

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.

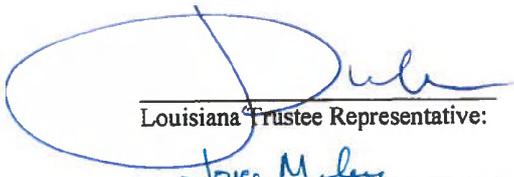
Each laboratory shall simultaneously deliver raw data, including all necessary metadata, generated as part of this work plan as a Laboratory Analytical Data Package (LADP) to the trustee Data Management Team (DMT), the Louisiana Oil Spill Coordinator's Office (LOSCO) on behalf of the State of Louisiana 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, except those consumed as a consequence of the applicable sampling or analytical process, must be retained unless and until approval is given for their disposal in accordance with the retention requirements set forth in paragraph 14 of Pretrial Order # 1 (issued August 10, 2010) 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). Such approval to dispose must be given in writing and by a person authorized to direct such action on behalf of the state or federal agency whose employees or contractors are in possession or control of such materials.

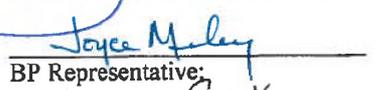
This plan will be implemented consistent with existing trustee regulations and policies. All applicable state and federal permits must be obtained prior to conducting work.

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.

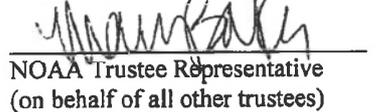
APPROVED:


Louisiana Trustee Representative:

4/17/13
Date


BP Representative:

3/21/2013
Date


NOAA Trustee Representative
(on behalf of all other trustees)

3/19/13
Date

Mississippi Canyon 252 Spill
Oyster Sampling Plan
2011 Oyster Quadrat and Sediment Sampling – Chemistry Analyses

January 18, 2013

Introduction

The Oyster Technical Working Group (“oyster working group”) collected oyster tissue and sediment samples in the fall of 2011 under the cooperative 2011 Oyster Quadrat and Sediment Sampling Plan. That plan specified that all chemistry samples would be archived, and chemistry analysis of sediment and tissue samples would be determined under a separate plan. On May 11, 2012, trustee and BP representatives agreed that all archived chemistry samples would be released for analysis, unless either the trustees or BP provided a reason to keep the samples in archive. This document presents a plan to release chemistry samples from the 2011 Oyster Quadrat and Sediment Sampling Plan for analysis.

Sample Number, Location, and Analysis

Tissue

Our records indicate that 102 tissue samples were generated from the resource collected under the 2011 Quadrat and Sediment Sampling Plan. This represents a single composite tissue sample generated at Dauphin Island Sea Lab (DISL) for each site that had live oyster resource.

Tissue samples were being archived at DISL, but were transferred to Columbia Analytical Services (CAS) in July 2012. They are currently at CAS and pending release for analysis. Tissues will be analyzed for PAH and percent lipids.

Sediment

Two surface (0-2cm) samples and one subsurface (2-4cm) sample were collected at each sampling location, with one of the surface samples designated for grainsize analysis. Up to four sampling locations were visited per site, and teams collected sediment samples at 145 sites. Samples were sent to CAS, where they are currently being held pending release for analysis. Our records indicate that there are 581 grainsize samples, 561 surface contaminant samples, and 571 subsurface contaminant samples currently at CAS. This encompasses all sample splits collected in the field. Each distinct location had three splits as described above; one surface sample for grainsize, one surface sample for contaminant analysis, and one subsurface sample for contaminant analysis.¹

¹ The original written plan called for 4 samples per site, with an estimated 596 total samples. The 596 estimate was for distinct sampling locations, and did not include the three splits of each sample. The lab holds a different number of samples for the different split types (grainsize, surface contaminant, and subsurface contaminant), and the numbers are different from the estimated 596 samples. The differences are due to what was accomplished in the field given site conditions and sampling circumstances.

The grainsize samples will be analyzed for true grainsize. All contaminant samples will first be screened for TPH to assess whether or not the TPH gas chromatograms indicate the potential presence of petroleum. All samples classified as having potential petroleum present will undergo full analysis for PAH and TOC. A subset of samples with no obvious oil present will also be chosen for full analysis following the same criteria used under the Oyster Sampling Transition Plan Amendment 2: Sediment Sample Analysis plan dated June 5, 2012. Specifically, within each site with a sample with potential petroleum present, the nearest sample with no obvious oil within the site will be selected (based on nearest distance) for full analysis to assess background signature patterns. If all samples from a site have no obvious oil, one sample will be randomly selected for full analysis.²

Cost Estimate

The table below provides a cost estimate for the complete analysis of all samples from the 2011 Oyster Quadrat and Sediment Sampling Plan. The range reflects uncertainty regarding how many of the sediment samples will be analyzed for full PAH and TOC and how many will only be screened. Using the ratio of sediments from the Transition Plan that went through for full analysis (about 30 percent) we estimate the cost to be around \$485,000.

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.

Table 1. Cost Estimate

	Number	Cost Per Sample	Cost
Tissue			
Tissue Samples	102	\$435	\$44,370
Sediment			
Grain Size	581	\$120	\$69,720
TPH Screen	1,132	\$200	\$226,400
PAH and TOC	145 to 1,132	\$425	\$61,625 to \$481,100
TOTAL			\$402,115 to \$821,590

² Surface and subsurface samples will be considered in a single pool for this process (i.e., if a surface and subsurface sample have different TPH categorizations, the corresponding surface or subsurface sample from the same location may be selected as the nearest sample).