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Closure Report

Marathon AGI State #2H
Eddy County, New Mexico
API ID # 30-015-34114
Incident # nkmw1102555534 / 2RP-582

Prepared For:

EOG Resources
104 S. 4th Street
Artesia, NM 88210

Prepared By:

Talon/LPE
408 W. Texas Avenue
Artesia, New Mexico 88210

December, 2022

NMOCD
506 W. Texas Ave
Artesia, NM 88210

Subject: **Closure Report**
Marathon AGI State #2H
Eddy County, New Mexico
API # 30-015-34114
Incident # nkmw1102555534 / 2RP-582

To Whom It May Concern,

EOG Resources contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the above referenced location. The incident description, soil sampling results, remedial actions and closure request are presented herein.

Site Information

The Marathon AGI State #2H is located approximately 12 miles west of Artesia, New Mexico. The legal location for this release is Unit Letter D, Section 33, Township 17 South and Range 24 East in Eddy County, New Mexico. More specifically the latitude and longitude for the release are 32.79729 and -104.59979. A Site Location Map is presented in Appendix I.

According to the soil survey provided by the United States Department of Agriculture National Resources Conservation Services, the soil in this area is comprised of Reagan-Upton, 0 to 9 percent slopes. The referenced soil data is presented in Appendix II. Per the New Mexico Bureau of Geology and Mineral Resources, the local geology consists of the Piedmont alluvial deposits, Holocene to lower Pleistocene in age.

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Ground Water and Site Characterization

The New Mexico Office of the State Engineer Database indicates the nearest reported depth to groundwater is 196 feet below ground surface (bgs). Further research of the Bureau of Land Management Karst data indicates that this site is situated within a low potential Karst area.

Approximate Depth to Groundwater	**196 Feet/bgs**

☐Yes ☒No Within 300 feet of any continuously flowing watercourse or any other significant watercourse

☐Yes ☒No Within 200 feet of any lakebed, sinkhole or a playa lake

☐Yes ☒No Within 300 feet from an occupied permanent residence, school, hospital, institution or church

☐Yes ☒No Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes

☐Yes ☒No Within 1000 feet of any freshwater well or spring

☐Yes ☒No Within incorporated municipal boundaries or within a defined municipal freshwater well field covered under a municipal ordinance adopted pursuant to Section 3-2703 NMSA 1978

☐Yes ☒No Within 300 feet of a wetland

☐Yes ☒No Within the area overlying a subsurface mine

☐Yes ☒No Within an unstable area

☐Yes ☒No Within a 100-year floodplain

With no depth to water source available that meets New Mexico Oil Conservation Division's (NMOCD) criteria, the responsible party must therefore adhere to the cleanup criteria for this site is as follows; groundwater is less than 50 feet bgs, Table I, NMOCD Rule 19.15.29 NMAC.

Table I Closure Criteria for Soils Impacted by a Release			
Depth below horizontal extents of release to ground water less than 10,000 mg/l TDS	Constituent	Method	Limit
≤ 50 feet	Total Chlorides	EPA 300.0 or SM4500 Cl B	600 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	100 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg

Incident Description

During routine site clean-up activities and decommissioning of the facility, EOG personnel noted a historical spill had been reported on January 18, 2011 and will need to be addressed before final abandonment of site can be achieved. The C-141 submitted to the NMOCD, incident number nkmw1102555534, stated that an old production tank that had a small pin hole leak on the bottom releasing approximately 11 bbls of produced water with zero bbls recovered. The site map is presented in Appendix I.

Site Assessment

On October 31, 2022, Talon mobilized personnel to the site to conduct an initial site assessment. The impacted area was photographed, sampled utilizing a hand auger, and mapped. All soil samples were properly packaged, preserved, and transported to Eurofins laboratories via chain of custody for analysis of Total Chlorides (Method SM4500Cl-B), TPH (EPA Method 8015M), and volatile organics (BTEX, EPA Method 8021B). Sample locations are shown on the attached Figure 2 (Appendix I) and the results of our sampling event are presented on the following data table.

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Table 1

10/31/2022 Soil sample Laboratory Results

Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Chlorides mg/kg
NMOCD Table 1 Closure Criteria 19.15.29 NMAC			50 mg/kg	10 mg/kg	DRO + GRO + MRO combined = 100 mg/kg			100 mg/kg	600 mg/kg
S-1	10/31/2022	0-6" R	ND	ND	ND	ND	ND	-	7700
S-2	10/31/2022	0-6" R	ND	ND	ND	ND	ND	-	4960
S-3	10/31/2022	0-6" R	ND	ND	ND	ND	ND	-	224
S-4	10/31/2022	0-6" R	ND	ND	ND	ND	ND	-	48
S-5	10/31/2022	0-6" R	ND	ND	ND	ND	ND	-	ND
S-6	10/31/2022	0-6" R	ND	ND	ND	ND	ND	-	ND
S-7	10/31/2022	0-6" R	ND	ND	ND	ND	ND	-	16
S-8	10/31/2022	0-6" R	ND	ND	ND	ND	ND	-	ND
ND = Analyte Not Detected, R = Rock Refusal									

On November 9, 2022, based on the laboratory results from the initial site assessment and upon client authorization, Talon personnel and equipment mobilized to the site to continue delineation of the impacted area with backhoe. Test then trenches were advanced at the locations shown on figure 1, site assessment map. All soil samples were properly collected and preserved for transport to Eurofins Laboratories for analysis. The soil sample results from the laboratory are tabulated below. Grab sample locations are illustrated on Figure 3 (Appendix I).

Table 2
11/09/2022 Soil sample Laboratory Results

Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Chlorides mg/kg
NMOCD Table 1 Closure Criteria 19.15.29 NMAC			50 mg/kg	10 mg/kg	DRO + GRO + MRO combined = 100 mg/kg			100 mg/kg	600 mg/kg
TT-1	11/9/2022	2'	ND	ND	ND	26	ND	26	145
TT-1	11/9/2022	4'	ND	ND	ND	23	ND	23	216
TT-2	11/9/2022	2'	ND	ND	ND	ND	ND	-	224
TT-2	11/9/2022	4'	ND	ND	16.8	ND	ND	16.8	2150
TT-2	11/9/2022	8'	ND	ND	ND	20.1	ND	20.1	1260
TT-2	11/9/2022	10'	ND	ND	23.7	ND	ND	23.7	1680
TT-3	11/9/2022	2'	ND	ND	ND	37.8	ND	37.8	34.6
TT-3	11/9/2022	4'	ND	ND	ND	33.4	ND	33.4	42.9
TT-4	11/9/2022	2'	ND	ND	ND	22	ND	22	ND
TT-4	11/9/2022	4'	ND	ND	ND	21.8	ND	21.8	35.7
ND = Analyte Not Detected, TT= Test Trench									

On November 14, 2022, Talon returned to the site to continue excavations and sampling activities. All soil samples were properly collected and preserved for transport to Eurofins Laboratories for analysis. The soil sample results from the laboratory are tabulated below. Grab sample locations are illustrated on Figure 1 (Appendix I).

Table 3
11/14/2022 Soil sample Laboratory Results

Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Chlorides mg/kg
NMOCD Table 1 Closure Criteria 19.15.29 NMAC			50 mg/kg	10 mg/kg	DRO + GRO + MRO combined = 100 mg/kg			100 mg/kg	600 mg/kg
TT-2 /S-9	11/14/2022	12'	ND	ND	ND	26	ND	26	771
TT-2 /S-9	11/14/2022	16'	ND	ND	ND	23	ND	23	641
TT-2 /S-9	11/14/2022	17'	ND	ND	ND	ND	ND	ND	628
ND = Analyte Not Detected, TT = Test Trench, TT-2 reclassified as S-9									

Returning to the site November 17, 2022 Talon personnel excavated depth and sidewalls to find the edge of the impacted soils. All soil samples retrieved on a composite basis, properly contained, preserved and transported to Eurofins Environment Testing for confirmation. The results are recapped below. The sample positions are illustrated on Figure 2 (Appendix I).

Table 4
11/17/2022 Confirmation sample Laboratory Results

Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Chlorides mg/kg
NMOCD Table 1 Closure Criteria 19.15.29 NMAC			**50 mg/kg**	**10 mg/kg**	**DRO + GRO + MRO combined = 100 mg/kg**			**100 mg/kg**	**600 mg/kg**
C-1	11/17/2022	20’	ND	ND	ND	20.2	ND	20.2	906
SWW	11/17/2022	4’	ND	ND	21.6	ND	ND	21.6	265
SWN	11/17/2022	4’	ND	ND	23.1	ND	ND	23.1	1260
SWE	11/17/2022	4'	ND	ND	33.0	ND	ND	33.0	124
SWS	11/17/2022	4'	ND	ND	24.5	ND	ND	24.5	14.9
C-2	11/17/2022	0-6”	ND	ND	17.7	ND	ND	17.7	1080
ND = Analyte Not Detected, R = Rock Refusal, C= Confirmation, SW = Side Wall									

On December 12, 2022, following the receipt of analytical results, Talon returned to the site to continue remediation efforts. The excavation in the vicinity of sample location of C-1 was advanced to 22’ bgs. The excavations at c-2 were advanced to 2’ bgs. Sidewalls were advanced as need in order to obtain confirmation samples as in accordance with the NMOCD closure criteria.

Table 5

12/7/2022 Confirmation sample Laboratory Results

Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Chlorides mg/kg
NMOCD Table 1 Closure Criteria 19.15.29 NMAC			**50 mg/kg**	**10 mg/kg**	**DRO + GRO + MRO combined = 100 mg/kg**			**100 mg/kg**	**600 mg/kg**
C-1	12/07/2022	22’	ND	ND	41.1	ND	ND	41.1	201
SWN	12/14/2022	4’	ND	ND	ND	ND	ND	ND	80.6
C-2	12/07/2022	2”	ND	ND	26.7	ND	ND	26.7	38.9
SWN-1	12/07/2022	1’	ND	ND	38.9	ND	ND	38.9	210
SWE-1	12/07/2022	1’	ND	ND	40.6	ND	ND	40.6	317
SWS-1	12/07/2022	1’	ND	ND	31.8	ND	ND	31.8	277
SWW-1	12/07/2022	1’	ND	ND	32.5	ND	ND	32.5	329
ND = Analyte Not Detected, R = Rock Refusal, C= Confirmation, SW = Side Wall									

Remedial Actions

- The impacted area in the vicinity of confirmation sample C-1was horizontally and vertically delineated utilizing a backhoe to a depth of 22’ bgs. based on the lab results from C-1.
- The impacted areas around C-2 were excavated to depths of 2’ bgs and sidewall samples were collected at depth of 1’ bgs Lab data shows the area was remediated in accordance with NMOCD Table I criteria.
- Background and sidewall samples were obtained in order to confirm horizontal delineation and has been achieved.
- All contaminated soil was transported to Lea Land, LLC, a NMOCD approved solid waste disposal facility.
- The excavated areas were backfilled with clean caliche, machine compacted, and restored to grade.

Closure

Based on this site characterization, remedial actions completed, and analytical results, we request that no further actions be required and that closure with regard to this incident be granted.

Should you have any questions or if further information is required, please do not hesitate to contact our office at 575-746-8768.

