

# Oil Sample Analysis Report

U. S. EPA Region V  
Case Number E13503

Marine Safety Laboratory  
Case Number 13-057



U.S. Department of  
Homeland Security

**United States  
Coast Guard**



Manager  
U.S. Coast Guard  
Marine Safety Laboratory

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16450  
17 Dec 2012

U. S. Environmental Protection Agency  
Attn: On-Scene Coordinator  
77 West Jackson  
Chicago, IL 60604

Dear On-Scene Coordinator:

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 The technical data supporting the report (spectrograms and chromatograms) have been archived at our facility and are available upon request.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

Encl: (1) MSL Report 13-057

**United States Coast Guard  
Marine Safety Laboratory  
Oil Sample Analysis Report  
13-057**

**Requestor:** U. S. EPA Region V

**Unit Case/Activity Number:** E13503

**Received:** 11-Dec-12                      **Via:** Federal Express      5408 0422 8275

**Number Of Samples:** 3

**Lab NO. of Spills:** 2 and 3

**Lab NO. of Suspects:** 1

**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**

**RESULTS:**

1. Samples 13-057-2 and 3 were specified to be representative of spilled oil. Analysis indicates:
  - A. Sample 13-057-2 contains slightly weathered lubricating oil.
  - B. Sample 13-057-3 contains lubricating oil. The quantity is not sufficient for comparison purposes based on the analysis conducted.
2. Suspected source sample 13-057-1 contains lubricating oil with characteristics similar to those of spill sample 13-057-2. Differences are attributable to slight weathering of spilled oil and to the non-petroleum contamination observed in sample 13-057-1.

**CONCLUSIONS:**

1. Suspected source sample 13-057-1 and spill sample 13-057-2 are derived from a common source of petroleum oil.
2. Sample 13-057-3 does not contain a quantity of petroleum oil sufficient for correlation analysis.

**SUPERVISOR OF ANALYSIS** \_\_\_\_\_

K. JUAIRE



**DATE** 17-Dec-12

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**United States Coast Guard  
Marine Safety Laboratory**

**Oil Spill Identification Analysis  
Cost Recovery Documentation**

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<b>Laboratory Case Number:</b>	13-057
<b>Requestor:</b>	U. S. EPA Region V
<b>Unit Case Number:</b>	E13503
<b>Number of Samples:</b>	4
<b>Cost Per Sample Prepared:</b>	\$20.00
<b>Total Costs of Sample Preparation:</b>	\$80.00
<b>Number of Analyses:</b>	10
<b>Cost Per Sample Analyzed:</b>	\$86.00
<b>Total Costs for Analysis:</b>	\$860.00
<b>TOTAL COSTS:</b>	\$940.00

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:** 17 Dec 2012

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

**MSL Case/Activity Number: 13-057**

**Requestor:** U. S. EPA Region V (Chicago Office)

**Unit Case Number** E13503

**Federal Project Number:** E13503

**Delivery Method:** Federal Express

**Received Date:** 11 Dec 12

**Delivery Number:** 5408 0422 8275

**Priority:** No

**Rush:** No

**Comparison** No

Lab Number 13-057	Sample Descriptions from Sample Jars	Spill	Source
1	MG-OIL-120712 SOURCE SAMPLE, LUBRICATING OIL 12-7-12 / 19:15	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	MG-SW01-120712 SURFACE WATER SAMPLE COLLECTED FROM POND 3 OF MG PROPERTY 12-7-12 / 20:15	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	MG-SW02-120712 SURFACE WATER SAMPLE COLLECTED FROM DES PLAINES RIVER DOWNSTREAM OF SPILL 12-8-12 / 09:25	<input checked="" 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"/>
<b>Remarks:</b>			

**Samples checked in by:** MST2 BRIAN MESSING

**Date:** 11 Dec 12

**Sample Custodian:** MST3 MICHELLE KOSMO

**Date:** 12 DEC 12

**Supervisor of Analysis:** K. JUAIRE

**Date:** 17 DEC 12