

Deepwater Horizon/Mississippi Canyon 252 Spill

As agreed upon by the Trustees and BP, all samples collected for contaminant analysis during the sampling plan described below will be sent to Alpha Analytical or Columbia Analytical Services, unless they are designated to be archived. Samples for other analyses, if not archived, will be sent to the laboratories indicated in the plan below.

Each laboratory shall simultaneously deliver raw data, including all necessary metadata, generated as part of this work plan as a Laboratory Analytical Data Package (LADP) to the trustee Data Management Team (DMT), the Louisiana Oil Spill Coordinator's Office (LOSCO) on behalf of the State of Louisiana and to BP (or ENTRIX on behalf of BP). The electronic data deliverable (EDD) spreadsheet with pre-validated analytical results, which is a component of the complete LADP, will also be delivered to the secure FTP drop box maintained by the trustees' Data Management Team (DMT). Any preliminary data distributed to the DMT shall also be distributed to LOSCO and to BP (or ENTRIX on behalf of BP). Thereafter, the DMT will validate and perform quality assurance/quality control (QA/QC) procedures on the LADP consistent with the authorized Quality Assurance Project Plan, after which time the validated/QA/QC-ed data shall be made available simultaneously to all trustees and BP (or ENTRIX on behalf of BP). Any questions raised on the validated/QA/QC results shall be handled per the procedures in the Quality Assurance Project Plan and the issue and results shall be distributed to all parties. In the interest of maintaining one consistent data set for use by all parties, only the validated/QA/QC-ed data set released by the DMT shall be considered the consensus data set. In order to assure reliability of the consensus data and full review by the parties, no party shall publish consensus data until 7 days after such data has been made available to the parties. Also, the LADP shall not be released by the DMT, LOSCO, BP or ENTRIX prior to validation/QA/QC absent a showing of critical operational need. Should any party show a critical operational need for data prior to validation/QA/QC, any released data will be clearly marked "preliminary/un-validated" and will be made available equally to all trustees and to BP (or ENTRIX on behalf of BP).

All materials associated with the collection or analysis of samples under these protocols or pursuant to any approved work plan, including any remains of samples and including remains of extracts created during or remaining after analytical testing, must be preserved and disposed of in accordance with the preservation and disposal requirements set forth in Pretrial Orders ("PTOs") # 1, # 30, #35, # 37, #39 and #43 and any other applicable Court Orders governing tangible items that are or may be issued in MDL No. 2179 IN RE: Oil Spill by the Oil Rig "DEEPWATER HORIZON" (E.D. LA 2010). Destructive analytical testing of oil, dispersant or

sediment samples may only be conducted in accordance with PTO # 37, paragraph 11, and PTO # 39, paragraph 11 and any other applicable Court Orders governing destructive analytical testing that may be issued in MDL No. 2179 IN RE: Oil Spill by the Oil Rig "DEEPWATER HORIZON" (E.D. LA 2010). Circumstances and procedures governing preservation and disposal of sample materials by the trustees must be set forth in a written protocol that is approved by the state or federal agency whose employees or contractors are in possession or control of such materials and must comply with the provisions of PTOs # 1, # 30, #35, #37, #39 and #43.

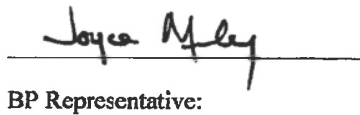
This plan will be implemented consistent with existing trustee regulations and policies. All applicable state and federal permits must be obtained prior to conducting work.

Approval of this work plan is for the purposes of obtaining data for the Natural Resource Damage Assessment (NRDA). Parties each reserve its right to produce its own independent interpretation and analysis of any data collected pursuant to this work plan.

