Oil Sample Analysis Report

NOAA Marine Fisheries Service Case Number LA453

Marine Safety Laboratory Case Number 11-140



U.S. Department of Homeland Security
United States
Coast Guard

Manager U.S. Coast Guard Marine Safety Laboratory

1 Chelsea Street New London, CT 06320 Phone: (860) 271-2704 Fax: (860) 271-2641

16450 01 Mar 2011

NOAA Marine Fisheries Service Attn: Elizabeth Tuohy-Sheen 75 Virginia Beach Dr. Miami, FL 33149

Dear Elizabeth Tuohy-Sheen:

The laboratory analysis of this case has been completed and our report is forwarded. The technical data supporting the report (spectrograms and chromatograms) have been archived at our facility and are available upon request. We will maintain the oil samples in refrigerated storage pending final case disposition.

Questions concerning this report or the analytical methods used should be directed to the Supervisor of Analysis, Kristy Juaire.

By direction

Encl: (1) MSL Report 11-140

United States Coast Guard Marine Safety Laboratory Oil Spill Identification Report 11-140

Requestor: NOAA Marine Fisheries Service

Unit Case/Activity Number: LA453

Received:

24-Feb-11

Via: Federal Express

8604 4352 2076

Number Of Samples: 5

5

Lab NO. of Spills: 1, 2, 3, 4 and 5

Lab NO. of Suspects: n/a
Lab NO. of Background: n/a

Analysis Methods:

✓ GAS CHROMATOGRAPHY (GC)

✓ GAS CHROMATOGRAPHY-MASS SPECTROMETRY (GC-MS)

INFRARED SPECTROSCOPY (IR)

Laboratory's Conclusion (as explained below): MATCH

SPECIAL INSTRUCTIONS: Compare all samples to the Deepwater Horizon oil spill. Samples 10-095-1 and 10-220-8 were analyzed as representative Deepwater Horizon samples.

RESULTS:

- 1. Samples 11-140-1, 2, 3, 4 and 5 were specified to be representative of various samples collected as part of NOAA Case LA453. All samples were wrapped in aluminum foil. Analysis indicates:
- A. Samples 11-140-1, 3 and 4 contain moderately degraded crude oil. Non-petroleum contamination is present in each sample.
 - B. Samples 11-140-2 and 5 do not contain a quantity of petroleum oil detectable by the analysis conducted.
- 2. Samples 10-095-1 and 10-220-8 contain crude oil with characteristics similar to those of samples 11-140-1, 3 and 4. Differences are attributable to weathering and non-petroleum contamination.

CONCLUSIONS:

- 1. Samples 11-140-1, 3 and 4 are derived from the Deepwater Horizon oil spill.
- 2. Samples 11-140-2 and 5 do not contain a quantity of petroleum oil detectable by the analysis conducted.

SUPERVISOR OF ANALYSIS K. JUAIRE DATE 01-Mar-11

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United States Coast Guard Marine Safety Laboratory

Oil Spill Identification Analysis Cost Recovery Documentation

Laboratory Case Number: 11-140

Requestor: NOAA Marine Fisheries Service

Unit Case Number: LA453

Number of Samples: 7

Cost Per Sample Prepared: \$20.00

Total Costs of Sample Preparation: \$140.00

Number of Analysis: 10

Cost Per Sample Prepared: \$86.00

Total Costs for Analysis: \$860.00

TOTAL COSTS: \$1,000.00

This documentation is provided for purposes of Phase IV - Documentation and Cost Recovery under the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300)

Signature: Date: 01 Mar 2011

United States Coast Guard Marine Safety Laboratory Sample Check-In Log

MSL Case/Activity Number: 11-140

Requestor: NOAA Marine Fisheries Service	Unit Case Number LA453
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Federal Project Number: Delivery Method: Federal Express

