Oil Sample Analysis Report

NOAA Marine Fisheries Service Case Number LA455

Marine Safety Laboratory Case Number 11-144



U.S. Department of Homeland Security





Manager U.S. Coast Guard Marine Safety Laboratory I Chelsea Street New London, CT 06320 Phone: (860) 271-2704 Fax: (860) 271-2641

16450 03 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 The technical data supporting the report (spectrograms and chromatograms) have been archived at our facility and are available upon request.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 11-144

United States Coast Guard Marine Safety Laboratory Oil Spill Identification Report 11-144

Requestor: NOAA Marine Fisheries Service

Unit Case/Activity Number: LA455

Received:

02-Mar-11

Via: Federal Express

8604 4352 2113

Number Of Samples: 4

Lab NO. of Spills: n/a

Lab NO. of Suspects: 1, 2, 3 and 4 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 11-144-1, 2, 3 and 4 were specified to be representative of various samples collected as part of NOAA Case LA455. All samples were wrapped in aluminum foil. Analysis indicates:
 - A. Sample 11-144-1 contains moderately degraded crude oil. Non-petroleum contamination is present.
- B. Sample 11-144-2 contains traces of petroleum oil. The quantity is not sufficient for conclusive comparison purposes based on the analysis conducted.
- C. Samples 11-144-3 and 4 contain non-petroleum contamination and traces of hydrocarbons. It is not possible based on the analysis conducted to conclusively attribute the presence of hydrocarbons to the presence of petroleum oil due to an insufficient quantity of hydrocarbons in the samples.
- 2. Samples 10-095-1 and 10-220-8 contain crude oil with characteristics similar to those of sample 11-144-1. Differences are attributable to weathering and non-petroleum contamination.

CONCLUSIONS:

- 1. Sample 11-144-1 is derived from the Deepwater Horizon oil spill.
- 2. Sample 11-144-2, 3 and 4 do not contain a quantity of petroleum oil sufficient for comparison purposes based on the analysis conducted.

SUPERVISOR OF ANALYSIS

K. JUAIRE TOTAL JUNE 10

DATE 03-Mar-11

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United States Coast Guard Marine Safety Laboratory

Oil Spill Identification Analysis Cost Recovery Documentation

Laboratory Case Number: 11-144

Requestor: NOAA Marine Fisheries Service

Unit Case Number: LA455

Number of Samples: 6

Cost Per Sample Prepared: \$20.00

Total Costs of Sample Preparation: \$120.00

Number of Analysis: 18

Cost Per Sample Prepared: \$86.00

Total Costs for Analysis: \$1,548.00

TOTAL COSTS: \$1,668.00

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: 03 Mar 2011

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

MSL Case/Activity Number: 11-144

Unit Case Number LA455

Federal Project Number:

Delivery Method: Federal Express

Delivery Number: 8604 4352 2113

Received Date:	02 Mar 11		Delivery Number: 8604 4352 2113			
Priority:	Yes	Rush:	No	Comparison	Yes	
Lab Number 11-144	Sam	ple Descriptions	from Samp	ole Jars	Spill Source	
1	TURSIOPS TRUN 20110228-LA001		ERRE N 29.28	184 W-89.92 566 MCT-	· ✓	
2	TURSIOPS TRUN 20110228-LA001		ERRE N 29.28	02-28-2011 0925 184 W-89.92 566 MCT-	· · · · · · · · · · · · · · · · · · ·	
3	TURSIOPS TRUN					
		[MOUTH SWAB]		02-28-2011 0925	Ť	
4		TURSIOPS TRUNCATUS GRAND TERRE N 29.28 184 W-89.92 566 MG 20110228-LA001 [BLOHOLE DORSAL SWAB]				
5				02-28-2011 0925		
6						
·						
7						
8						
9						
10						
	e to DWH. Samples de indicate data taken fro		e" for compari	ison purposes only. Informa	ation in square	
Samples checked	in by: MST3 MIKE	RUSHANE	T	Date:	02 Mar 11	
Sample Custo	odian: MSTI ALICI	A TODMAN GEL	W	Date:	ORMARI	
Supervisor of An	alysis: K. JUAIRE	histopico	w	Date:	osmaru.	
	* *	Page 1	of 1			

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
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Federal Project Number: N10036 Delivery Method: Federal Express

Received Date: 14 May 10 Delivery Number: 8697 9761 8027 / 8049

Priority: Comparison No Yes Rush: No Lab Number Sample Descriptions from Sample Jars Spill Source 10-095 DTS-6 5,000 FT VESSEL: SKANDI - NEPTUNE 65% OIL KMS, ADM 1 V 5-5-10 1813 DTS-6 VESSEL: SKANDI NEPTUNE < 1% OIL BOTTOM KMS, ADM 2 \checkmark 3 4 5 6 7 8 9 10 Remarks: ID ONLY. Date: 14 May 10 Samples checked in by: MST1 ALICIA TODMAN Sample Custodian: Date: MST2 JOHN AGAPITO Date: Supervisor of Analysis: OLDUDIO

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

		MSL Case/Activity Nu	ımber: 1	0-220				
Requestor: Sector Mobile Federal Project Number:			Unit Case Number 3789039					
			Delivery Method: Federal Express					
Received Date:		09 Jul 10	Delivery Number: 8726 4052 5936/5925					
Priori	ty:	No Rush:	No	Comparison	Yes			
Lab Number 10-220		Sample Description	s from Samp	le Jars	Spill	Source		
1	PCI	PASS CHRISTIAN BEACH MISS TA	R BALL	7JULY10 1016	~			
2	PC2	PASS CHRISTIAN BEACH MISS. TA	PASS CHRISTIAN BEACH MISS. TAR BALL 7.JULY10 1020					
3	LBI	LONG BEACH MISS TAR BALLS		7ЛULY10 1123	~			
4	LB2	LONG BEACH MISS TAR BALLS		7JULY10 1130	V			
5		3789039-GSI-SMW FIRST TAR PAT	TY TAKEN FR		V			
6		3789039-GS2-SMW SECOND TAR I	PATTY TAKEN	FROM GULF SHORES ,AL.	V			
7		3789039-FM1-SMW FIRST TAR PA	ITY TAKEN FI	OM FORT MORGAN, AL.		🖸		
8		3789039-FM2-SMW SECOND TAR	V					
9		3789039-DII-SMW FIRST TAR PAT	V					
10		3789039-DI2-SMW SECOND TAR P AL.	ATTY TAKEN	07JUL2010 FROM DAUPHIN ISLAND, 07JUL2010	V			
Remarks: Co	mpare t	o Deepwater Horizon.			4			
Samples chec	cked in	1 by: MST3 ZACHARY COTE	Zadung (a. Cole Date:	09 Jul	10		
Sample (Custod	lian: MST2 JOHN AGAPITO	11/6	Date:	1.77	10010		

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Supervisor of Analysis:

Date: 14 JULIO