discharge back to an area of the Decision Unit that is set for excavation. Disposable items,

such as sample bags, gloves and protective overalls and paper towels, were placed in plastic bags after use and deposited in trash receptacles for disposal.

Laboratory Analytical Plan

Laboratory analyses were conducted in accordance with EPA approved methods. The project utilized the laboratories accepted method detection limits as our reporting goals. All samples were analyzed for total lead in soil using EPA Method 6010 and multiple extraction procedure for lead.

APPENDIX G

R2 DRAINAGE VAULT MODIFICATION MEMO

Geosyntec consultants

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Memorandum

Date: 1 March 2017

To: Darin Leibelt – Northwest Demolition, LLC

From: Jennifer Nevius, P.E. and Greg Corcoran, P.E.

Subject: R-2 Unit Vault Backfill Construction

This memorandum has been prepared to document R-2 Unit drainage vault (vault) modifications completed during the 2016 construction season at Midway Atoll National Wildlife Refuge. Precise design measurements were not obtained due to limited access and confined space considerations. Therefore, design flexibility was required and the construction plans and specifications included several "field fit" elements. In our opinion, the construction of the vault modifications was appropriate for the intended purpose of maintaining the ability for stormwater conveyance through the vault while permitting the construction of the clean soil buttress in the vault area. Construction of the vault backfill meets the design intent outlined in the drawings, specifications and quality assurance plan referenced below.

A Geosyntec representative, Mr. Scott Wakefield, was on-site during the 2016 construction season between 9 September and 25 October 2016, and prepared detailed Daily Field Reports including notes on weather; visitors and personnel working on the project; equipment; materials; description of work; and photographs. These Daily Field Reports were transmitted to project team members, including representatives from NW Demolition and Environmental (NWD), and U.S. Fish and Wildlife Service (FWS). The intent of this memorandum is not to re-transmit the Daily Field Reports, but to summarize pertinent information regarding the construction of the vault backfill, particularly where design elements were modified. Numerous photographs documenting the construction of the system are included in the Daily Field Reports from September 8 through 24, 2016 (as summarized in Table 1). In addition, a photograph log of the vault modifications is attached to this memorandum.

The relevant construction documents regarding the vault backfill include the following:

- Construction Drawings, Midway Atoll Remediation Project, R-2 Unit, Midway Atoll National Wildlife Refuge, dated May 2015 (9 drawings);
- Technical Specifications, Midway Atoll Remediation Project, R-2 Unit, Midway Atoll National Wildlife Refuge, dated May 2015; and

- Construction Quality Assurance Plan, Removal of Lead-Based Paint from Structures and Lead Contaminated Soil, Midway Atoll National Wildlife Refuge, Midway Island, Contract No. F11PC00327, Revision 1 dated 28 May 2015.

AS-BUILT CONSTRUCTION DETAILS

The R-2 Unit vault inlet and outlet pipe diameters and vertical and horizontal positioning differed slightly than were approximated from the exterior of the vault during previous site investigations. The actual inlet and outlet pipe diameters measured to be 18 inches and 36 inches, respectively. The Rainstore3 (RS3) stacks were placed flush against the inlet and outlet as designed, however, longitudinally, the stacks were centered horizontally over the outlet. With a stack width of 40 inches, the RS3 stacks had an overlap of approximately 2 inches on each side of the outlet and approximately 9 inches and 13 inches on the east and west sides of the inlet, respectively. Vertically, the RS3 stacks were positioned with the base of the stack located approximately 2 inches below the outlet. The RS3 stacks as installed were 80 inches in height. The RS3 stacks were installed without offset between stacks, with approximately 12 inches (horizontally) of Select R-2 Unit Vault Backfill on the east side (away from the R-2 Unit, towards the eastern vault wall) and approximately 8 inches or more (horizontally) of Select R-2 Unit Vault Backfill on the west side (toward the existing concrete beam and R-2 Unit). Section 02200 of the project Technical specifications defines backfill materials; however, in general, Select R-2 Unit Vault Backfill consists of crushed concrete and clean native sand, blended to meet RS3 Manufacturer specifications. Figure 1 presents plan and profile illustrations of the RS3 system placement.

The R-2 Unit vault concrete beam separating the inlet and outlet bay from the remainder of the vault was found to be a baffle wall that did not extend to the base of the vault. General soil fill was placed beneath the concrete baffle wall base and compacted.

