

ANALYTICAL REPORT

PREPARED FOR

Attn: Kelly Ottmar
Graymar Environmental Services Inc
601 S Pioneer Way
Ste F218
Moses lake, Washington 98837

Generated 5/14/2024 4:19:57 PM

JOB DESCRIPTION

Lawrence Oil

JOB NUMBER

590-24715-1

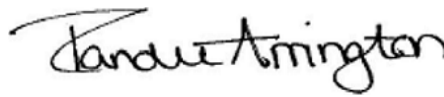
Eurofins Spokane

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



Generated
5/14/2024 4:19:57 PM

Authorized for release by
Randee Arrington, Business Unit Manager
Randee.Arrington@et.eurofinsus.com
(509)924-9200



Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Sample Summary	5
Definitions	6
Client Sample Results	7
QC Sample Results	8
Chronicle	10
Certification Summary	11
Method Summary	12
Chain of Custody	13
Receipt Checklists	14

Case Narrative

Client: Graymar Environmental Services Inc
Project: Lawrence Oil

Job ID: 590-24715-1

Job ID: 590-24715-1

Eurofins Spokane

Job Narrative 590-24715-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 5/9/2024 12:31 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 8.0°C.

Receipt Exceptions

The following samples were collected in an improper container: Sample 1 (590-24715-1) and Sample 2 (590-24715-2). VOC was collected as soil in jar. Samples were not collected according to 5035L/5035A-L specifications.

GC/MS VOA

Method NWTPH_Gx_MS: The laboratory control sample (LCS) for preparation batch 590-47334 and 590-47334 and analytical batch 590-47333 recovered outside control limits for the following analytes: Gasoline. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method NWTPH_Gx_MS: The continuing calibration verification (CCV) associated with batch 590-47333 recovered above the upper control limit for Gasoline. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Spokane

Sample Summary

Client: Graymar Environmental Services Inc
Project/Site: Lawrence Oil

Job ID: 590-24715-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-24715-1	Sample 1	Solid	05/08/24 10:00	05/09/24 12:31
590-24715-2	Sample 2	Solid	05/08/24 10:15	05/09/24 12:31

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

Definitions/Glossary

Client: Graymar Environmental Services Inc
Project/Site: Lawrence Oil

Job ID: 590-24715-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Graymar Environmental Services Inc
Project/Site: Lawrence Oil

Job ID: 590-24715-1

Client Sample ID: Sample 1

Date Collected: 05/08/24 10:00

Date Received: 05/09/24 12:31

Lab Sample ID: 590-24715-1

Matrix: Solid

Percent Solids: 94.6

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND	*+	6.2		mg/Kg	☼	05/13/24 15:30	05/13/24 17:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		41.5 - 162	05/13/24 15:30	05/13/24 17:00	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		10		mg/Kg	☼	05/10/24 07:08	05/10/24 11:46	1
Residual Range Organics (RRO) (C25-C36)	ND		25		mg/Kg	☼	05/10/24 07:08	05/10/24 11:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	98		50 - 150	05/10/24 07:08	05/10/24 11:46	1
n-Triacontane-d62	87		50 - 150	05/10/24 07:08	05/10/24 11:46	1

Client Sample ID: Sample 2

Date Collected: 05/08/24 10:15

Date Received: 05/09/24 12:31

Lab Sample ID: 590-24715-2

Matrix: Solid

Percent Solids: 95.6

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND	*+	6.2		mg/Kg	☼	05/13/24 15:30	05/13/24 17:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		41.5 - 162	05/13/24 15:30	05/13/24 17:21	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		10		mg/Kg	☼	05/10/24 07:08	05/10/24 12:29	1
Residual Range Organics (RRO) (C25-C36)	ND		25		mg/Kg	☼	05/10/24 07:08	05/10/24 12:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	97		50 - 150	05/10/24 07:08	05/10/24 12:29	1
n-Triacontane-d62	90		50 - 150	05/10/24 07:08	05/10/24 12:29	1

Eurofins Spokane

QC Sample Results

Client: Graymar Environmental Services Inc
Project/Site: Lawrence Oil

Job ID: 590-24715-1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC/MS)

Lab Sample ID: MB 590-47334/1-A

Matrix: Solid

Analysis Batch: 47333

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 47334

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		5.0		mg/Kg		05/13/24 12:00	05/13/24 15:11	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		41.5 - 162				05/13/24 12:00	05/13/24 15:11	1

Lab Sample ID: LCS 590-47334/3-A

Matrix: Solid

Analysis Batch: 47333

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 47334

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline	50.0	72.9	*+	mg/Kg		146	74.4 - 124
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	96		41.5 - 162				

