

**Water Column Injury Ephemeral Data Collections:  
Deepwater Horizon Oil Spill (DWHOS)**

**Plan for Adaptive Water Column NOAA-NRDA Sampling (PAWNNS)**

**Cruise Plan – American Diver 1**

**Original Plan: July 17, 2010**

**AMMENDED: July 27, 2010**

Prepared by: Debbie French-McCay (ASA)

Reviewed by: Laura Riege (Entrix) and Robert Mulcahy (CSA)

**Proposed Cruise dates:** July 17, 2010 – July 24, 2010

**Revised Cruise dates:** July 29, 2010 – Aug 6, 2010

After some delay related to equipment needs and logistics, American Diver sailed on 20 July 2010. On 21 July, 2010, the American Diver returned to port due to failure of the winch and generators, making sampling infeasible. The American Diver docked in Port Fourchon on the morning of 22 July, 2010 for repairs. Due to impending tropical storm conditions, American Diver was moved on 23 July 2010 to Smi Co-East Yard in Berwick, LA. Samples were picked up 23 July in Berwick and sent to laboratories along with chain of custody, as outlined in the plan.

The unanticipated return to port resulted in an interruption of the scientific schedule and sampling program. The Water Column Technical Working Group Lead, Dr. Deborah French McCay, requested that the cruise be rescheduled for 29 July to 6 August, 2010.

**Equipment/Personnel needs:**

Changes in crew and personnel are as follows. The Chief Scientist, Dr. Jim Payne, is unable to sail on the revised schedule due to other obligations. Dr. Cabell Davis will replace him as Chief Scientist. Erik Quiroz (TAMU), who was to perform the Winklers, will not be able to sail on the second trip as well.

Additional water sample bottles (16 4-L amber glass) will be required from the Houma Command Center.

**Vessel:**

All operations will be completed on the American Diver.

**Safety Plan:**

A full operations and safety plan was included in the original study plan. There are no changes to the safety plan beyond the amendment to the cruise dates.

**Estimated Costs:**

The following additional costs are anticipated for the additional cruise days:

<b>Amendment Costs</b>	<b>Hrs/Days/Trips</b>	<b>Day Rate</b>	<b>Total</b>
<b>Labor (days):</b>			
C. Davis	10	\$2,000	\$20,000
M. Sutor and 2 techs	10	\$2,400	\$24,000
CNES technician	10	\$800	\$8,000
Data Manager	10	\$1,000	\$10,000
Deck Hand	10	\$1,000	\$10,000
Navigation Tech (Cochran / CSA TO)	10	\$3,310	\$33,100
Entrix Staff (invoiced separately)	7	\$0	\$0
CSA Labor	100	\$175	\$17,500
Other Labor (Seabird, Aquatec) estimated	1	\$10,000	\$10,000
<b>Misc Costs Sample Handling</b>	1	\$10,000	\$10,000
<b>Equipment Rental:</b>			\$0
Hydro-winch (Aquatech Lease / CSA TO)	10	\$500	\$5,000
Generators	10	\$500	\$5,000
Fathometers (CSA Lease / CSA TO)	10	\$420	\$4,200
Navigation / Metered Block	10	\$650	\$6,500
Sat Communications System	1	\$10,000	\$10,000
CTD and rosette (CSA Lease)	10	\$960	\$9,600
CDOM Eco Fluorometer	10	\$400	\$4,000
<b>Additional Travel (trips)</b>	2	\$1,200	\$2,400
<b>TOTAL</b>			\$189,300

Days/Trips based on 2/dys Mob, 7dys Fid, 1dy demobilization

Labor is estimated cost and hours

Vessel Costs for field and standby not included

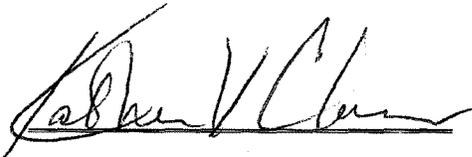
Standby costs for Equipment between Cruises is not included

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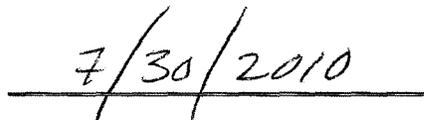
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Cruise Plan – American Diver 1  
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**Approvals**

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



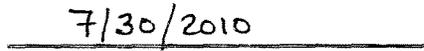
Federal Trustee Representative



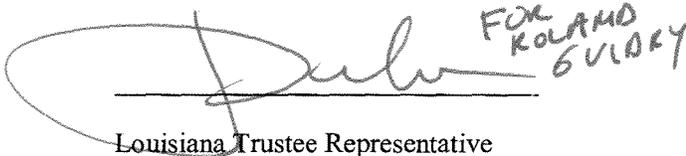
Date



BP NRDA Representative



Date



Louisiana Trustee Representative



Date