The R-2 Unit vault cast-in-place concrete (CIP) walls (from inlet pipe face to outlet pipe face) were measured at approximately 19.5 feet apart, slightly smaller than was measured for the concrete masonry unit (CMU) block wall on top of the CIP wall during previous site investigation. The total length of the RS3 delivered was greater than the length of the vault opening. After discussion with, and approval from, Ms. Kate Wright of Invisible Structures (RS3 Manufacturer), one row of “cups” were removed from one RS3 stack to accommodate the shorter length of the vault opening. The extra cups were used along with polyvinyl chloride (PVC) pipe pieces as horizontal spacers to maintain the position the RS3 units in latitudinal and longitudinal directions.

Holes cut in the upper two layers of geogrid facilitated installation of the three (3) PVC pipe maintenance ports installed, and geotextile “flanges” were added to prevent soil migration at the port locations. The ¼” thick steel plate cover (approximately 5 feet by 10 feet in plan dimensions) also had a hole cut for the center maintenance port access. The maintenance ports were finished within individual steel access manholes to support inspection and maintenance of the RS3 system. The PVC casing and steel manholes were set in place using 24-inch diameter and 24-inch tall forms and set in concrete. The top of the steel manhole lids were finished at

approximately 6 inches above the existing east CIP concrete vault wall, which is expected to be close to the final grade once the R-2 Unit cover is complete. The top of the 8-inch diameter PVC pipe ports was established approximately 9 inches below the top of the steel manholes and capped using an expanding plug with lockable hasp.

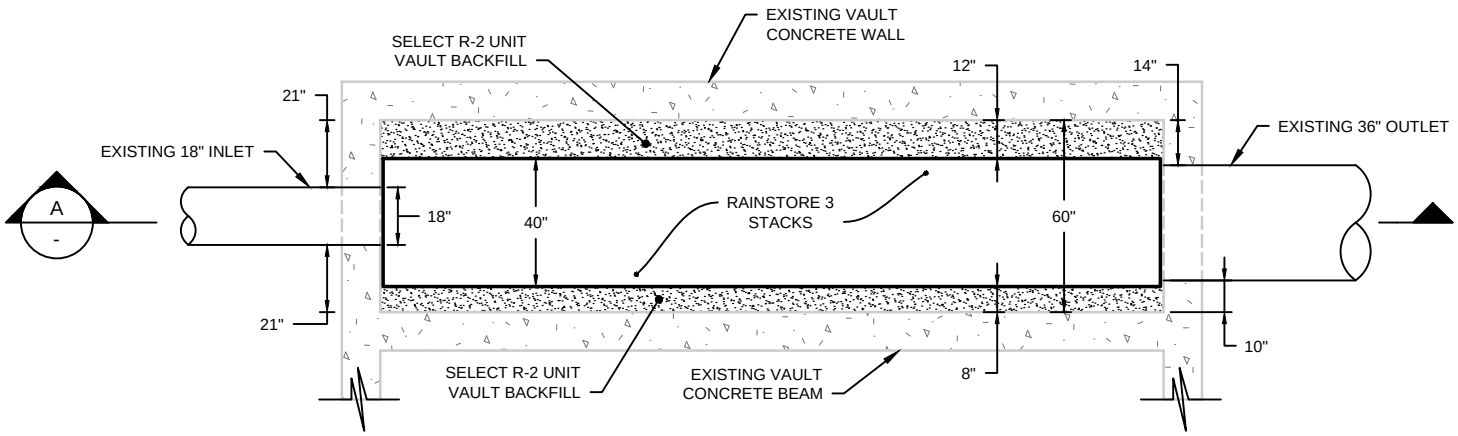
Following a small rain event on 20 October 2016, the taxiway valves were opened to verify that collective taxiway run off would flow towards the existing outfall to the south of the R-2 Unit. After removal of previously deposited sand at the outfall point, the taxiway water flowed towards the outfall as designed.

Continuing functionality of the RS3 system requires routine inspection and maintenance of the RS3 system and of the outfall as part of the inspection and maintenance of the R-2 Unit. We understand that FWS will develop and implement an operation and maintenance plan for the R-2 Unit, including the RS3 system. Inspection items may include checking the sediment and water levels within the RS3 system from the maintenance ports, flushing the RS3 system with water to remove accumulated sediments, and checking water levels and monitoring and removing sand accumulation at the ocean outfall. Previously, sand buildup between the outfall and the ocean has limited drainage of the R-2 vault. Inspection and maintenance of the RS3 system, particularly maintenance of the outfall (routine removal of sand buildup between the outfall and the ocean) is critical to functionality of the RS3 system installed as part of the R-2 Unit Vault backfill.