Respectfully submitted,

Talon/LPE

Chad Hensley
Environmental Project Manager

Attachments:

Appendix I	Site Plans
Appendix II	Groundwater Data, Soil Survey
Appendix III	Photographic Documentation
Appendix IV	Laboratory Data

Appendix I

Site Maps

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Drafted: 11/29/2022
1 in = 30 ft
Drafted By: JAI

EOG Resources Marathon AGI State 2H
Eddy County, NM
Figure 1
Site Assessment Map

TALON LPE

Drafted: 12/13/2022
1 in = 30 ft
Drafted By: JAI

EOG Resources Marathon AGI State 2H
Eddy County, NM
Figure 2
Confirmation Map

Appendix II

Groundwater Data, Soil Survey, & Wetlands Map

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
RA 02674		RA	XX	1	1	3	04	18S	24E	537345	3626582*	2306	228		
RA 10992 POD1		RA	ED		2	3	30	17S	24E	534648	3629660	2927	900		
RA 07252		RA	ED	1	1	1	26	17S	24E	540545	3630629*	3534	370	290	80
RA 07104		RA	ED		3	3	23	17S	24E	540645	3630932*	3776	336	200	136
RA 07163		RA	CH		2	2	25	17S	23E	533778	3630463*	4016	55	40	15
RA 08145		RA	ED	1	1	4	08	18S	24E	536547	3624972*	4020	500		
RA 04728		RA	ED			3	23	17S	24E	540846	3631133*	4055	385	368	17
RA 04247		RA	CH			1	36	17S	23E	532794	3628649*	4682	555		
RA 05474		RA	ED	1	1	2	16	18S	24E	538166	3624180*	4756	600	516	84
RA 08780		RA	ED	4	3	3	14	17S	24E	540733	3632441*	4825	425	320	105
RA 10980 POD1		RA	ED	3	4	2	18	17S	24E	535275	3633187	4830	600		
RA 10721		RA	ED	1	3	2	23	17S	24E	541346	3631843*	4874	534	394	140
RA 07846		RA	ED			1	15	17S	24E	539213	3633533*	4963	540	455	85
RA 07614		RA	ED	3	1	2	23	17S	24E	541344	3632046*	4999	395	310	85

Average Depth to Water: **321 feet**

Minimum Depth: **40 feet**

Maximum Depth: **516 feet**

Record Count: 14

UTMNAD83 Radius Search (in meters):

Easting (X): 537471 **Northing (Y):** 3628885 **Radius:** 5000

***UTM location was derived from PLSS - see Help**

New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Twn	Rng	X	Y
	RA 07252	1	1	1	26	17S	24E	540545	3630629*

Driller License: 749 **Driller Company:** HUGHES, SAMUEL DALE

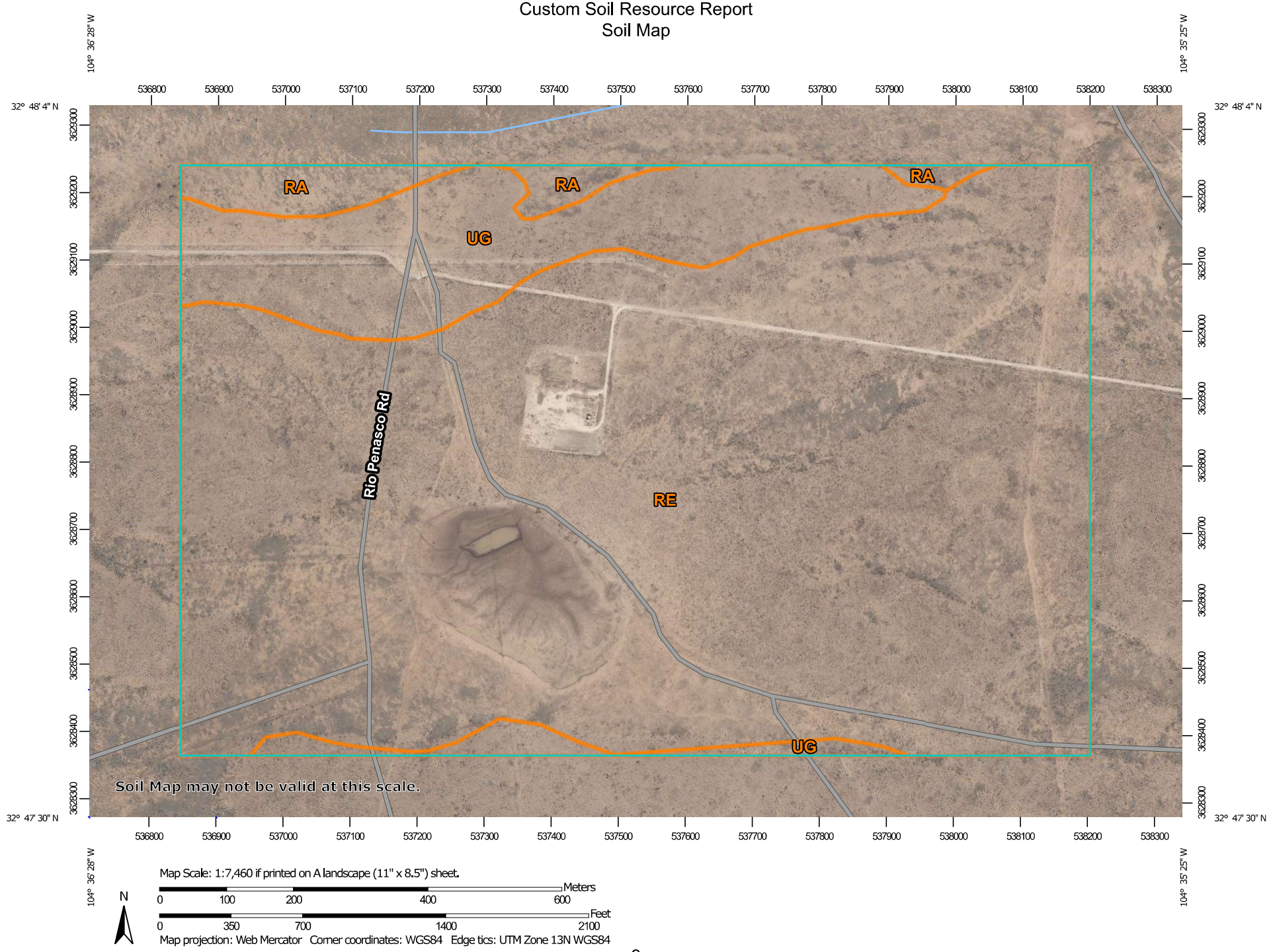
Driller Name: HUGHES, SAMUEL DALE

Drill Start Date:	12/02/1983	**Drill Finish Date:**	02/29/1984	**Plug Date:**	
Log File Date:	03/06/1984	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	1 GPM
Casing Size:	7.00	**Depth Well:**	370 feet	**Depth Water:**	290 feet

Water Bearing Stratifications:	Top	Bottom	Description
	65	70	Sandstone/Gravel/Conglomerate
	295	310	Other/Unknown

***UTM location was derived from PLSS - see Help**

Custom Soil Resource Report
Soil Map



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 18, Sep 8, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 27, 2020—Feb 28, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Eddy Area, New Mexico

RA—Reagan loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1w5c
Elevation: 1,100 to 4,400 feet
Mean annual precipitation: 7 to 14 inches
Mean annual air temperature: 60 to 70 degrees F
Frost-free period: 200 to 240 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Reagan and similar soils: 98 percent
Minor components: 2 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Reagan

Setting

Landform: Fan remnants, alluvial fans
Landform position (three-dimensional): Rise
Down-slope shape: Convex, linear
Across-slope shape: Linear
Parent material: Alluvium and/or eolian deposits

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 60 inches: loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: B
Ecological site: R070BC007NM - Loamy
Hydric soil rating: No

Minor Components

Atoka

Percent of map unit: 1 percent

Ecological site: R070BC007NM - Loamy
Hydric soil rating: No

Upton

Percent of map unit: 1 percent
Ecological site: R070BC025NM - Shallow
Hydric soil rating: No

RE—Reagan-Upton association, 0 to 9 percent slopes

Map Unit Setting

National map unit symbol: 1w5d
Elevation: 1,100 to 5,400 feet
Mean annual precipitation: 6 to 14 inches
Mean annual air temperature: 60 to 64 degrees F
Frost-free period: 180 to 240 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Reagan and similar soils: 70 percent
Upton and similar soils: 25 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Reagan

Setting

Landform: Fan remnants, alluvial fans
Landform position (three-dimensional): Rise
Down-slope shape: Convex, linear
Across-slope shape: Linear
Parent material: Alluvium and/or eolian deposits

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 60 inches: loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: B
Ecological site: R042CY153NM - Loamy
Hydric soil rating: No

Description of Upton

Setting

Landform: Ridges, fans
Landform position (three-dimensional): Side slope, rise
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from limestone

Typical profile

H1 - 0 to 9 inches: gravelly loam
H2 - 9 to 13 inches: gravelly loam
H3 - 13 to 21 inches: cemented
H4 - 21 to 60 inches: very gravelly loam

Properties and qualities

Slope: 0 to 9 percent
Depth to restrictive feature: 7 to 20 inches to petrocalcic
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.01 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 75 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: R042CY159NM - Shallow Loamy
Hydric soil rating: No

Minor Components

Atoka

Percent of map unit: 3 percent
Ecological site: R070BC007NM - Loamy
Hydric soil rating: No

Pima

Percent of map unit: 2 percent
Ecological site: R070BC017NM - Bottomland
Hydric soil rating: No

UG—Upton gravelly loam, 0 to 9 percent slopes

Map Unit Setting

National map unit symbol: 1w64
Elevation: 1,100 to 4,400 feet
Mean annual precipitation: 7 to 15 inches
Mean annual air temperature: 60 to 70 degrees F
Frost-free period: 200 to 240 days
Farmland classification: Not prime farmland

Map Unit Composition

Upton and similar soils: 96 percent
Minor components: 4 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Upton

Setting

Landform: Ridges, fans
Landform position (three-dimensional): Side slope, rise
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from limestone

Typical profile

H1 - 0 to 9 inches: gravelly loam
H2 - 9 to 13 inches: gravelly loam
H3 - 13 to 21 inches: cemented
H4 - 21 to 60 inches: very gravelly loam

Properties and qualities

Slope: 0 to 9 percent
Depth to restrictive feature: 7 to 20 inches to petrocalcic
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.01 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 75 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D

Ecological site: R070BC025NM - Shallow
Hydric soil rating: No

Minor Components

Reagan
Percent of map unit: 1 percent
Ecological site: R070BC007NM - Loamy
Hydric soil rating: No

Atoka
Percent of map unit: 1 percent
Ecological site: R070BC007NM - Loamy
Hydric soil rating: No

Atoka
Percent of map unit: 1 percent
Ecological site: R070BC007NM - Loamy
Hydric soil rating: No

Upton
Percent of map unit: 1 percent
Ecological site: R070BC025NM - Shallow
Hydric soil rating: No

