

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 The technical data supporting the report (spectrograms and chromatograms) have been archived at our facility and are available upon request.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


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

**United States Coast Guard
Marine Safety Laboratory**

**Oil Spill Identification Analysis
Cost Recovery Documentation**

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

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