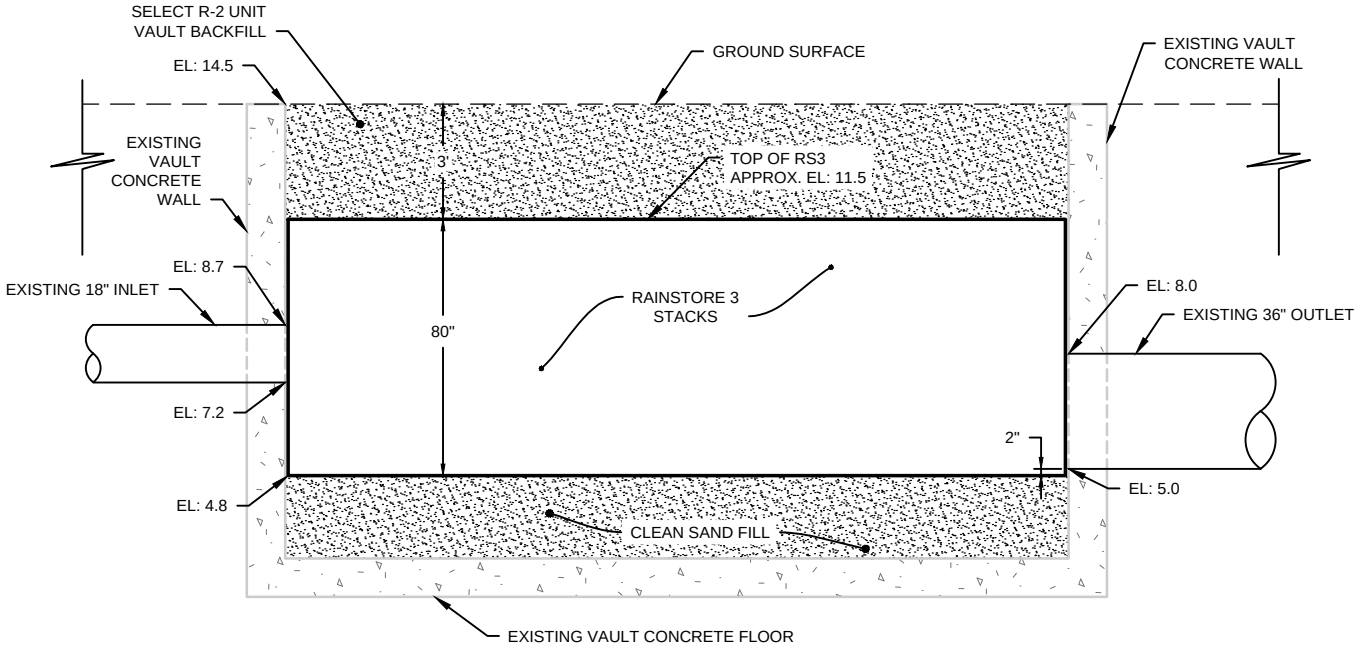
Table 1 – Summary of R-2 Unit Vault Backfill Daily Field Reports