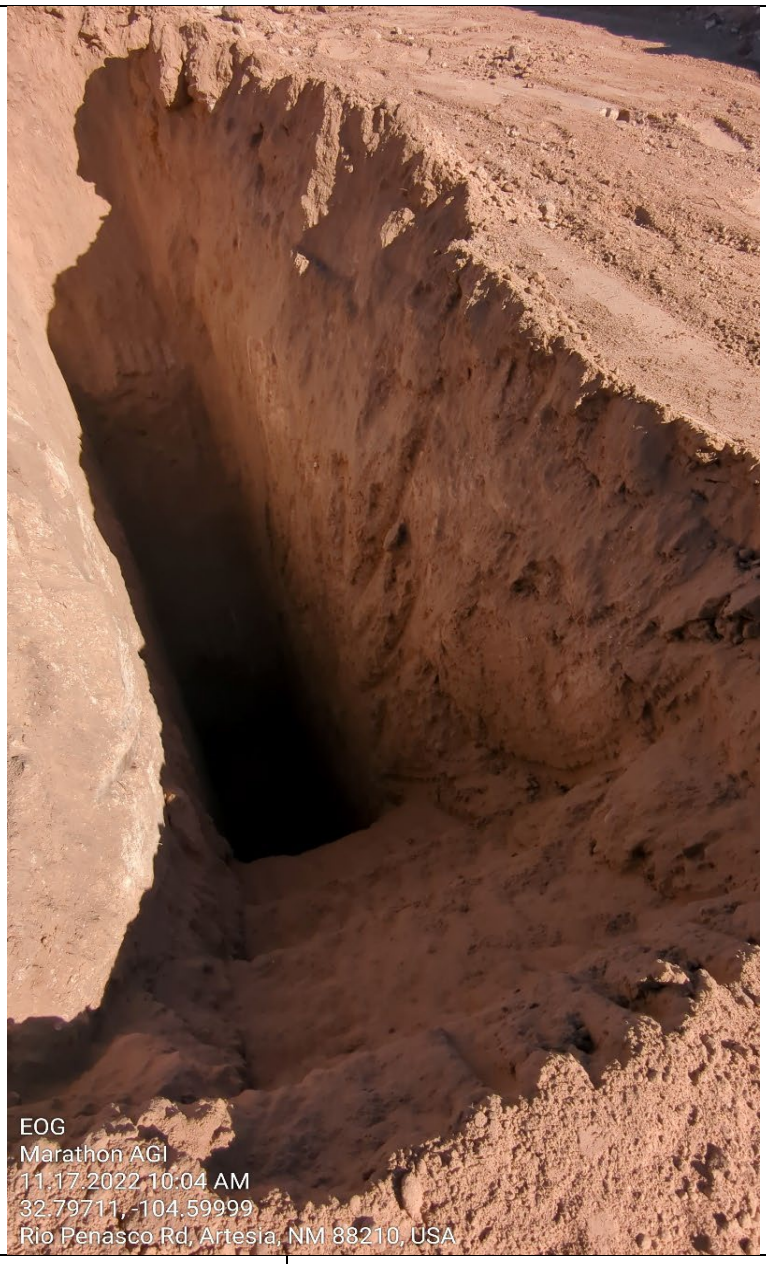
Appendix lll

Photographic Documentation

Marathon AGI State #2H
Eddy County, NM

Photograph No.1 Description:	Depth 17’

Marathon AGI State #2H
Eddy County, NM



Photograph No.2 Description:	Depth at 20’

Photograph No.3 Description:	6’ around excavation for backhoe to reach 20’

Photograph No.3 Description:	Location after backfill

Appendix IV

Laboratory Data

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Chad Hensley
Talon/LPE
408 W. Texas St.
Artesia New Mexico 88210

Generated 11/21/2022 6:30:49 PM

JOB DESCRIPTION

Marathon AGI State 2
SDG NUMBER 700438.303.01

JOB NUMBER

890-3428-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

Client: Talon/LPE
Project/Site: Marathon AGI State 2

Laboratory Job ID: 890-3428-1
SDG: 700438.303.01

Table of Contents

Definitions/Glossary

Client: Talon/LPE
Project/Site: Marathon AGI State 2

Job ID: 890-3428-1
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Qualifiers

GC VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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

Case Narrative

Client: Talon/LPE
Project/Site: Marathon AGI State 2

Job ID: 890-3428-1
SDG: 700438.303.01

Job ID: 890-3428-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3428-1

Receipt
The samples were received on 11/10/2022 2:30 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 11.0°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: TT-1 (890-3428-1), TT-1 (890-3428-2), TT-2 (890-3428-3), TT-2 (890-3428-4), TT-2 (890-3428-5), TT-2 (890-3428-6), TT-3 (890-3428-7), TT-3 (890-3428-8), TT-4 (890-3428-9) and TT-4 (890-3428-10).

GC VOA
Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-39922 and analytical batch 880-39930 was outside the upper control limits.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-39696 and analytical batch 880-39930 was outside the upper control limits.

Method 8021B: The method blank for preparation batch 880-39922 and analytical batch 880-39930 contained m-Xylene & p-Xylene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8021B: LCS biased low. Since only an acceptable LCS or LCSD is required per the method, the data has been qualified and reported.(LCS 880-39696/1-A)

Method 8021B: The method blank for preparation batch 880-39696 and analytical batch 880-39930 contained m-Xylene & p-Xylene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (LCSD 880-39418/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: TT-2 (890-3428-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-39418 and analytical batch 880-39385 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28).

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

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

Client Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2

Job ID: 890-3428-1
SDG: 700438.303.01

Client Sample ID: TT-1

Lab Sample ID: 890-3428-1
Matrix: Solid
Date Collected: 11/09/22 08:42
Date Received: 11/10/22 14:30
Sample Depth: 2

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		11/16/22 10:57	11/17/22 02:29	1
Toluene	**0.000975**	**J**	0.00201	0.000459	mg/Kg		11/16/22 10:57	11/17/22 02:29	1
Ethylbenzene	**0.00157**	**J**	0.00201	0.000568	mg/Kg		11/16/22 10:57	11/17/22 02:29	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102	mg/Kg		11/16/22 10:57	11/17/22 02:29	1
o-Xylene	**0.000569**	**J**	0.00201	0.000346	mg/Kg		11/16/22 10:57	11/17/22 02:29	1
Xylenes, Total	<0.00102	U	0.00402	0.00102	mg/Kg		11/16/22 10:57	11/17/22 02:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*11/16/22 10:57*	*11/17/22 02:29*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*11/16/22 10:57*	*11/17/22 02:29*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00311**	**J**	0.00402	0.00102	mg/Kg			11/17/22 14:53	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**26.0**	**J**	50.0	15.0	mg/Kg			11/15/22 13:49	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**26.0**	**J**	50.0	15.0	mg/Kg		11/14/22 10:22	11/15/22 02:18	1
Diesel Range Organics (Over C10-C28)	<15.0	U *1	50.0	15.0	mg/Kg		11/14/22 10:22	11/15/22 02:18	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		11/14/22 10:22	11/15/22 02:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*11/14/22 10:22*	*11/15/22 02:18*	*1*
o-Terphenyl	*120*		*70 - 130*	*11/14/22 10:22*	*11/15/22 02:18*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**145**		5.01	0.396	mg/Kg			11/15/22 23:44	1

Client Sample ID: TT-1

Lab Sample ID: 890-3428-2
Matrix: Solid
Date Collected: 11/09/22 08:47
Date Received: 11/10/22 14:30
Sample Depth: 4

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U *- *1	0.00199	0.000383	mg/Kg		11/16/22 10:35	11/19/22 11:01	1
Toluene	<0.000454	U *- *1	0.00199	0.000454	mg/Kg		11/16/22 10:35	11/19/22 11:01	1
Ethylbenzene	<0.000563	U *- *1	0.00199	0.000563	mg/Kg		11/16/22 10:35	11/19/22 11:01	1
m-Xylene & p-Xylene	**0.00180**	**J *- *1 B**	0.00398	0.00101	mg/Kg		11/16/22 10:35	11/19/22 11:01	1
o-Xylene	<0.000343	U *- *1	0.00199	0.000343	mg/Kg		11/16/22 10:35	11/19/22 11:01	1
Xylenes, Total	**0.00180**	**J *- *1 B**	0.00398	0.00101	mg/Kg		11/16/22 10:35	11/19/22 11:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*11/16/22 10:35*	*11/19/22 11:01*	*1*

Client Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2

Job ID: 890-3428-1
SDG: 700438.303.01

Client Sample ID: TT-1

Lab Sample ID: 890-3428-2
Matrix: Solid
Date Collected: 11/09/22 08:47
Date Received: 11/10/22 14:30
Sample Depth: 4

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*11/16/22 10:35*	*11/19/22 11:01*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00180**	**J**	0.00398	0.00101	mg/Kg			11/21/22 18:12	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**23.3**	**J**	49.9	15.0	mg/Kg			11/15/22 13:49	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**23.3**	**J**	49.9	15.0	mg/Kg		11/14/22 10:22	11/15/22 02:39	1
Diesel Range Organics (Over C10-C28)	<15.0	U *1	49.9	15.0	mg/Kg		11/14/22 10:22	11/15/22 02:39	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		11/14/22 10:22	11/15/22 02:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*118*		*70 - 130*	*11/14/22 10:22*	*11/15/22 02:39*	*1*
o-Terphenyl	*130*		*70 - 130*	*11/14/22 10:22*	*11/15/22 02:39*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**216**		4.99	0.394	mg/Kg			11/16/22 00:01	1

Client Sample ID: TT-2

Lab Sample ID: 890-3428-3
Matrix: Solid
Date Collected: 11/09/22 08:51
Date Received: 11/10/22 14:30
Sample Depth: 2

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U *- *1	0.00199	0.000383	mg/Kg		11/16/22 10:35	11/19/22 12:46	1
Toluene	<0.000453	U *- *1	0.00199	0.000453	mg/Kg		11/16/22 10:35	11/19/22 12:46	1
Ethylbenzene	<0.000562	U *- *1	0.00199	0.000562	mg/Kg		11/16/22 10:35	11/19/22 12:46	1
m-Xylene & p-Xylene	**0.00188**	**J *- *1 B**	0.00398	0.00100	mg/Kg		11/16/22 10:35	11/19/22 12:46	1
o-Xylene	<0.000342	U *- *1	0.00199	0.000342	mg/Kg		11/16/22 10:35	11/19/22 12:46	1
Xylenes, Total	**0.00188**	**J *- *1 B**	0.00398	0.00100	mg/Kg		11/16/22 10:35	11/19/22 12:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*11/16/22 10:35*	*11/19/22 12:46*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*11/16/22 10:35*	*11/19/22 12:46*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00188**	**J**	0.00398	0.00100	mg/Kg			11/21/22 18:12	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**16.8**	**J**	49.9	15.0	mg/Kg			11/15/22 13:49	1

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Client Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2

Job ID: 890-3428-1
SDG: 700438.303.01

Client Sample ID: TT-2

Lab Sample ID: 890-3428-3
Matrix: Solid
Date Collected: 11/09/22 08:51
Date Received: 11/10/22 14:30
Sample Depth: 2

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**16.8**	**J**	49.9	15.0	mg/Kg		11/14/22 10:22	11/15/22 03:00	1
Diesel Range Organics (Over C10-C28)	<15.0	U *1	49.9	15.0	mg/Kg		11/14/22 10:22	11/15/22 03:00	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		11/14/22 10:22	11/15/22 03:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*11/14/22 10:22*	*11/15/22 03:00*	*1*
o-Terphenyl	*113*		*70 - 130*	*11/14/22 10:22*	*11/15/22 03:00*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**608**		4.95	0.391	mg/Kg			11/16/22 00:07	1

Client Sample ID: TT-2

Lab Sample ID: 890-3428-4
Matrix: Solid
Date Collected: 11/09/22 08:56
Date Received: 11/10/22 14:30
Sample Depth: 4

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U *- *1	0.00201	0.000387	mg/Kg		11/16/22 10:35	11/19/22 13:12	1
Toluene	<0.000459	U *- *1	0.00201	0.000459	mg/Kg		11/16/22 10:35	11/19/22 13:12	1
Ethylbenzene	<0.000568	U *- *1	0.00201	0.000568	mg/Kg		11/16/22 10:35	11/19/22 13:12	1
m-Xylene & p-Xylene	**0.00197**	**J *- *1 B**	0.00402	0.00102	mg/Kg		11/16/22 10:35	11/19/22 13:12	1
o-Xylene	<0.000346	U *- *1	0.00201	0.000346	mg/Kg		11/16/22 10:35	11/19/22 13:12	1
Xylenes, Total	**0.00197**	**J *- *1 B**	0.00402	0.00102	mg/Kg		11/16/22 10:35	11/19/22 13:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*11/16/22 10:35*	*11/19/22 13:12*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*11/16/22 10:35*	*11/19/22 13:12*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00197**	**J**	0.00402	0.00102	mg/Kg			11/21/22 18:12	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**20.1**	**J**	50.0	15.0	mg/Kg			11/15/22 13:49	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**20.1**	**J**	50.0	15.0	mg/Kg		11/14/22 10:22	11/15/22 03:21	1
Diesel Range Organics (Over C10-C28)	<15.0	U *1	50.0	15.0	mg/Kg		11/14/22 10:22	11/15/22 03:21	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		11/14/22 10:22	11/15/22 03:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*11/14/22 10:22*	*11/15/22 03:21*	*1*
o-Terphenyl	*133*	*S1+*	*70 - 130*	*11/14/22 10:22*	*11/15/22 03:21*	*1*