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 590-47301/1-A

Matrix: Solid

Analysis Batch: 47291

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 47301

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		10		mg/Kg		05/10/24 07:08	05/10/24 11:03	1
Residual Range Organics (RRO) (C25-C36)	ND		25		mg/Kg		05/10/24 07:08	05/10/24 11:03	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	102		50 - 150				05/10/24 07:08	05/10/24 11:03	1
n-Triacontane-d62	83		50 - 150				05/10/24 07:08	05/10/24 11:03	1

Lab Sample ID: LCS 590-47301/2-A

Matrix: Solid

Analysis Batch: 47291

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 47301

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics (DRO) (C10-C25)	66.7	67.4		mg/Kg		101	50 - 150
Residual Range Organics (RRO) (C25-C36)	66.7	66.6		mg/Kg		100	50 - 150
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
o-Terphenyl	104		50 - 150				
n-Triacontane-d62	105		50 - 150				

Eurofins Spokane

QC Sample Results

Client: Graymar Environmental Services Inc
Project/Site: Lawrence Oil

Job ID: 590-24715-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: 590-24715-1 DU

Matrix: Solid

Analysis Batch: 47291

Client Sample ID: Sample 1

Prep Type: Total/NA

Prep Batch: 47301

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Diesel Range Organics (DRO) (C10-C25)	ND		ND		mg/Kg	⚡	NC	40
Residual Range Organics (RRO) (C25-C36)	ND		ND		mg/Kg	⚡	NC	40
Surrogate	%Recovery	DU Qualifier	DU	DU	Limits			
<i>o</i> -Terphenyl	95				50 - 150			
<i>n</i> -Triacontane-d62	87				50 - 150			

Lab Chronicle

Client: Graymar Environmental Services Inc
Project/Site: Lawrence Oil

Job ID: 590-24715-1

Client Sample ID: Sample 1

Date Collected: 05/08/24 10:00

Date Received: 05/09/24 12:31

Lab Sample ID: 590-24715-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			47296	05/09/24 16:18	MRV	EET SPK

Client Sample ID: Sample 1

Date Collected: 05/08/24 10:00

Date Received: 05/09/24 12:31

Lab Sample ID: 590-24715-1

Matrix: Solid

Percent Solids: 94.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8.988 g	10 mL	47334	05/13/24 15:30	JSP	EET SPK
Total/NA	Analysis	NWTPH-Gx		1	0.86 mL	43 mL	47333	05/13/24 17:00	JSP	EET SPK
Total/NA	Prep	3550C			15.67 g	5 mL	47301	05/10/24 07:08	MRV	EET SPK
Total/NA	Analysis	NWTPH-Dx		1	1 mL	1 mL	47291	05/10/24 11:46	NMI	EET SPK

Client Sample ID: Sample 2

Date Collected: 05/08/24 10:15

Date Received: 05/09/24 12:31

Lab Sample ID: 590-24715-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			47296	05/09/24 16:18	MRV	EET SPK

Client Sample ID: Sample 2

Date Collected: 05/08/24 10:15

Date Received: 05/09/24 12:31

Lab Sample ID: 590-24715-2

Matrix: Solid

Percent Solids: 95.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8.759 g	10 mL	47334	05/13/24 15:30	JSP	EET SPK
Total/NA	Analysis	NWTPH-Gx		1	0.86 mL	43 mL	47333	05/13/24 17:21	JSP	EET SPK
Total/NA	Prep	3550C			15.69 g	5 mL	47301	05/10/24 07:08	MRV	EET SPK
Total/NA	Analysis	NWTPH-Dx		1	1 mL	1 mL	47291	05/10/24 12:29	NMI	EET SPK

Laboratory References:

EET SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

Accreditation/Certification Summary

Client: Graymar Environmental Services Inc
Project/Site: Lawrence Oil

Job ID: 590-24715-1

Laboratory: Eurofins Spokane

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Washington	State	C569	01-07-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: Graymar Environmental Services Inc
Project/Site: Lawrence Oil

Job ID: 590-24715-1

Method	Method Description	Protocol	Laboratory
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC/MS)	NWTPH	EET SPK
NWTPH-Dx	Northwest - Semi-Volatile Petroleum Products (GC)	NWTPH	EET SPK
Moisture	Percent Moisture	EPA	EET SPK
3550C	Ultrasonic Extraction	SW846	EET SPK
5035	Closed System Purge and Trap	SW846	EET SPK

Protocol References:

EPA = US Environmental Protection Agency

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

#N/A
#N/A
#N/A
#N/A

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

[illegible]

5/14/2024

Login Sample Receipt Checklist

Client: Graymar Environmental Services Inc

Job Number: 590-24715-1

Login Number: 24715

List Source: Eurofins Spokane

List Number: 1

Creator: Morris, Mackenzie 1

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Water present in cooler; indicates evidence of melted ice.
Cooler Temperature is acceptable.	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	