Daily Field Report Date	Synopsis
8 September 2016	Dewatering equipment mobilized. R-2 vault dewatering begins.
9 September 2016	Materials for vault backfill mobilized to site. R-2 vault dewatering continues. Solids washed from sides of vault. Historical steel piping removed.
10 September 2016	R-2 vault cleaning and dewatering continues. Solids removed with excavator from surface. Select R-2 Unit Vault Backfill material generation started.
12 September 2016	R-2 vault cleaning and dewatering continues. Initial R-2 vault entry for cleaning and preparation for RS3 installation. Surface demolition. Select R-2 Unit Vault Backfill material generation continues.
13 September 2016	Select R-2 Unit Vault Backfill material generation continues. Native coral sand placed in R-2 vault as base for RS3.
14 September 2016	General Soil R-2 Unit Vault Backfill placement begins. Clean coral sand placement continues below RS3. Installation procedures verified and field adjusted for RS3.
15 September 2016	General Soil R-2 Unit Vault Backfill placement continues. Geogrid and geotextile placement begins. RS3 trimming. RS3 stack placement begins.
16 September 2016	General Soil R-2 Unit Vault Backfill placement continues. Select R-2 Unit Vault Backfill placement around RS3 stacks begins. Geosynthetic placement continues. RS3 stack placement completed. Maintenance ports placed.
17 September 2016	General Soil R-2 Unit Vault Backfill placement continues. Select R-2 Unit Vault Backfill placement around RS3 stacks continues.
19 September 2016	General Soil R-2 Unit Vault Backfill placement continues. Select R-2 Unit Vault Backfill placement around RS3 stacks continues. Geosynthetic placement completed. Port manhole/vault constructed.
20 September 2016	General Soil R-2 Unit Vault Backfill placement reaches initial rough grade. Select R-2 Unit Vault Backfill placement around RS3 stacks reaches initial rough grade. Site cleanup.
24 September 2016	RS3 stacks primed with hydrant water; water applied to RS3 stacks to near operating water levels.
20 October 2016	RS3 inlet and outlet valves opened for first time. Verified flow direction. Routine maintenance performed by Island personnel at outfall to remove sanded area.
24 October 2016	Photo in Daily Field Report of the taxiway drain channel recently excavated by DBSI south of the runway.

* * * * *



PLAN VIEW



ELEVATION VIEW

NOTES:

1. ALL ELEVATIONS AND DIMENSIONS ARE APPROXIMATE.
2. NOT ALL FEATURES (E.G. GEOTEXTILE, GEOGRID) SHOWN FOR CLARITY.

0 5
SCALE IN FEET

RS3 PLACEMENT DIAGRAM
R-2 UNIT VAULT BACKFILL
MIDWAY ATOLL

Geosyntec consultants

FIGURE 1

PROJECT NO: PNG0710 | FEBRUARY 2017

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Photographic Log

R-2 Unit Vault Backfill Construction, Midway 2016

Photo 1. R2 drainage vault static level at 3.25' near end of the day.

Photo 2. View north. R2 vault dewatering via blue hose into the outfall of the raising stem valve grate.

Photo 3. View north – Bldg 5303 R2 taxiway vault. Steel shaft driven pumps (left).

Photo 4. View west – Bldg 5303 R2 taxiway vault. Steel pumps, motors and piping removed.

Photo 5. View north – Bldg 5303 R2 taxiway vault. Steel pumps, motors and piping removed.

Photo 6. View south – Bldg 5303 R2 taxiway vault. Steel pumps, motors and piping removed.

Photo 7. View southeast – Bldg 5303 R2 taxiway vault muck and sediment removal.

Photo 8. View northeast – Seaplane apron operations sizing ¾" minus concrete.

Photo 9. View north – Bldg 5303 R2 taxiway vault CMU wall removal.

Photo 10. Bldg 5303 R2 Taxiway vault – Clearing out small debris in vault bottom.

Photo 11. View southwest – Bldg 5305 R2 Taxiway vault work area.

Photo 12. View north - R2 east wall abutment stockpile of clean coral sand for General R2 Vault backfill

Photo 13. View east - Bldg 5303 R2 Taxiway vault. Placement of clean backfill with mini excavator.

Photo 14. View north-ish – Bldg 5303 R2 taxiway vault begin backfill lift.

Photo 15. View north-ish – Bldg 5303 R2 taxiway vault compaction followed by next material lift.

Photo 16: View north-ish – Bldg 5303 R2 taxiway vault backfill lift plate compaction.

Photo 17: View southwest – Bldg 5303 R2 taxiway vault General Backfill lift placement with mini.

Photo 18: View north- Final grade work that is the base for the Rainstore^3 cell stacks.

Photo 19: View north – The two layers of orange geotextile are buried 1.5' deep against wall.

Photo 20: View north – Layers of geotextile long wall edges are being flanged up. Adhesive to concrete.

Photo 21: View north – Base layer of black geogrid placed atop textile to form foundation.

Photo 22: View south – End cap panels of textile are aligned and temporarily affixed.
Photo

Photo 23: View northeast – Double layer textile is oriented then 2 layers of black geogrid staged.

Photo 24: View east – Rainstore[3] stacks #1 and #2 are positioned within the prepared area.

Photo 25: View north – Rainstore[3] stacks #1 and #2 are positioned within the prepared area.

Photo 26: View south- Rainstore[3] cell stack #6 (with port relief) aligned at the 36" effluent pipe.