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Client Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2

Job ID: 890-3428-1
SDG: 700438.303.01

Client Sample ID: TT-2
Date Collected: 11/09/22 08:56
Date Received: 11/10/22 14:30
Sample Depth: 4

Lab Sample ID: 890-3428-4
Matrix: Solid

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2150**		25.2	1.99	mg/Kg			11/16/22 00:24	5

Client Sample ID: TT-2
Date Collected: 11/09/22 10:20
Date Received: 11/10/22 14:30
Sample Depth: 8

Lab Sample ID: 890-3428-5
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U *- *1	0.00200	0.000385	mg/Kg		11/16/22 10:35	11/19/22 13:38	1
Toluene	<0.000456	U *- *1	0.00200	0.000456	mg/Kg		11/16/22 10:35	11/19/22 13:38	1
Ethylbenzene	<0.000565	U *- *1	0.00200	0.000565	mg/Kg		11/16/22 10:35	11/19/22 13:38	1
m-Xylene & p-Xylene	**0.00183**	**J *- *1 B**	0.00400	0.00101	mg/Kg		11/16/22 10:35	11/19/22 13:38	1
o-Xylene	<0.000344	U *- *1	0.00200	0.000344	mg/Kg		11/16/22 10:35	11/19/22 13:38	1
Xylenes, Total	**0.00183**	**J *- *1 B**	0.00400	0.00101	mg/Kg		11/16/22 10:35	11/19/22 13:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*	*11/16/22 10:35*	*11/19/22 13:38*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*11/16/22 10:35*	*11/19/22 13:38*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00183**	**J**	0.00400	0.00101	mg/Kg			11/21/22 18:12	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**19.0**	**J**	50.0	15.0	mg/Kg			11/15/22 13:49	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**19.0**	**J**	50.0	15.0	mg/Kg		11/14/22 10:22	11/15/22 03:42	1
Diesel Range Organics (Over C10-C28)	<15.0	U *1	50.0	15.0	mg/Kg		11/14/22 10:22	11/15/22 03:42	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		11/14/22 10:22	11/15/22 03:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*11/14/22 10:22*	*11/15/22 03:42*	*1*
o-Terphenyl	*109*		*70 - 130*	*11/14/22 10:22*	*11/15/22 03:42*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1260**		25.1	1.98	mg/Kg			11/16/22 00:30	5

Client Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2

Job ID: 890-3428-1
SDG: 700438.303.01

Client Sample ID: TT-2

Date Collected: 11/09/22 10:24
Date Received: 11/10/22 14:30
Sample Depth: 10

Lab Sample ID: 890-3428-6

Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000386	U *- *1	0.00200	0.000386	mg/Kg		11/16/22 10:35	11/19/22 14:03	1
Toluene	<0.000457	U *- *1	0.00200	0.000457	mg/Kg		11/16/22 10:35	11/19/22 14:03	1
Ethylbenzene	<0.000566	U *- *1	0.00200	0.000566	mg/Kg		11/16/22 10:35	11/19/22 14:03	1
m-Xylene & p-Xylene	**0.00184**	**J *- *1 B**	0.00401	0.00101	mg/Kg		11/16/22 10:35	11/19/22 14:03	1
o-Xylene	<0.000345	U *- *1	0.00200	0.000345	mg/Kg		11/16/22 10:35	11/19/22 14:03	1
Xylenes, Total	**0.00184**	**J *- *1 B**	0.00401	0.00101	mg/Kg		11/16/22 10:35	11/19/22 14:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*11/16/22 10:35*	*11/19/22 14:03*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*11/16/22 10:35*	*11/19/22 14:03*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00184**	**J**	0.00401	0.00101	mg/Kg			11/21/22 18:12	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**23.7**	**J**	49.9	15.0	mg/Kg			11/15/22 13:49	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**23.7**	**J**	49.9	15.0	mg/Kg		11/14/22 10:22	11/15/22 04:04	1
Diesel Range Organics (Over C10-C28)	<15.0	U *1	49.9	15.0	mg/Kg		11/14/22 10:22	11/15/22 04:04	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		11/14/22 10:22	11/15/22 04:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*11/14/22 10:22*	*11/15/22 04:04*	*1*
o-Terphenyl	*108*		*70 - 130*	*11/14/22 10:22*	*11/15/22 04:04*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1680**		24.9	1.96	mg/Kg			11/16/22 00:35	5

Client Sample ID: TT-3

Date Collected: 11/09/22 09:00
Date Received: 11/10/22 14:30
Sample Depth: 2

Lab Sample ID: 890-3428-7

Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000389	U *- *1	0.00202	0.000389	mg/Kg		11/16/22 10:35	11/19/22 14:29	1
Toluene	<0.000461	U *- *1	0.00202	0.000461	mg/Kg		11/16/22 10:35	11/19/22 14:29	1
Ethylbenzene	<0.000571	U *- *1	0.00202	0.000571	mg/Kg		11/16/22 10:35	11/19/22 14:29	1
m-Xylene & p-Xylene	**0.00186**	**J *- *1 B**	0.00404	0.00102	mg/Kg		11/16/22 10:35	11/19/22 14:29	1
o-Xylene	<0.000347	U *- *1	0.00202	0.000347	mg/Kg		11/16/22 10:35	11/19/22 14:29	1
Xylenes, Total	**0.00186**	**J *- *1 B**	0.00404	0.00102	mg/Kg		11/16/22 10:35	11/19/22 14:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*11/16/22 10:35*	*11/19/22 14:29*	*1*

Client Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2

Job ID: 890-3428-1
SDG: 700438.303.01

Client Sample ID: TT-3

Lab Sample ID: 890-3428-7
Matrix: Solid
Date Collected: 11/09/22 09:00
Date Received: 11/10/22 14:30
Sample Depth: 2

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*11/16/22 10:35*	*11/19/22 14:29*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00186**	**J**	0.00404	0.00102	mg/Kg			11/21/22 18:12	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**37.8**	**J**	50.0	15.0	mg/Kg			11/15/22 13:49	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**19.9**	**J**	50.0	15.0	mg/Kg		11/14/22 10:22	11/15/22 04:25	1
Diesel Range Organics (Over C10-C28)	**17.9**	**J *1**	50.0	15.0	mg/Kg		11/14/22 10:22	11/15/22 04:25	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		11/14/22 10:22	11/15/22 04:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*102*		*70 - 130*	*11/14/22 10:22*	*11/15/22 04:25*	*1*
o-Terphenyl	*109*		*70 - 130*	*11/14/22 10:22*	*11/15/22 04:25*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**34.6**		4.96	0.392	mg/Kg			11/16/22 00:41	1

Client Sample ID: TT-3

Lab Sample ID: 890-3428-8
Matrix: Solid
Date Collected: 11/09/22 09:03
Date Received: 11/10/22 14:30
Sample Depth: 4

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U *- *1	0.00199	0.000383	mg/Kg		11/16/22 10:35	11/19/22 14:55	1
Toluene	<0.000454	U *- *1	0.00199	0.000454	mg/Kg		11/16/22 10:35	11/19/22 14:55	1
Ethylbenzene	<0.000563	U *- *1	0.00199	0.000563	mg/Kg		11/16/22 10:35	11/19/22 14:55	1
m-Xylene & p-Xylene	**0.00179**	**J *- *1 B**	0.00398	0.00101	mg/Kg		11/16/22 10:35	11/19/22 14:55	1
o-Xylene	<0.000343	U *- *1	0.00199	0.000343	mg/Kg		11/16/22 10:35	11/19/22 14:55	1
Xylenes, Total	**0.00179**	**J *- *1 B**	0.00398	0.00101	mg/Kg		11/16/22 10:35	11/19/22 14:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*11/16/22 10:35*	*11/19/22 14:55*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*11/16/22 10:35*	*11/19/22 14:55*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00179**	**J**	0.00398	0.00101	mg/Kg			11/21/22 18:12	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**33.4**	**J**	49.9	15.0	mg/Kg			11/15/22 13:49	1

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Client Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2

Job ID: 890-3428-1
SDG: 700438.303.01

Client Sample ID: TT-3

Lab Sample ID: 890-3428-8
Matrix: Solid
Date Collected: 11/09/22 09:03
Date Received: 11/10/22 14:30
Sample Depth: 4

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**33.4**	**J**	49.9	15.0	mg/Kg		11/14/22 10:22	11/15/22 04:46	1
Diesel Range Organics (Over C10-C28)	<15.0	U *1	49.9	15.0	mg/Kg		11/14/22 10:22	11/15/22 04:46	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		11/14/22 10:22	11/15/22 04:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*11/14/22 10:22*	*11/15/22 04:46*	*1*
o-Terphenyl	*114*		*70 - 130*	*11/14/22 10:22*	*11/15/22 04:46*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**42.9**		5.00	0.395	mg/Kg			11/16/22 00:47	1

Client Sample ID: TT-4

Lab Sample ID: 890-3428-9
Matrix: Solid
Date Collected: 11/09/22 09:16
Date Received: 11/10/22 14:30
Sample Depth: 2

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U *- *1	0.00199	0.000383	mg/Kg		11/16/22 10:35	11/19/22 15:20	1
Toluene	<0.000453	U *- *1	0.00199	0.000453	mg/Kg		11/16/22 10:35	11/19/22 15:20	1
Ethylbenzene	<0.000562	U *- *1	0.00199	0.000562	mg/Kg		11/16/22 10:35	11/19/22 15:20	1
m-Xylene & p-Xylene	**0.00179**	**J *- *1 B**	0.00398	0.00100	mg/Kg		11/16/22 10:35	11/19/22 15:20	1
o-Xylene	<0.000342	U *- *1	0.00199	0.000342	mg/Kg		11/16/22 10:35	11/19/22 15:20	1
Xylenes, Total	**0.00179**	**J *- *1 B**	0.00398	0.00100	mg/Kg		11/16/22 10:35	11/19/22 15:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*11/16/22 10:35*	*11/19/22 15:20*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*11/16/22 10:35*	*11/19/22 15:20*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00179**	**J**	0.00398	0.00100	mg/Kg			11/21/22 18:12	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**22.0**	**J**	49.9	15.0	mg/Kg			11/15/22 13:49	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**22.0**	**J**	49.9	15.0	mg/Kg		11/14/22 10:22	11/15/22 05:07	1
Diesel Range Organics (Over C10-C28)	<15.0	U *1	49.9	15.0	mg/Kg		11/14/22 10:22	11/15/22 05:07	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		11/14/22 10:22	11/15/22 05:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*11/14/22 10:22*	*11/15/22 05:07*	*1*
o-Terphenyl	*112*		*70 - 130*	*11/14/22 10:22*	*11/15/22 05:07*	*1*

Client Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2

Job ID: 890-3428-1
SDG: 700438.303.01

Client Sample ID: TT-4
Lab Sample ID: 890-3428-9
Date Collected: 11/09/22 09:16
Matrix: Solid
Date Received: 11/10/22 14:30
Sample Depth: 2

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.392	U	4.96	0.392	mg/Kg			11/16/22 00:52	1

Client Sample ID: TT-4
Lab Sample ID: 890-3428-10
Date Collected: 11/09/22 09:19
Matrix: Solid
Date Received: 11/10/22 14:30
Sample Depth: 4