Received Date: 24 Feb 11 Delivery Number: 8604 4352 2076

Priority:		Yes	Rush:	No	Comparison	Yes	
Lab Number 11-140	•	Sample Descriptions from Sample Jars				Spill	Source
1	IA	3 GAUZE SWABS WRAPPED IN FOIL IN ZIPLOCK BAG CES - 20110218 - LA001 [V]					
2	ΙB	3 GAUZE SW LA001 [D]	/ABS WRAPPED IN FC	IL IN ZIPLOCE	02/18/11 /1058 C BAG CES - 20110218 - 02/18/11 /1058	~	
3	IA	4 TOUNGE D 20110218 - L	DEPRESSOR WRAPPEE A001) IN FOIL IN Z	•	~	
4	IB	4 TOUNGE D 20110218 - L	DEPRESSOR WRAPPEE A001) IN FOIL IN Z		~	
5			AB WRAPPED IN FOI CES-20110218-LA001		K OBTAINED DURING	~	
6							
7							
8							
9							
10							
					the exception of square brack d as "spill" for comparison p		
Samples ch	ecked	in by: MST3 M	IKE RUSHANE	7	Date:	24 Feb	П

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Sample Custodian:

Supervisor of Analysis:

Date: 28 Cebil

Date: _ OLMOR_H_

United States Coast Guard Marine Safety Laboratory Sample Check-In Log

MSL Case/Activity Number: 10-095

Requestor: Marine Safety Unit Morgan City		Unit Case Number 3721503 Delivery Method: Federal Express							
Federal Project Number: N10036 Received Date: 14 May 10 Priority: Yes Rush:									
				Delivery Number: 8697 9761 8027 / 8049					
			Rush:	No	No Comparison		No		
Lab Number 10-095		Sample	le Descriptions from Sample Jars				Source		
1	DTS-6	5,000 FT VESSEL: S	SKANDI - NEPT	UNE 65% OIL	KMS,ADM 5-5-10 1813		•		
2	DTS-6	VESSEL: SKANDI N	IEPTUNE < 1%	OIL BOTTOM			V		
3									
4	The second secon								
5									
6									
7									
8									
9									
10									
Remarks: ID	ONLY.								
Samples che	cked in t	y: MSTI ALICIA T	ODMAN	Hur (Date:	14 May	y 10		
Sample (Custodia	n: MST2 JOHN AC	GAPITO /	White of	Date:	5/21	110		

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CONFIDENTIAL

Supervisor of Analysis:

United States Coast Guard Marine Safety Laboratory Sample Check-In Log

MSL Case/Activity Number: 10-220

Unit Case Number 3789039

Federal Project Number:

Delivery Method: Federal Express

Received Date:

09 Jul 10

Delivery Number: 8726 4052 5936/5925

Priority: Yes No No Comparison Rush: Lab Number Sample Descriptions from Sample Jars Spill Source 10-220 PCI PASS CHRISTIAN BEACH MISS TAR BALL Ĭ \checkmark 7JULY10_1016 PC2 PASS CHRISTIAN BEACH MISS. TAR BALL 2 **V** 7JULY10 1020 LBI LONG BEACH MISS TAR BALLS 3 \checkmark 7JULY10 1123 LB2 LONG BEACH MISS TAR BALLS 4 П **V** 7JULY10 1130 3789039-GS1-SMW FIRST TAR PATTY TAKEN FROM GULF SHORES, AL. 5 \checkmark 3789039-GS2-SMW SECOND TAR PATTY TAKEN FROM GULF SHORES, AL. 6 **V** 3789039-FM1-SMW FIRST TAR PATTY TAKEN FROM FORT MORGAN, AL. ..7. **V**__ .. [.] 07JUL2010 3789039-FM2-SMW SECOND TAR PATTY TAKEN FROM FORT MORGAN, AL. 8 **V** 07JUL2010 3789039-DII-SMW FIRST TAR PATTY TAKEN FROM DAUPHIN ISLAND, AL. 9 \checkmark 3789039-DI2-SMW SECOND TAR PATTY TAKEN FROM DAUPHIN ISLAND, 10 **V** 07JUL2010 Remarks: Compare to Deepwater Horizon. Harlung a lote Samples checked in by: Date: 09 Jul 10 MST3 ZACHARY COTE Sample Custodian: MST2 JOHN AGAPITO Date: 1330010 Supervisor of Analysis: K. JUAIRE Date: 14 JULIO