Photo 27: View east – Six stacks of 40” x 40” x 80” Rainstore[3] units in place.

Photo 28: View northeast – Black geogrid two-layer wrap and orange geotextile layer #1 begin.

Photo 29: View northeast – Geotextile wrap layers # 1 and #2. End cap double flange to wall and cell.

Photo 30: View east – Geotextile wrap layers # 1 and #2. End cap double flange to wall and cell.

Photo 31: View south – Geotextile layer #3 & #4 (panel 1) are being positioned to the west cell wall.

Photo 32: View south – Geotextile layer #3 & #4 (panel 2) are positioned to the top and flanged to wall.

Photo 33: View east – Lift placement of Select backfill within the 12” and 8” vault / cell space.

Photo 34: View northeast – Overview of Select backfill progress and 8” inspection port locations.

Photo 35: View southeast- Rainstore^3 cell stacks being backfilled with Select material.

Photo 36: View south – Continued lifts of Select (l) and General (r) backfill prior to level and compaction.

Photo 37: View east – Setting the ¼" steel plate on top of the Rainstore[3] assembly.

Photo 38: View east – Flanged impermeable sheeting at inspection port to horizontal surfaces.

Photo 39: View northeast- Orange geotextile flanges at inspection port pipes intersecting top of cell.

Photo 40: View east – Black geogrid layer at 3.0' below top of east concrete vault wall.

Photo 41: View east – Foil utility tape above the Rainstore[3] assembly.

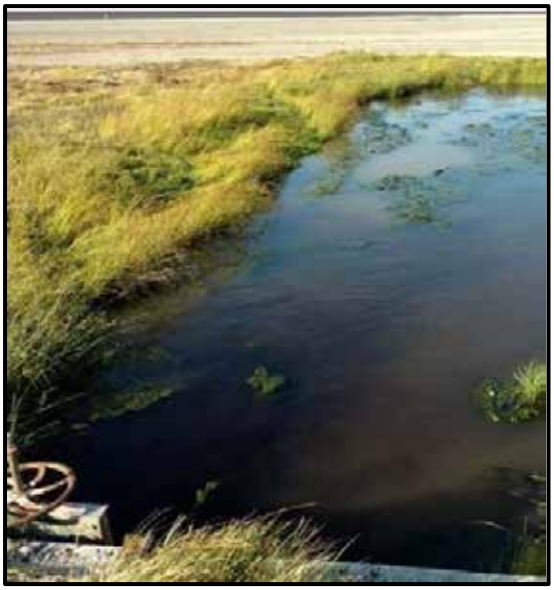
Photo 42: Setting the MON brand steel ring base for one of three 8" pvc vertical inspection ports.

Photo 43: View east – Second lift of concrete. Second geogrid layer at 1.5' below vault wall reference.

Photo 44: View east – R2 Taxiway vault Rainstore[3] installation initial rough grade.

Photo 45: View west – R2 Taxiway vault Rainstore^3 installation initial rough grade.

Photo 46: View north – R2 Taxiway vault Rainstore^3 installation initial rough grade.



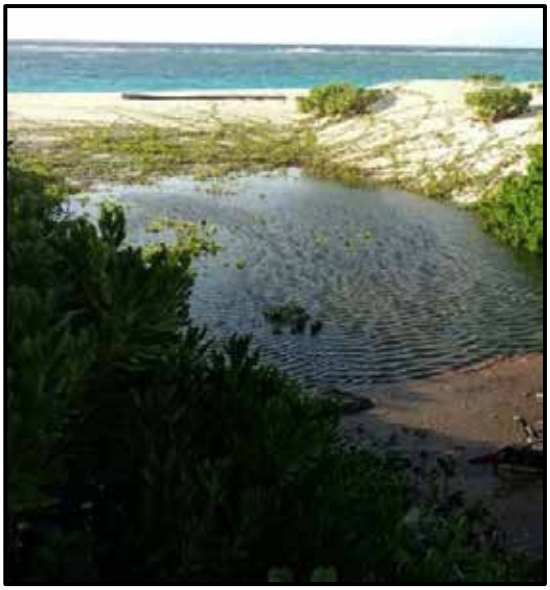


Photo 47: View west- Taxiway inlet and valve (L.) View south – Taxiway effluent prior to O&M (R.)

Photo 48: View south- Taxiway drain channel recently excavated by DBSI south of the runway.