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U *- *1	0.00200	0.000384	mg/Kg		11/16/22 10:35	11/19/22 15:46	1
Toluene	<0.000455	U *- *1	0.00200	0.000455	mg/Kg		11/16/22 10:35	11/19/22 15:46	1
Ethylbenzene	<0.000564	U *- *1	0.00200	0.000564	mg/Kg		11/16/22 10:35	11/19/22 15:46	1
m-Xylene & p-Xylene	**0.00180**	**J *- *1 B**	0.00399	0.00101	mg/Kg		11/16/22 10:35	11/19/22 15:46	1
o-Xylene	<0.000343	U *- *1	0.00200	0.000343	mg/Kg		11/16/22 10:35	11/19/22 15:46	1
Xylenes, Total	**0.00180**	**J *- *1 B**	0.00399	0.00101	mg/Kg		11/16/22 10:35	11/19/22 15:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*11/16/22 10:35*	*11/19/22 15:46*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*11/16/22 10:35*	*11/19/22 15:46*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00180**	**J**	0.00399	0.00101	mg/Kg			11/21/22 18:12	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**21.8**	**J**	49.8	14.9	mg/Kg			11/15/22 13:49	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**21.8**	**J**	49.8	14.9	mg/Kg		11/14/22 10:22	11/15/22 05:29	1
Diesel Range Organics (Over C10-C28)	<14.9	U *1	49.8	14.9	mg/Kg		11/14/22 10:22	11/15/22 05:29	1
OII Range Organics (Over C28-C36)	<14.9	U	49.8	14.9	mg/Kg		11/14/22 10:22	11/15/22 05:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*11/14/22 10:22*	*11/15/22 05:29*	*1*
o-Terphenyl	*120*		*70 - 130*	*11/14/22 10:22*	*11/15/22 05:29*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**35.7**		4.98	0.393	mg/Kg			11/16/22 00:58	1

Surrogate Summary

Client: Talon/LPE
Project/Site: Marathon AGI State 2

Job ID: 890-3428-1
SDG: 700438.303.01

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-3428-1	TT-1	101	109
890-3428-2	TT-1	115	101
890-3428-3	TT-2	97	92
890-3428-4	TT-2	102	94
890-3428-5	TT-2	125	99
890-3428-6	TT-2	102	92
890-3428-7	TT-3	109	103
890-3428-8	TT-3	111	94
890-3428-9	TT-4	109	82
890-3428-10	TT-4	90	93
LCS 880-39696/1-A	Lab Control Sample	92	88
LCS 880-39713/1-A	Lab Control Sample	85	106
LCSD 880-39696/2-A	Lab Control Sample Dup	121	101
LCSD 880-39713/2-A	Lab Control Sample Dup	92	97
MB 880-39259/5-A	Method Blank	77	104
MB 880-39696/5-A	Method Blank	66 S1-	89
MB 880-39713/5-A	Method Blank	81	100
MB 880-39922/5-A	Method Blank	63 S1-	94

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-3428-1	TT-1	108	120
890-3428-2	TT-1	118	130
890-3428-3	TT-2	104	113
890-3428-4	TT-2	120	133 S1+
890-3428-5	TT-2	100	109
890-3428-6	TT-2	102	108
890-3428-7	TT-3	102	109
890-3428-8	TT-3	105	114
890-3428-9	TT-4	104	112
890-3428-10	TT-4	113	120
LCS 880-39418/2-A	Lab Control Sample	97	110
LCSD 880-39418/3-A	Lab Control Sample Dup	115	135 S1+
MB 880-39418/1-A	Method Blank	89	97

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2

Job ID: 890-3428-1
SDG: 700438.303.01

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-39259/5-A
Matrix: Solid
Analysis Batch: 39686

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 39259

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		11/10/22 15:16	11/16/22 13:25	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		11/10/22 15:16	11/16/22 13:25	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		11/10/22 15:16	11/16/22 13:25	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		11/10/22 15:16	11/16/22 13:25	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		11/10/22 15:16	11/16/22 13:25	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		11/10/22 15:16	11/16/22 13:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*77*		*70 - 130*	*11/10/22 15:16*	*11/16/22 13:25*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*11/10/22 15:16*	*11/16/22 13:25*	*1*

Lab Sample ID: MB 880-39696/5-A
Matrix: Solid
Analysis Batch: 39930

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 39696

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		11/16/22 10:35	11/19/22 06:32	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		11/16/22 10:35	11/19/22 06:32	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		11/16/22 10:35	11/19/22 06:32	1
m-Xylene & p-Xylene	0.001805	J	0.00400	0.00101	mg/Kg		11/16/22 10:35	11/19/22 06:32	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		11/16/22 10:35	11/19/22 06:32	1
Xylenes, Total	0.001805	J	0.00400	0.00101	mg/Kg		11/16/22 10:35	11/19/22 06:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*66*	*S1-*	*70 - 130*	*11/16/22 10:35*	*11/19/22 06:32*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*11/16/22 10:35*	*11/19/22 06:32*	*1*

Lab Sample ID: LCS 880-39696/1-A
Matrix: Solid
Analysis Batch: 39930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 39696

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.02233	*-	mg/Kg		22	70 - 130
Toluene	0.100	0.02593	*-	mg/Kg		26	70 - 130
Ethylbenzene	0.100	0.02451	*-	mg/Kg		25	70 - 130
m-Xylene & p-Xylene	0.200	0.05600	*-	mg/Kg		28	70 - 130
o-Xylene	0.100	0.03046	*-	mg/Kg		30	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*

Lab Sample ID: LCSD 880-39696/2-A
Matrix: Solid
Analysis Batch: 39930

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 39696

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1046	*1	mg/Kg		105	70 - 130	130	35

QC Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2

Job ID: 890-3428-1
SDG: 700438.303.01

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-39696/2-A
Matrix: Solid
Analysis Batch: 39930

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 39696

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.09291	*1	mg/Kg		93	70 - 130	113	35
Ethylbenzene			0.100	0.09366	*1	mg/Kg		94	70 - 130	117	35
m-Xylene & p-Xylene			0.200	0.2040	*1	mg/Kg		102	70 - 130	114	35
o-Xylene			0.100	0.09928	*1	mg/Kg		99	70 - 130	106	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 880-39713/5-A
Matrix: Solid
Analysis Batch: 39686

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 39713

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		11/16/22 10:57	11/17/22 00:59	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		11/16/22 10:57	11/17/22 00:59	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		11/16/22 10:57	11/17/22 00:59	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		11/16/22 10:57	11/17/22 00:59	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		11/16/22 10:57	11/17/22 00:59	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		11/16/22 10:57	11/17/22 00:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*11/16/22 10:57*	*11/17/22 00:59*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*11/16/22 10:57*	*11/17/22 00:59*	*1*

Lab Sample ID: LCS 880-39713/1-A
Matrix: Solid
Analysis Batch: 39686

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 39713

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene			0.100	0.08679		mg/Kg		87	70 - 130
Toluene			0.100	0.09007		mg/Kg		90	70 - 130
Ethylbenzene			0.100	0.08826		mg/Kg		88	70 - 130
m-Xylene & p-Xylene			0.200	0.1618		mg/Kg		81	70 - 130
o-Xylene			0.100	0.08011		mg/Kg		80	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 880-39713/2-A
Matrix: Solid
Analysis Batch: 39686

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 39713

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08832		mg/Kg		88	70 - 130	2	35
Toluene			0.100	0.09197		mg/Kg		92	70 - 130	2	35
Ethylbenzene			0.100	0.09209		mg/Kg		92	70 - 130	4	35

Eurofins Carlsbad

QC Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2

Job ID: 890-3428-1
SDG: 700438.303.01

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-39713/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 39686 — **Prep Batch: 39713**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
m-Xylene & p-Xylene			0.200	0.1686		mg/Kg		84	70 - 130	4	35
o-Xylene			0.100	0.08300		mg/Kg		83	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: MB 880-39922/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 39930 — **Prep Batch: 39922**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		11/18/22 12:17	11/18/22 17:10	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		11/18/22 12:17	11/18/22 17:10	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		11/18/22 12:17	11/18/22 17:10	1
m-Xylene & p-Xylene	0.001798	J	0.00400	0.00101	mg/Kg		11/18/22 12:17	11/18/22 17:10	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		11/18/22 12:17	11/18/22 17:10	1
Xylenes, Total	0.001798	J	0.00400	0.00101	mg/Kg		11/18/22 12:17	11/18/22 17:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*63*	*S1-*	*70 - 130*	*11/18/22 12:17*	*11/18/22 17:10*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*11/18/22 12:17*	*11/18/22 17:10*	*1*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-39418/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 39385 — **Prep Batch: 39418**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	50.0	15.0	mg/Kg		11/14/22 10:22	11/14/22 20:35	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		11/14/22 10:22	11/14/22 20:35	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		11/14/22 10:22	11/14/22 20:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*11/14/22 10:22*	*11/14/22 20:35*	*1*
o-Terphenyl	*97*		*70 - 130*	*11/14/22 10:22*	*11/14/22 20:35*	*1*

Lab Sample ID: LCS 880-39418/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 39385 — **Prep Batch: 39418**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	860.5		mg/Kg		86	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	886.1		mg/Kg		89	70 - 130		

QC Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2

Job ID: 890-3428-1
SDG: 700438.303.01

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-39418/2-A
Matrix: Solid
Analysis Batch: 39385

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 39418

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*97*		*70 - 130*
o-Terphenyl	*110*		*70 - 130*

Lab Sample ID: LCSD 880-39418/3-A
Matrix: Solid
Analysis Batch: 39385

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 39418

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	889.3		mg/Kg		89	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	1112	*1	mg/Kg		111	70 - 130	23	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*115*		*70 - 130*
o-Terphenyl	*135*	*S1+*	*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-39447/1-A
Matrix: Solid
Analysis Batch: 39640

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			11/15/22 22:08	1

Lab Sample ID: LCS 880-39447/2-A
Matrix: Solid
Analysis Batch: 39640

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	263.6		mg/Kg		105	90 - 110		

Lab Sample ID: LCSD 880-39447/3-A
Matrix: Solid
Analysis Batch: 39640

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	262.6		mg/Kg		105	90 - 110	0	20

Lab Sample ID: 890-3428-1 MS
Matrix: Solid
Analysis Batch: 39640

Client Sample ID: TT-1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	145		251	383.2		mg/Kg		95	90 - 110		

QC Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2

Job ID: 890-3428-1
SDG: 700438.303.01

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-3428-1 MSD
Matrix: Solid
Analysis Batch: 39640

Client Sample ID: TT-1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	145		251	395.3		mg/Kg		100	90 - 110	3	20

QC Association Summary

Client: Talon/LPE
Project/Site: Marathon AGI State 2

Job ID: 890-3428-1
SDG: 700438.303.01

GC VOA

Prep Batch: 39259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-39259/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 39686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3428-1	TT-1	Total/NA	Solid	8021B	39713
MB 880-39259/5-A	Method Blank	Total/NA	Solid	8021B	39259
MB 880-39713/5-A	Method Blank	Total/NA	Solid	8021B	39713
LCS 880-39713/1-A	Lab Control Sample	Total/NA	Solid	8021B	39713
LCSD 880-39713/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	39713

