

Oil Sample Analysis Report

NOAA Marine Fisheries Service

Case Number LA436

Marine Safety Laboratory

Case Number 11-069



U.S. Department of
Homeland Security

**United States
Coast Guard**



Manager
U.S. Coast Guard
Marine Safety Laboratory

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16450
03 Jan 2011

NOAA Marine Fisheries Service
Attn: Elizabeth Tuohy-Sheen
SEFSC
75 Virginia Beach Drive
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 The technical data supporting the report (spectrograms and chromatograms) have been archived at our facility and are available upon request.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 Juare.


K. JUARE
By direction

Encl: (1) MSL Report 11-069

**United States Coast Guard
Marine Safety Laboratory
Oil Spill Identification Report
11-069**

Requestor: NOAA Marine Fisheries Service

Unit Case/Activity Number: LA436

Received: 28-Dec-10 **Via:** Federal Express 8741 5232 5750

Number Of Samples: 4

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

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 10-220-6 were reanalyzed as representative samples.

RESULTS:

1. Samples 11-069-1, 2, 3 and 4 were specified to be representative of spilled oil. Analysis indicates:
 - A. Sample 11-069-1 contains moderately degraded crude oil. Non-petroleum contamination typical for a sample extracted from a wooden tongue depressor is present.
 - B. Samples 11-069-2, 3 and 4 contain traces of petroleum oil. The quantity is not sufficient for comparison purposes based on the analysis conducted.
2. Samples 10-095-1 and 10-220-6 contain crude oil with characteristics similar to those of spill sample 11-069-1. Differences are attributable to weathering and non-petroleum contamination.

CONCLUSIONS:

1. Sample 11-069-1 is derived from the Deepwater Horizon oil spill.
2. Samples 11-069-2, 3 and 4 do not contain a quantity of petroleum oil sufficient for correlation analysis.

SUPERVISOR OF ANALYSIS

K. JUAIRE



DATE

03-Jan-11

Page 1 of 1

**United States Coast Guard
Marine Safety Laboratory**

**Oil Spill Identification Analysis
Cost Recovery Documentation**

Laboratory Case Number: 11-069
Requestor: NOAA Marine Fisheries Service
Unit Case Number: LA436
Number of Samples: 6
Cost Per Sample Prepared: \$20.00
Total Costs of Sample Preparation: \$120.00
Number of Analysis: 24
Cost Per Sample Prepared: \$86.00
Total Costs for Analysis: \$2,064.00
TOTAL COSTS: \$2,184.00

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 Jan 2011

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

MSL Case/Activity Number: 11-069

Requestor: NOAA Marine Fisheries Service

Unit Case Number LA436

Federal Project Number:

Delivery Method: Federal Express

Received Date: 28 Dec 10

Delivery Number: 8741 5232 5750

Priority:	Yes	Rush:	No	Comparison	Yes	Spill	Source
Lab Number							
11-069							
				Sample Descriptions from Sample Jars			
1	1B			TONGUE DEPRESSORS FOR OIL SAMPLES, WRAPPED IN FOIL + PLACED IN ZIPLOC BAG, FIELD TAG #MCT-20101203-LA001		✓	
				12/3/10 1044			
2	2			GAUZE SWAB SAMPLES WRAPPED IN FOIL + PLACED IN ZIPLOC BAG		✓	
				12/3/10 1044			
3	2			GAUZE SWAB SAMPLES WRAPPED IN FOIL + PLACED IN ZIPLOC BAG		✓	
				12/3/10			
4	2			GAUZE SWAB SAMPLES WRAPPED IN FOIL + PLACED IN ZIPLOC BAG		✓	
				12/3/10			
5							
6							
7							
8							
9							
10							

Remarks: Samples 1, 2, 3 and 4 designated "spill" for comparison purposes only. Sample descriptions, numbers, and date/time taken from COC. Samples received 28Dec10 in late afternoon; box not opened until 29Dec10. Compare samples to DWH.

Samples checked in by: KRISTY JUAIRE *Kristy Juare*

Date: 29 Dec 10

Sample Custodian: MST2 JOHN AGAPITO *John Agapito*

Date: 30 Dec 10

Supervisor of Analysis: K. JUAIRE *Kristy Juare*

Date: 03 Jan 11

**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

Federal Project Number: N10036

Delivery Method: Federal Express

Received Date: 14 May 10

Delivery Number: 8697 9761 8027 / 8049

Priority: Yes

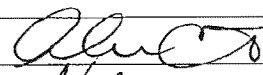
Rush: No

Comparison: No

Lab Number 10-095	Sample Descriptions from Sample Jars	Spill	Source
1	DTS-6 5,000 FT VESSEL: SKANDI - NEPTUNE 65% OIL KMS,ADM 5-5-10 1813	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	DTS-6 VESSEL: SKANDI NEPTUNE < 1% OIL BOTTOM KMS,ADM 5-5-10 1813	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3		<input type="checkbox"/>	<input type="checkbox"/>
4		<input type="checkbox"/>	<input type="checkbox"/>
5		<input type="checkbox"/>	<input type="checkbox"/>
6		<input type="checkbox"/>	<input type="checkbox"/>
7		<input type="checkbox"/>	<input type="checkbox"/>
8		<input type="checkbox"/>	<input type="checkbox"/>
9		<input type="checkbox"/>	<input type="checkbox"/>
10		<input type="checkbox"/>	<input type="checkbox"/>

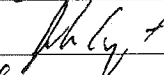
Remarks: ID ONLY.

Samples checked in by: MST1 ALICIA TODMAN



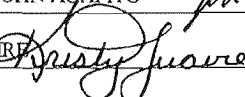
Date: 14 May 10

Sample Custodian: MST2 JOHN AGAPITO



Date: 5/21/10

Supervisor of Analysis: K. JUAREZ



Date: ^{KLJ} ~~10~~ 01 JUN 10

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

MSL Case/Activity Number: 10-220

Requestor: Sector Mobile

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 10-220	Sample Descriptions from Sample Jars	Spill	Source
1	PC1 PASS CHRISTIAN BEACH MISS TAR BALL 7JULY10 1016	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	PC2 PASS CHRISTIAN BEACH MISS. TAR BALL 7JULY10 1020	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	LB1 LONG BEACH MISS TAR BALLS 7JULY10 1123	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	LB2 LONG BEACH MISS TAR BALLS 7JULY10 1130	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	3789039-GS1-SMW FIRST TAR PATTY TAKEN FROM GULF SHORES, AL.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	3789039-GS2-SMW SECOND TAR PATTY TAKEN FROM GULF SHORES, AL. 07JUL2010	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	3789039-FM1-SMW FIRST TAR PATTY TAKEN FROM FORT MORGAN, AL. 07JUL2010	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	3789039-FM2-SMW SECOND TAR PATTY TAKEN FROM FORT MORGAN, AL. 07JUL2010	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	3789039-DI1-SMW FIRST TAR PATTY TAKEN FROM DAUPHIN ISLAND, AL. 07JUL2010	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	3789039-DI2-SMW SECOND TAR PATTY TAKEN FROM DAUPHIN ISLAND, AL. 07JUL2010	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Remarks: Compare to Deepwater Horizon.			

Samples checked in by: MST3 ZACHARY COTE *Zachary A. Cote* **Date:** 09 Jul 10

Sample Custodian: MST2 JOHN AGAPITO *John Agapito* **Date:** 13 JUL 10

Supervisor of Analysis: K. JUAIRE *Kristy Juare* **Date:** 14 JUL 10