

Oil Sample Analysis Report

NOAA Marine Fisheries Service

Case Number LA454

Marine Safety Laboratory

Case Number 11-138



U.S. Department of
Homeland Security

**United States
Coast Guard**



Manager
U.S. Coast Guard
Marine Safety Laboratory

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 The technical data supporting the report (spectrograms and chromatograms) have been archived at our facility and are available upon request.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


K. JUARE
By direction

Encl: (1) MSL Report 11-138

**United States Coast Guard
Marine Safety Laboratory
Oil Spill Identification Report
11-138**

Requestor: NOAA Marine Fisheries Service

Unit Case/Activity Number: LA454

Received: 24-Feb-11 **Via:** Federal Express 8604 4352 2076

Number Of Samples: 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 11-138-1, 2, 3, 4 and 5 were specified to be representative of various samples collected as part of NOAA Case LA454. All samples were wrapped in aluminum foil. Analysis indicates:
 - A. Samples 11-138-1, 2 and 4 contain moderately degraded crude oil. Non-petroleum contamination is present in each sample.
 - B. Sample 11-138-3 contains traces of hydrocarbons. The quantity is not sufficient to conclusively attribute these hydrocarbons to the presence of petroleum oil based on the analysis conducted.
 - C. Sample 11-138-5 does 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 11-138-1, 2 and 4. Differences are attributable to weathering and non-petroleum contamination.

CONCLUSIONS:

1. Samples 11-138-1, 2 and 4 are derived from the Deepwater Horizon oil spill.
2. Samples 11-138-3 and 5 do not contain a quantity of petroleum oil sufficient for comparison or identification purposes based on the analysis conducted.

SUPERVISOR OF ANALYSIS _____

K. JUAIRE




DATE 01-Mar-11

**United States Coast Guard
Marine Safety Laboratory**

**Oil Spill Identification Analysis
Cost Recovery Documentation**

Laboratory Case Number: 11-138
Requestor: NOAA Marine Fisheries Service
Unit Case Number: LA454
Number of Samples: 7
Cost Per Sample Prepared: \$20.00
Total Costs of Sample Preparation: \$140.00
Number of Analysis: 18
Cost Per Sample Prepared: \$86.00
Total Costs for Analysis: \$1,548.00
TOTAL COSTS: \$1,688.00

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: 11-138

Requestor: NOAA Marine Fisheries Service

Unit Case Number LA454

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		Sample Descriptions from Sample Jars	Spill	Source
11-138				
1	1A	5 GAUZE SWABS WRAPPED IN FOIL IN A ZIPLOC BAG (SDD-20110219-LA001) [DORSAL] 2-19-11 1211	✓	
2	1B	5 GAUZE SWABS WRAPPED IN FOIL IN A ZIPLOC BAG (SDD-20110219-LA001) [VENTRAL] 2-19-11 1211	✓	
3	1A	5 TONGUE DEPRESSORS WRAPPED IN FOIL IN A ZIPLOC BAG (SDD-20110219-LA001) 2-19-11 1211	✓	
4	1B	5 TONGUE DEPRESSORS WRAPPED IN FOIL IN A ZIPLOC BAG (SDD-20110219-LA001) 2-19-11 1211	✓	
5	1	1 GAUZE SWAB WRAPPED IN FOIL IN WHIRLPAK OBTAINED DURING NECROPSY SDD-20110219-LA001 [SWAB FROM INSIDE MOUTH] 2-19-11 1800	✓	
6				
7				
8				
9				
10				

Remarks: Compare to DWH. Sample descriptions taken from CoC with the exception of square brackets indicating information taken from individual samples. Samples designated as "spill" for comparison purposes only.

Samples checked in by: MST3 MIKE RUSHANE

Date: 24 Feb 11

Sample Custodian: MST2 JOHN AGAPITO

Date: 28 Feb 11

Supervisor of Analysis: K. JUAIRE

Date: 01 Mar 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

Alicia Todman

Date: 14 May 10

Sample Custodian: MST2 JOHN AGAPITO

John Agapito

Date: 5/21/10

Supervisor of Analysis: K. JUAREZ

Kristy 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 Juarez* **Date:** 14 JUL 10