Prep Batch: 39696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3428-2	TT-1	Total/NA	Solid	5035	
890-3428-3	TT-2	Total/NA	Solid	5035	
890-3428-4	TT-2	Total/NA	Solid	5035	
890-3428-5	TT-2	Total/NA	Solid	5035	
890-3428-6	TT-2	Total/NA	Solid	5035	
890-3428-7	TT-3	Total/NA	Solid	5035	
890-3428-8	TT-3	Total/NA	Solid	5035	
890-3428-9	TT-4	Total/NA	Solid	5035	
890-3428-10	TT-4	Total/NA	Solid	5035	
MB 880-39696/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-39696/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-39696/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 39713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3428-1	TT-1	Total/NA	Solid	5035	
MB 880-39713/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-39713/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-39713/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 39836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3428-1	TT-1	Total/NA	Solid	Total BTEX	
890-3428-2	TT-1	Total/NA	Solid	Total BTEX	
890-3428-3	TT-2	Total/NA	Solid	Total BTEX	
890-3428-4	TT-2	Total/NA	Solid	Total BTEX	
890-3428-5	TT-2	Total/NA	Solid	Total BTEX	
890-3428-6	TT-2	Total/NA	Solid	Total BTEX	
890-3428-7	TT-3	Total/NA	Solid	Total BTEX	
890-3428-8	TT-3	Total/NA	Solid	Total BTEX	
890-3428-9	TT-4	Total/NA	Solid	Total BTEX	
890-3428-10	TT-4	Total/NA	Solid	Total BTEX	

Prep Batch: 39922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-39922/5-A	Method Blank	Total/NA	Solid	5035	

QC Association Summary

Client: Talon/LPE
Project/Site: Marathon AGI State 2

Job ID: 890-3428-1
SDG: 700438.303.01

GC VOA

Analysis Batch: 39930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3428-2	TT-1	Total/NA	Solid	8021B	39696
890-3428-3	TT-2	Total/NA	Solid	8021B	39696
890-3428-4	TT-2	Total/NA	Solid	8021B	39696
890-3428-5	TT-2	Total/NA	Solid	8021B	39696
890-3428-6	TT-2	Total/NA	Solid	8021B	39696
890-3428-7	TT-3	Total/NA	Solid	8021B	39696
890-3428-8	TT-3	Total/NA	Solid	8021B	39696
890-3428-9	TT-4	Total/NA	Solid	8021B	39696
890-3428-10	TT-4	Total/NA	Solid	8021B	39696
MB 880-39696/5-A	Method Blank	Total/NA	Solid	8021B	39696
MB 880-39922/5-A	Method Blank	Total/NA	Solid	8021B	39922
LCS 880-39696/1-A	Lab Control Sample	Total/NA	Solid	8021B	39696
LCSD 880-39696/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	39696

GC Semi VOA

Analysis Batch: 39385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3428-1	TT-1	Total/NA	Solid	8015B NM	39418
890-3428-2	TT-1	Total/NA	Solid	8015B NM	39418
890-3428-3	TT-2	Total/NA	Solid	8015B NM	39418
890-3428-4	TT-2	Total/NA	Solid	8015B NM	39418
890-3428-5	TT-2	Total/NA	Solid	8015B NM	39418
890-3428-6	TT-2	Total/NA	Solid	8015B NM	39418
890-3428-7	TT-3	Total/NA	Solid	8015B NM	39418
890-3428-8	TT-3	Total/NA	Solid	8015B NM	39418
890-3428-9	TT-4	Total/NA	Solid	8015B NM	39418
890-3428-10	TT-4	Total/NA	Solid	8015B NM	39418
MB 880-39418/1-A	Method Blank	Total/NA	Solid	8015B NM	39418
LCS 880-39418/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	39418
LCSD 880-39418/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	39418

Prep Batch: 39418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3428-1	TT-1	Total/NA	Solid	8015NM Prep	
890-3428-2	TT-1	Total/NA	Solid	8015NM Prep	
890-3428-3	TT-2	Total/NA	Solid	8015NM Prep	
890-3428-4	TT-2	Total/NA	Solid	8015NM Prep	
890-3428-5	TT-2	Total/NA	Solid	8015NM Prep	
890-3428-6	TT-2	Total/NA	Solid	8015NM Prep	
890-3428-7	TT-3	Total/NA	Solid	8015NM Prep	
890-3428-8	TT-3	Total/NA	Solid	8015NM Prep	
890-3428-9	TT-4	Total/NA	Solid	8015NM Prep	
890-3428-10	TT-4	Total/NA	Solid	8015NM Prep	
MB 880-39418/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-39418/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-39418/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 39622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3428-1	TT-1	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Talon/LPE
Project/Site: Marathon AGI State 2

Job ID: 890-3428-1
SDG: 700438.303.01

GC Semi VOA (Continued)

Analysis Batch: 39622 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3428-2	TT-1	Total/NA	Solid	8015 NM	
890-3428-3	TT-2	Total/NA	Solid	8015 NM	
890-3428-4	TT-2	Total/NA	Solid	8015 NM	
890-3428-5	TT-2	Total/NA	Solid	8015 NM	
890-3428-6	TT-2	Total/NA	Solid	8015 NM	
890-3428-7	TT-3	Total/NA	Solid	8015 NM	
890-3428-8	TT-3	Total/NA	Solid	8015 NM	
890-3428-9	TT-4	Total/NA	Solid	8015 NM	
890-3428-10	TT-4	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 39447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3428-1	TT-1	Soluble	Solid	DI Leach	
890-3428-2	TT-1	Soluble	Solid	DI Leach	
890-3428-3	TT-2	Soluble	Solid	DI Leach	
890-3428-4	TT-2	Soluble	Solid	DI Leach	
890-3428-5	TT-2	Soluble	Solid	DI Leach	
890-3428-6	TT-2	Soluble	Solid	DI Leach	
890-3428-7	TT-3	Soluble	Solid	DI Leach	
890-3428-8	TT-3	Soluble	Solid	DI Leach	
890-3428-9	TT-4	Soluble	Solid	DI Leach	
890-3428-10	TT-4	Soluble	Solid	DI Leach	
MB 880-39447/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-39447/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-39447/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3428-1 MS	TT-1	Soluble	Solid	DI Leach	
890-3428-1 MSD	TT-1	Soluble	Solid	DI Leach	

Analysis Batch: 39640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3428-1	TT-1	Soluble	Solid	300.0	39447
890-3428-2	TT-1	Soluble	Solid	300.0	39447
890-3428-3	TT-2	Soluble	Solid	300.0	39447
890-3428-4	TT-2	Soluble	Solid	300.0	39447
890-3428-5	TT-2	Soluble	Solid	300.0	39447
890-3428-6	TT-2	Soluble	Solid	300.0	39447
890-3428-7	TT-3	Soluble	Solid	300.0	39447
890-3428-8	TT-3	Soluble	Solid	300.0	39447
890-3428-9	TT-4	Soluble	Solid	300.0	39447
890-3428-10	TT-4	Soluble	Solid	300.0	39447
MB 880-39447/1-A	Method Blank	Soluble	Solid	300.0	39447
LCS 880-39447/2-A	Lab Control Sample	Soluble	Solid	300.0	39447
LCSD 880-39447/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	39447
890-3428-1 MS	TT-1	Soluble	Solid	300.0	39447
890-3428-1 MSD	TT-1	Soluble	Solid	300.0	39447

Lab Chronicle

Client: Talon/LPE
Project/Site: Marathon AGI State 2

Job ID: 890-3428-1
SDG: 700438.303.01

Client Sample ID: TT-1
Date Collected: 11/09/22 08:42
Date Received: 11/10/22 14:30

Lab Sample ID: 890-3428-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	39713	11/16/22 10:57	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39686	11/17/22 02:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39836	11/17/22 14:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			39622	11/15/22 13:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39418	11/14/22 10:22	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39385	11/15/22 02:18	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	39447	11/14/22 11:41	KS	EET MID
Soluble	Analysis	300.0		1			39640	11/15/22 23:44	CH	EET MID

Client Sample ID: TT-1
Date Collected: 11/09/22 08:47
Date Received: 11/10/22 14:30

Lab Sample ID: 890-3428-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	39696	11/16/22 10:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39930	11/19/22 11:01	SM	EET MID
Total/NA	Analysis	Total BTEX		1			39836	11/21/22 18:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			39622	11/15/22 13:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	39418	11/14/22 10:22	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39385	11/15/22 02:39	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	39447	11/14/22 11:41	KS	EET MID
Soluble	Analysis	300.0		1			39640	11/16/22 00:01	CH	EET MID

Client Sample ID: TT-2
Date Collected: 11/09/22 08:51
Date Received: 11/10/22 14:30

Lab Sample ID: 890-3428-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	39696	11/16/22 10:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39930	11/19/22 12:46	SM	EET MID
Total/NA	Analysis	Total BTEX		1			39836	11/21/22 18:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			39622	11/15/22 13:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	39418	11/14/22 10:22	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39385	11/15/22 03:00	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	39447	11/14/22 11:41	KS	EET MID
Soluble	Analysis	300.0		1			39640	11/16/22 00:07	CH	EET MID

Client Sample ID: TT-2
Date Collected: 11/09/22 08:56
Date Received: 11/10/22 14:30

Lab Sample ID: 890-3428-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	39696	11/16/22 10:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39930	11/19/22 13:12	SM	EET MID
Total/NA	Analysis	Total BTEX		1			39836	11/21/22 18:12	SM	EET MID

Lab Chronicle

Client: Talon/LPE
Project/Site: Marathon AGI State 2

Job ID: 890-3428-1
SDG: 700438.303.01

Client Sample ID: TT-2
Date Collected: 11/09/22 08:56
Date Received: 11/10/22 14:30

Lab Sample ID: 890-3428-4
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	8015 NM		1			39622	11/15/22 13:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39418	11/14/22 10:22	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39385	11/15/22 03:21	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	39447	11/14/22 11:41	KS	EET MID
Soluble	Analysis	300.0		5			39640	11/16/22 00:24	CH	EET MID

Client Sample ID: TT-2
Date Collected: 11/09/22 10:20
Date Received: 11/10/22 14:30

Lab Sample ID: 890-3428-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	39696	11/16/22 10:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39930	11/19/22 13:38	SM	EET MID
Total/NA	Analysis	Total BTEX		1			39836	11/21/22 18:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			39622	11/15/22 13:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	39418	11/14/22 10:22	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39385	11/15/22 03:42	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	39447	11/14/22 11:41	KS	EET MID
Soluble	Analysis	300.0		5			39640	11/16/22 00:30	CH	EET MID

Client Sample ID: TT-2
Date Collected: 11/09/22 10:24
Date Received: 11/10/22 14:30

Lab Sample ID: 890-3428-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	39696	11/16/22 10:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39930	11/19/22 14:03	SM	EET MID
Total/NA	Analysis	Total BTEX		1			39836	11/21/22 18:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			39622	11/15/22 13:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	39418	11/14/22 10:22	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39385	11/15/22 04:04	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	39447	11/14/22 11:41	KS	EET MID
Soluble	Analysis	300.0		5			39640	11/16/22 00:35	CH	EET MID

Client Sample ID: TT-3
Date Collected: 11/09/22 09:00
Date Received: 11/10/22 14:30

Lab Sample ID: 890-3428-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	39696	11/16/22 10:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39930	11/19/22 14:29	SM	EET MID
Total/NA	Analysis	Total BTEX		1			39836	11/21/22 18:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			39622	11/15/22 13:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39418	11/14/22 10:22	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39385	11/15/22 04:25	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Talon/LPE
Project/Site: Marathon AGI State 2

Job ID: 890-3428-1
SDG: 700438.303.01

Client Sample ID: TT-3
Date Collected: 11/09/22 09:00
Date Received: 11/10/22 14:30

Lab Sample ID: 890-3428-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	39447	11/14/22 11:41	KS	EET MID
Soluble	Analysis	300.0		1			39640	11/16/22 00:41	CH	EET MID

Client Sample ID: TT-3
Date Collected: 11/09/22 09:03
Date Received: 11/10/22 14:30

Lab Sample ID: 890-3428-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	39696	11/16/22 10:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39930	11/19/22 14:55	SM	EET MID
Total/NA	Analysis	Total BTEX		1			39836	11/21/22 18:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			39622	11/15/22 13:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	39418	11/14/22 10:22	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39385	11/15/22 04:46	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	39447	11/14/22 11:41	KS	EET MID
Soluble	Analysis	300.0		1			39640	11/16/22 00:47	CH	EET MID

