## Oil Sample Analysis Report

# NOAA Marine Fisheries Service Case Number LA487 / LA492

Marine Safety Laboratory Case Number 11-175



U.S. Department of Homeland Security

**United States** Coast Guard



Manager U.S. Coast Guard Marine Safety Laboratory Phone: (860) 271-2704

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

16450 01 Apr 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 The technical data supporting the report (spectrograms and chromatograms) have been archived at our facility and are available upon request.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.

Encl: (1) MSL Report 11-175

## United States Coast Guard Marine Safety Laboratory Oil Spill Identification Report 11-175

Requestor: NOAA Marine Fisheries Service Unit Case/Activity Number: LA487 / LA492

Received:

30-Mar-11

Via: Federal Express

8750 2932 4760

Number Of Samples: 8 Lab NO. of Spills: n/a

**Lab NO. of Suspects:** 1, 2, 3, 4, 5, 6, 7 and 8

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 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 11-175-1, 2, 3, 4, 5, 6, 7 and 8 were specified to represent source samples. Analysis indicates:
  - A. Sample 11-175-6 contains moderately degraded crude oil. Non-petroleum contamination is present.
- B. Samples 11-175-1, 2, 3, 4 and 5 contain moderately degraded crude oil. Non-petroleum contamination is present in each sample. Despite the overall similarities noted between these samples, there are several important differences not attributable to weathering or non-petroleum contamination.
  - C. Samples 11-175-7 and 8 contain traces of petroleum oil. The quantity is not sufficient for comparison purposes.
- 2. Samples 10-095-1 and 10-220-8 contain crude oil with characteristics similar to those of sample 11-175-6. Differences are attributable to weathering and non-petroleum contamination.

### **CONCLUSIONS:**

- 1. Sample 11-175-6 is derived from the Deepwater Horizon oil spill.
- 2. Samples 11-175-1, 2, 3, 4 and 5 are not derived from the Deepwater Horizon oil spill.
- 3. Samples 11-175-7 and 8 do not contain a quantity of petroleum oil sufficient for comparison purposes based on the analysis conducted.

SUPERVISOR OF ANALYSIS

K. JUAIREN LINE

DATE 01-Apr-1

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# **United States Coast Guard Marine Safety Laboratory**

### Oil Spill Identification Analysis Cost Recovery Documentation

Laboratory Case Number: 11-175

Requestor: NOAA Marine Fisheries Service

Unit Case Number: LA487 / LA492

Number of Samples: 10

Cost Per Sample Prepared: \$20.00

Total Costs of Sample Preparation: \$200.00

Number of Analysis: 24

Cost Per Sample Prepared: \$86.00

Total Costs for Analysis: \$2,064.00

**TOTAL COSTS:** \$2,264.00

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 Apr 2011

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

MSL Case/Activity Number: 11-175

Requestor: NOAA Marine Fisheries Service

Unit Case Number LA487 / LA492

Federal Project Number:

Delivery Method: Federal Express

Received Date:

30 Mar 11

**Delivery Number:** 8750 2932 4760

accer ca Date.		50 141a1 11					
Priority:	Yes		Rush:	No	Comparison	Yes	
Lab Number 11-175		Sample	Descriptio	ns from Sam	iple Jars	Spill	Source
1	МС	T-20110321-LA00	I RIGHT SID	E ABOVE PEC	TORAL		<b>✓</b>
2	МС	T-20110321-LA00	I RIGHT SID	E ABOVE PEC	3/21/11 1143 TORAL FIN		
£					3/21/11 1143		•
3	MC	T-20110321-LA00	I LEFT MELO	NC			<b>~</b>
		T 20110221 1 400	, picum ain	- 0111011 DE	3/21/11 1143		
4	MC	T-20110321-LA00	I KIGH I SID	E, CAUDAL PE			✓
	MC	T-200110321-LA0	OLLEFT SIDE	E ABOVE PECT	3/21/11 1143 FORAL FIN. ONLY 1 SAMPLE		
5			✓				
6	MC	T-20110325-LA00	I [RIGHT LO	WER JAW]	3/21/11 1143		_
					1130 3/25/11		<b>V</b> ,
7	MC	T-20110325-LA00	I [RIGHT PE	C FIN]			~
•					1130 3/25/11		
8	MCT-20110325-LA001 [RIGHT FLUKE]				~		
					1130 3/25/11		
9							
10							
		d as 'Source' for cuminum foil.	omparison p	ourposes only,	Compare to DWH. Description	ons in brac	kets[]
Samples checked	in by:	MST3 ZACHARY	COTE 3	arlay c	Cota Date:	30 Mar	11
Sample Custo	dian:	MST2 JOHN AGA	APITO	1662	Date:	ZIMAK	:IL _
Supervisor of Ana	ilysis:	K. JUAIRE	and fr	w	Date:	ZIMAZ OIAPI	
		<del>-</del>	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 Federal Project Number: N10036				Unit Case Number 3721503  Delivery Method: Federal Express					
Priori	ty: Y	es	Rush:	No	Comparison	No			
Lab Number 10-095		Sampl	le Description	s from Samp	le Jars	Spill	Source		
1	DTS-6	5,000 FT VESSEL:	SKANDI - NEPTI	UNE 65% OIL R	CMS,ADM 5-5-10 1813		V		
2	DTS-6	VESSEL: SKANDI I	NEPTUNE < 1%	OIL BOTTOM			v		
3									
4			notes participates of control of planes tumb **						
5									
6	, and a second of				·				
7 .					•				
8									
9									
10									
Remarks: ID	ONLY.	49000							
Samples chec	ked in b	y: MSTI ALICIA 1	TODMAN (	luc	Date:	14 May	10		
Sample (	Custodia	n: MST2 JOHN AC	GAPITO /	hla +	Date:	5/21	110		

Supervisor of Analysis:

OI JUD 10

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

MSL Case/Activity Number: 10-220

H	leq	u	esto	r:	Se	ctor	M	obil	e
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Unit Case Number 3789039

Federal Project Number:

Delivery Method: Federal Express

Received Date:

09 Jul 10

Delivery Number: 8726 4052 5936/5925

Priority: No Rush: No Comparison Yes Lab Number Sample Descriptions from Sample Jars Spill Source 10-220 PCI PASS CHRISTIAN BEACH MISS TAR BALL 1 V 7JULY10 1016 PC2 PASS CHRISTIAN BEACH MISS, TAR BALL 2 V 7JULY10 1020 LBI LONG BEACH MISS TAR BALLS 3 V 7JULY10 1123 LB2 LONG BEACH MISS TAR BALLS 4 V 7JULY10 1130 3789039-GS1-SMW FIRST TAR PATTY TAKEN FROM GULF SHORES, AL. 5 V 3789039-GS2-SMW SECOND TAR PATTY TAKEN FROM GULF SHORES, AL. 6 V 3789039-FM1-SMW FIRST TAR PATTY TAKEN FROM FORT MORGAN, AL. **V**\_ 3789039-FM2-SMW SECOND TAR PATTY TAKEN FROM FORT MORGAN, AL. 8 07JUL2010 3789039-DII-SMW FIRST TAR PATTY TAKEN FROM DAUPHIN ISLAND, AL. 9 V 3789039-DI2-SMW SECOND TAR PATTY TAKEN FROM DAUPHIN ISLAND, 10 V Remarks: Compare to Deepwater Horizon. Samples checked in by: Date: MST3 ZACHARY COTE 09 Jul 10 Sample Custodian: Date: MST2 JOHN AGAPITO 1370010 Supervisor of Analysis: Date: 14 JULIO K. JUAIRE

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