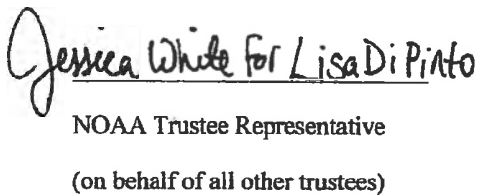
APPROVED:


Louisiana Trustee Representative:

7/6/12
Date


BP Representative:

06/17/2012
Date


NOAA Trustee Representative
(on behalf of all other trustees)

06/12/2012
Date

Mississippi Canyon 252 Spill
Oyster Sampling Transition Plan-Amendment 2:
Sediment Sample Analysis

June 5, 2012

The Oyster Technical Working Group (TWG) collected 697 sediment samples under the Oyster Sampling Transition Plan and Oyster Sampling Transition Plan Amendment 1 in the spring of 2011. These samples were originally sent to Alpha Analytical laboratory and stored in accordance with the SOP for this plan; however, as most samples had not been analyzed, the samples were transferred to Columbia Analytical Services (CAS) to help expedite the analysis.

This amendment identifies four specific changes to the analysis protocols identified in the Oyster Sampling Transition Plan:

1. Addition of TPH screening to the sediment analysis procedure,
2. Analysis of each individual sample instead of the identified composite samples,
3. Analysis of the 2-4 centimeter (cm) depth strata samples instead of archival, and
4. Total cost

To expedite sample analysis for Oyster Sampling Transition Plan sediments, TPH screening methodology was employed in a similar manner as utilized by other NRDA work plans, notably the *Submerged Oil Characterization across Multiple Habitats for Assessment of Persistent Exposures in Nearshore Sediments* (Submerged Oil Characterization Plan). The TPH screening process assessed whether or not the TPH gas chromatograms appeared to indicate the potential presence of petroleum or not. Samples indicating the potential presence of petroleum were further analyzed (GC/MS for extended PAH and qualitative biomarkers, plus TOC and grain size). A subset of samples with no obvious oil was also selected, based on proximity to samples with potential presence of petroleum. These samples also were submitted for full analysis.

The Oyster Sampling Transition Plan and Amendment 1 included sampling at approximately 95 randomly selected 600 by 600 meter sites in Louisiana and Mississippi. Sediment samples were collected at up to 4 locations within each site, with both surface (0-2 cm) and subsurface (2-4 cm) samples collected at each location. A total of 746 TPH screens were completed, which

included both depth strata.¹ Approximately 21% of the TPH samples were classified by the Trustees as having potential petroleum present (79% of the TPH samples had no obvious oil).

Based on the TPH screening results, 227 samples were selected for further analysis using a similar method to that employed by the Fish TWG for the Submerged Oil Characterization plan. Samples classified as having potential petroleum present were selected for full analysis as were a subset of the samples with no obvious oil. Within each site with a sample with potential petroleum present, the nearest sample with no obvious oil within the site (based on distance) was selected for full analysis to forensically characterize the background. If all samples from a site had no obvious oil, one sample was randomly selected for full analysis.

Cost Estimate

The revised cost estimate presented in this amendment addresses the analysis of sediment samples only, as all field work is complete. The original cost estimate for the contaminant analysis of sediment samples was \$285,000.

We estimate the total cost of the revised analytical plan for sediments, including TPH screening of all samples, and full analysis as described above of the 227 sample subset, to be \$296,750. The breakdown of this cost and the difference in cost between the new and old analytical plans is presented in the table below.

Analysis	Number of Samples	Unit Cost	Cost
TPH Screen	746	\$200	\$149, 200
Full analysis	227	\$650	\$147, 550
Total for sediment analysis			\$296, 750
Change from initial estimate			\$11, 750

¹ 697 unique samples were screened. A subset of samples (49) was screened by Alpha Analytical when they were first collected. When the TWG released all samples for TPH screen, those 49 samples were analyzed again at CAS for consistency across all samples.

The Parties acknowledge that this budget is an estimate, and that actual costs may prove to be higher due to a number of potential factors. BP's commitment to fund the costs of this work includes any additional reasonable costs within the scope of this work plan that may arise because of any contingencies. The trustees will make a good faith effort to notify BP in advance of any such contingencies.