Client Sample ID: TT-4
Date Collected: 11/09/22 09:16
Date Received: 11/10/22 14:30

Lab Sample ID: 890-3428-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	39696	11/16/22 10:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39930	11/19/22 15:20	SM	EET MID
Total/NA	Analysis	Total BTEX		1			39836	11/21/22 18:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			39622	11/15/22 13:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	39418	11/14/22 10:22	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39385	11/15/22 05:07	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	39447	11/14/22 11:41	KS	EET MID
Soluble	Analysis	300.0		1			39640	11/16/22 00:52	CH	EET MID

Client Sample ID: TT-4
Date Collected: 11/09/22 09:19
Date Received: 11/10/22 14:30

Lab Sample ID: 890-3428-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	39696	11/16/22 10:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39930	11/19/22 15:46	SM	EET MID
Total/NA	Analysis	Total BTEX		1			39836	11/21/22 18:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			39622	11/15/22 13:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	39418	11/14/22 10:22	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39385	11/15/22 05:29	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	39447	11/14/22 11:41	KS	EET MID
Soluble	Analysis	300.0		1			39640	11/16/22 00:58	CH	EET MID

Lab Chronicle

Client: Talon/LPE
Project/Site: Marathon AGI State 2

Job ID: 890-3428-1
SDG: 700438.303.01

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Talon/LPE
Project/Site: Marathon AGI State 2

Job ID: 890-3428-1
SDG: 700438.303.01

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Talon/LPE
Project/Site: Marathon AGI State 2

Job ID: 890-3428-1
SDG: 700438.303.01

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Talon/LPE
Project/Site: Marathon AGI State 2

Job ID: 890-3428-1
SDG: 700438.303.01

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3428-1	TT-1	Solid	11/09/22 08:42	11/10/22 14:30	2
890-3428-2	TT-1	Solid	11/09/22 08:47	11/10/22 14:30	4
890-3428-3	TT-2	Solid	11/09/22 08:51	11/10/22 14:30	2
890-3428-4	TT-2	Solid	11/09/22 08:56	11/10/22 14:30	4
890-3428-5	TT-2	Solid	11/09/22 10:20	11/10/22 14:30	8
890-3428-6	TT-2	Solid	11/09/22 10:24	11/10/22 14:30	10
890-3428-7	TT-3	Solid	11/09/22 09:00	11/10/22 14:30	2
890-3428-8	TT-3	Solid	11/09/22 09:03	11/10/22 14:30	4
890-3428-9	TT-4	Solid	11/09/22 09:16	11/10/22 14:30	2
890-3428-10	TT-4	Solid	11/09/22 09:19	11/10/22 14:30	4

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

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Project Manager:	Chad Hensley	Bill to: (if different)	EOG
Company Name:	Talon LPE	Company Name:	
Address:	408 W. Texas Ave.	Address:	
City, State ZIP:	Artesia, NM 88210	City, State ZIP:	
Phone:	575.746.8768	Email:	Chensley@talonlpe.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Marathon AGI State 2	Turn Around	Pres. Code
Project Number:	700438.303.01	☑ Routine ☐ Rush	
Project Location:	Eddy	Due Date:	
Sampler's Name:	Chad Hensley	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	N/A		

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	Parameters
Samples Received Intact:	(Yes) No	Thermometer ID:	TNM007	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	11.2	
Total Containers:		Corrected Temperature:	11.0	

ANALYSIS REQUEST

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2S0_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	CL	BTEX	TPH	Sample Comments
TT-1	Soil	11/9/2022	8:42	2'	Grab/	1	x	X	X	
TT-1	Soil	11/9/2022	8:47	4'	Grab/	1	x	X	X	
TT-2	Soil	11/9/2022	8:51	2'	Grab/	1	x	X	X	
TT-2	Soil	11/9/2022	8:56	4'	Grab/	1	x	X	X	
TT-2	Soil	11/9/2022	10:20	8'	Grab/	1	x	X	X	
TT-2	Soil	11/9/2022	10:24	10'	Grab/	1	x	X	X	
TT-3	Soil	11/9/2022	9:00	2'	Grab/	1	x	X	X	
TT-3	Soil	11/9/2022	9:03	4'	Grab/	1	x	X	X	
TT-4	Soil	11/9/2022	9:16	2'	Grab/	1	x	X	X	
TT-4	Soil	11/9/2022	9:19	4'	Grab/	1	x	X	X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			11.10.22 1430			
3				4		
5				6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Talon/LPE

Job Number: 890-3428-1
SDG Number: 700438.303.01

Login Number: 3428
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
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.	N/A	Refer to Job Narrative for details.
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 <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Talon/LPE

Job Number: 890-3428-1
SDG Number: 700438.303.01

Login Number: 3428
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 11/14/22 08:39 AM

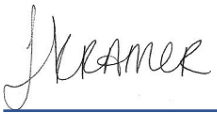
Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature 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 <6mm (1/4").	N/A	

Eurofins Carlsbad

Job Notes

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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11/21/2022 6:30:49 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

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ANALYTICAL REPORT

PREPARED FOR

Attn: Chad Hensley
Talon/LPE
408 W. Texas St.
Artesia, New Mexico 88210

Generated 11/28/2022 4:15:56 PM

JOB DESCRIPTION

Marathon AGI State 2H
SDG NUMBER 700438.303.01

JOB NUMBER

890-3499-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

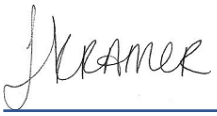
my EOL

Eurofins Carlsbad

Job Notes

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Generated
11/28/2022 4:15:56 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Laboratory Job ID: 890-3499-1
SDG: 700438.303.01

Table of Contents

Definitions/Glossary

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3499-1
SDG: 700438.303.01

Qualifiers

GC VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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

Case Narrative

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3499-1
SDG: 700438.303.01

Job ID: 890-3499-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3499-1

Receipt
The samples were received on 11/17/2022 2:27 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 2.0°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: S-9 (890-3499-1), S-9 (890-3499-2) and S-9 (890-3499-3).

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: (LCSD 880-40235/2-A). Evidence of matrix interferences is not obvious.

Method 8021B: LCSD biased low. Since only an acceptable LCS is required per the method, the data has been qualified and reported. (LCSD 880-40235/2-A)

Method 8021B: The method blank for preparation batch 880-40235 and analytical batch 880-40267 contained m-Xylene & p-Xylene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-40185/2-A) and (LCSD 880-40185/3-A). Evidence of matrix interferences is not obvious.

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

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

Client Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3499-1
SDG: 700438.303.01

Client Sample ID: S-9

Lab Sample ID: 890-3499-1
Matrix: Solid
Date Collected: 11/14/22 10:01
Date Received: 11/17/22 14:27
Sample Depth: 12

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000381	U *- *1	0.00198	0.000381	mg/Kg		11/22/22 15:31	11/24/22 04:14	1
Toluene	<0.000451	U *- *1	0.00198	0.000451	mg/Kg		11/22/22 15:31	11/24/22 04:14	1
Ethylbenzene	<0.000559	U *- *1	0.00198	0.000559	mg/Kg		11/22/22 15:31	11/24/22 04:14	1
m-Xylene & p-Xylene	<0.00100	U *- *1	0.00396	0.00100	mg/Kg		11/22/22 15:31	11/24/22 04:14	1
o-Xylene	<0.000341	U *- *1	0.00198	0.000341	mg/Kg		11/22/22 15:31	11/24/22 04:14	1
Xylenes, Total	<0.00100	U *- *1	0.00396	0.00100	mg/Kg		11/22/22 15:31	11/24/22 04:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*11/22/22 15:31*	*11/24/22 04:14*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*11/22/22 15:31*	*11/24/22 04:14*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00100	U	0.00396	0.00100	mg/Kg			11/28/22 14:50	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**39.3**	**J**	49.9	15.0	mg/Kg			11/23/22 12:17	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**21.9**	**J**	49.9	15.0	mg/Kg		11/22/22 09:47	11/22/22 10:59	1
Diesel Range Organics (Over C10-C28)	**17.4**	**J**	49.9	15.0	mg/Kg		11/22/22 09:47	11/22/22 10:59	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		11/22/22 09:47	11/22/22 10:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*81*		*70 - 130*	*11/22/22 09:47*	*11/22/22 10:59*	*1*
o-Terphenyl	*97*		*70 - 130*	*11/22/22 09:47*	*11/22/22 10:59*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**771**		4.98	0.393	mg/Kg			11/22/22 19:16	1

Client Sample ID: S-9

Lab Sample ID: 890-3499-2
Matrix: Solid
Date Collected: 11/14/22 10:56
Date Received: 11/17/22 14:27
Sample Depth: 16

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U *- *1	0.00200	0.000384	mg/Kg		11/22/22 15:31	11/24/22 04:35	1
Toluene	<0.000455	U *- *1	0.00200	0.000455	mg/Kg		11/22/22 15:31	11/24/22 04:35	1
Ethylbenzene	<0.000564	U *- *1	0.00200	0.000564	mg/Kg		11/22/22 15:31	11/24/22 04:35	1
m-Xylene & p-Xylene	<0.00101	U *- *1	0.00399	0.00101	mg/Kg		11/22/22 15:31	11/24/22 04:35	1
o-Xylene	<0.000343	U *- *1	0.00200	0.000343	mg/Kg		11/22/22 15:31	11/24/22 04:35	1
Xylenes, Total	<0.00101	U *- *1	0.00399	0.00101	mg/Kg		11/22/22 15:31	11/24/22 04:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*11/22/22 15:31*	*11/24/22 04:35*	*1*

Client Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3499-1
SDG: 700438.303.01

Client Sample ID: S-9

Date Collected: 11/14/22 10:56
Date Received: 11/17/22 14:27
Sample Depth: 16

Lab Sample ID: 890-3499-2

Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*11/22/22 15:31*	*11/24/22 04:35*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg			11/28/22 14:50	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**27.3**	**J**	49.8	14.9	mg/Kg			11/23/22 12:17	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**27.3**	**J**	49.8	14.9	mg/Kg		11/22/22 09:47	11/22/22 12:04	1
Diesel Range Organics (Over C10-C28)	<14.9	U	49.8	14.9	mg/Kg		11/22/22 09:47	11/22/22 12:04	1
OII Range Organics (Over C28-C36)	<14.9	U	49.8	14.9	mg/Kg		11/22/22 09:47	11/22/22 12:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*81*		*70 - 130*	*11/22/22 09:47*	*11/22/22 12:04*	*1*
o-Terphenyl	*96*		*70 - 130*	*11/22/22 09:47*	*11/22/22 12:04*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**641**		4.95	0.391	mg/Kg			11/22/22 19:21	1

Client Sample ID: S-9

Date Collected: 11/14/22 11:49
Date Received: 11/17/22 14:27
Sample Depth: 17

Lab Sample ID: 890-3499-3

Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000382	U *- *1	0.00198	0.000382	mg/Kg		11/22/22 15:31	11/24/22 04:55	1
Toluene	<0.000452	U *- *1	0.00198	0.000452	mg/Kg		11/22/22 15:31	11/24/22 04:55	1
Ethylbenzene	<0.000561	U *- *1	0.00198	0.000561	mg/Kg		11/22/22 15:31	11/24/22 04:55	1
m-Xylene & p-Xylene	<0.00100	U *- *1	0.00397	0.00100	mg/Kg		11/22/22 15:31	11/24/22 04:55	1
o-Xylene	<0.000341	U *- *1	0.00198	0.000341	mg/Kg		11/22/22 15:31	11/24/22 04:55	1
Xylenes, Total	<0.00100	U *- *1	0.00397	0.00100	mg/Kg		11/22/22 15:31	11/24/22 04:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*	*11/22/22 15:31*	*11/24/22 04:55*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*11/22/22 15:31*	*11/24/22 04:55*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00100	U	0.00397	0.00100	mg/Kg			11/28/22 14:50	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**38.6**	**J**	49.9	15.0	mg/Kg			11/23/22 12:17	1

Client Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3499-1
SDG: 700438.303.01

Client Sample ID: S-9

Date Collected: 11/14/22 11:49
Date Received: 11/17/22 14:27
Sample Depth: 17

Lab Sample ID: 890-3499-3

Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	38.6	J	49.9	15.0	mg/Kg		11/22/22 09:47	11/22/22 12:26	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		11/22/22 09:47	11/22/22 12:26	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		11/22/22 09:47	11/22/22 12:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*11/22/22 09:47*	*11/22/22 12:26*	*1*
o-Terphenyl	*109*		*70 - 130*	*11/22/22 09:47*	*11/22/22 12:26*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	628		4.96	0.392	mg/Kg			11/22/22 19:27	1

Surrogate Summary

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3499-1
SDG: 700438.303.01

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-3499-1	S-9	121	97
890-3499-2	S-9	110	105
890-3499-3	S-9	123	111
LCS 880-40235/1-A	Lab Control Sample	108	78
LCSD 880-40235/2-A	Lab Control Sample Dup	37 S1-	30 S1-
MB 880-40235/5-A	Method Blank	106	95
MB 880-40278/5-A	Method Blank	99	97

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-3499-1	S-9	81	97
890-3499-1 MS	S-9	96	101
890-3499-1 MSD	S-9	113	118
890-3499-2	S-9	81	96
890-3499-3	S-9	99	109
LCS 880-40185/2-A	Lab Control Sample	163 S1+	190 S1+
LCSD 880-40185/3-A	Lab Control Sample Dup	157 S1+	180 S1+
MB 880-40185/1-A	Method Blank	108	126

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3499-1
SDG: 700438.303.01

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-40235/5-A
Matrix: Solid
Analysis Batch: 40267

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40235

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		11/22/22 15:31	11/23/22 23:23	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		11/22/22 15:31	11/23/22 23:23	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		11/22/22 15:31	11/23/22 23:23	1
m-Xylene & p-Xylene	0.001466	J	0.00400	0.00101	mg/Kg		11/22/22 15:31	11/23/22 23:23	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		11/22/22 15:31	11/23/22 23:23	1
Xylenes, Total	0.001466	J	0.00400	0.00101	mg/Kg		11/22/22 15:31	11/23/22 23:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*11/22/22 15:31*	*11/23/22 23:23*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*11/22/22 15:31*	*11/23/22 23:23*	*1*

Lab Sample ID: LCS 880-40235/1-A
Matrix: Solid
Analysis Batch: 40267

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40235

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1100		mg/Kg		110	70 - 130
Toluene	0.100	0.1004		mg/Kg		100	70 - 130
Ethylbenzene	0.100	0.09891		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	0.200	0.2004		mg/Kg		100	70 - 130
o-Xylene	0.100	0.1165		mg/Kg		117	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*78*		*70 - 130*

Lab Sample ID: LCSD 880-40235/2-A
Matrix: Solid
Analysis Batch: 40267

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 40235

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.03559	*- *1	mg/Kg		36	70 - 130	102	35
Toluene	0.100	0.03773	*- *1	mg/Kg		38	70 - 130	91	35
Ethylbenzene	0.100	0.03854	*- *1	mg/Kg		39	70 - 130	88	35
m-Xylene & p-Xylene	0.200	0.07074	*- *1	mg/Kg		35	70 - 130	96	35
o-Xylene	0.100	0.03879	*- *1	mg/Kg		39	70 - 130	100	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*37*	*S1-*	*70 - 130*
1,4-Difluorobenzene (Surr)	*30*	*S1-*	*70 - 130*

Lab Sample ID: MB 880-40278/5-A
Matrix: Solid
Analysis Batch: 40267

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40278

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		11/23/22 10:41	11/23/22 12:41	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		11/23/22 10:41	11/23/22 12:41	1

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QC Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3499-1
SDG: 700438.303.01

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 880-40278/5-A
Matrix: Solid
Analysis Batch: 40267

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40278

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		11/23/22 10:41	11/23/22 12:41	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		11/23/22 10:41	11/23/22 12:41	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		11/23/22 10:41	11/23/22 12:41	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		11/23/22 10:41	11/23/22 12:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*11/23/22 10:41*	*11/23/22 12:41*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*11/23/22 10:41*	*11/23/22 12:41*	*1*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-40185/1-A
Matrix: Solid
Analysis Batch: 40170

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40185

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	50.0	15.0	mg/Kg		11/22/22 08:09	11/22/22 08:21	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		11/22/22 08:09	11/22/22 08:21	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		11/22/22 08:09	11/22/22 08:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*11/22/22 08:09*	*11/22/22 08:21*	*1*
o-Terphenyl	*126*		*70 - 130*	*11/22/22 08:09*	*11/22/22 08:21*	*1*

Lab Sample ID: LCS 880-40185/2-A
Matrix: Solid
Analysis Batch: 40170

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40185

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	816.2		mg/Kg		82	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	988.2		mg/Kg		99	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*163*	*S1+*	*70 - 130*
o-Terphenyl	*190*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-40185/3-A
Matrix: Solid
Analysis Batch: 40170

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 40185

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	827.6		mg/Kg		83	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	925.3		mg/Kg		93	70 - 130	7	20

QC Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3499-1
SDG: 700438.303.01

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 880-40185/3-A
Matrix: Solid
Analysis Batch: 40170

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 40185

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	157	S1+	70 - 130
o-Terphenyl	180	S1+	70 - 130

Lab Sample ID: 890-3499-1 MS
Matrix: Solid
Analysis Batch: 40170

Client Sample ID: S-9
Prep Type: Total/NA
Prep Batch: 40185

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	21.9	J	999	865.2		mg/Kg		84	70 - 130
Diesel Range Organics (Over C10-C28)	17.4	J	999	1010		mg/Kg		99	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	101		70 - 130

Lab Sample ID: 890-3499-1 MSD
Matrix: Solid
Analysis Batch: 40170

Client Sample ID: S-9
Prep Type: Total/NA
Prep Batch: 40185

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	21.9	J	999	1028		mg/Kg		101	70 - 130	17	20
Diesel Range Organics (Over C10-C28)	17.4	J	999	1191		mg/Kg		117	70 - 130	16	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	113		70 - 130
o-Terphenyl	118		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-40004/1-A
Matrix: Solid
Analysis Batch: 40156

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			11/22/22 16:43	1

Lab Sample ID: LCS 880-40004/2-A
Matrix: Solid
Analysis Batch: 40156

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	257.4		mg/Kg		103	90 - 110

QC Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3499-1
SDG: 700438.303.01

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-40004/3-A
Matrix: Solid
Analysis Batch: 40156

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	256.4		mg/Kg		103	90 - 110	0	20

QC Association Summary

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3499-1
SDG: 700438.303.01

GC VOA

Prep Batch: 40235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3499-1	S-9	Total/NA	Solid	5035	
890-3499-2	S-9	Total/NA	Solid	5035	
890-3499-3	S-9	Total/NA	Solid	5035	
MB 880-40235/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-40235/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-40235/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 40267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3499-1	S-9	Total/NA	Solid	8021B	40235
890-3499-2	S-9	Total/NA	Solid	8021B	40235
890-3499-3	S-9	Total/NA	Solid	8021B	40235
MB 880-40235/5-A	Method Blank	Total/NA	Solid	8021B	40235
MB 880-40278/5-A	Method Blank	Total/NA	Solid	8021B	40278
LCS 880-40235/1-A	Lab Control Sample	Total/NA	Solid	8021B	40235
LCSD 880-40235/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	40235

Prep Batch: 40278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-40278/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 40474

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3499-1	S-9	Total/NA	Solid	Total BTEX	
890-3499-2	S-9	Total/NA	Solid	Total BTEX	
890-3499-3	S-9	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 40170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3499-1	S-9	Total/NA	Solid	8015B NM	40185
890-3499-2	S-9	Total/NA	Solid	8015B NM	40185
890-3499-3	S-9	Total/NA	Solid	8015B NM	40185
MB 880-40185/1-A	Method Blank	Total/NA	Solid	8015B NM	40185
LCS 880-40185/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	40185
LCSD 880-40185/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	40185
890-3499-1 MS	S-9	Total/NA	Solid	8015B NM	40185
890-3499-1 MSD	S-9	Total/NA	Solid	8015B NM	40185

Prep Batch: 40185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3499-1	S-9	Total/NA	Solid	8015NM Prep	
890-3499-2	S-9	Total/NA	Solid	8015NM Prep	
890-3499-3	S-9	Total/NA	Solid	8015NM Prep	
MB 880-40185/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-40185/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-40185/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3499-1 MS	S-9	Total/NA	Solid	8015NM Prep	
890-3499-1 MSD	S-9	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3499-1
SDG: 700438.303.01

GC Semi VOA

Analysis Batch: 40304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3499-1	S-9	Total/NA	Solid	8015 NM	
890-3499-2	S-9	Total/NA	Solid	8015 NM	
890-3499-3	S-9	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 40004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3499-1	S-9	Soluble	Solid	DI Leach	
890-3499-2	S-9	Soluble	Solid	DI Leach	
890-3499-3	S-9	Soluble	Solid	DI Leach	
MB 880-40004/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-40004/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-40004/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 40156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3499-1	S-9	Soluble	Solid	300.0	40004
890-3499-2	S-9	Soluble	Solid	300.0	40004
890-3499-3	S-9	Soluble	Solid	300.0	40004
MB 880-40004/1-A	Method Blank	Soluble	Solid	300.0	40004
LCS 880-40004/2-A	Lab Control Sample	Soluble	Solid	300.0	40004
LCSD 880-40004/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	40004

Lab Chronicle

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3499-1
SDG: 700438.303.01

Client Sample ID: S-9
Date Collected: 11/14/22 10:01
Date Received: 11/17/22 14:27

Lab Sample ID: 890-3499-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	40235	11/22/22 15:31	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40267	11/24/22 04:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40474	11/28/22 14:50	SM	EET MID
Total/NA	Analysis	8015 NM		1			40304	11/23/22 12:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	40185	11/22/22 09:47	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40170	11/22/22 10:59	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	40004	11/21/22 16:10	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40156	11/22/22 19:16	SMC	EET MID

Client Sample ID: S-9
Date Collected: 11/14/22 10:56
Date Received: 11/17/22 14:27

Lab Sample ID: 890-3499-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	40235	11/22/22 15:31	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40267	11/24/22 04:35	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40474	11/28/22 14:50	SM	EET MID
Total/NA	Analysis	8015 NM		1			40304	11/23/22 12:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	40185	11/22/22 09:47	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40170	11/22/22 12:04	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	40004	11/21/22 16:10	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40156	11/22/22 19:21	SMC	EET MID

Client Sample ID: S-9
Date Collected: 11/14/22 11:49
Date Received: 11/17/22 14:27

Lab Sample ID: 890-3499-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	40235	11/22/22 15:31	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40267	11/24/22 04:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40474	11/28/22 14:50	SM	EET MID
Total/NA	Analysis	8015 NM		1			40304	11/23/22 12:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	40185	11/22/22 09:47	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40170	11/22/22 12:26	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	40004	11/21/22 16:10	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40156	11/22/22 19:27	SMC	EET MID

Laboratory References:
EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3499-1
SDG: 700438.303.01

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3499-1
SDG: 700438.303.01

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3499-1
SDG: 700438.303.01

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3499-1	S-9	Solid	11/14/22 10:01	11/17/22 14:27	12
890-3499-2	S-9	Solid	11/14/22 10:56	11/17/22 14:27	16
890-3499-3	S-9	Solid	11/14/22 11:49	11/17/22 14:27	17

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

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Project Manager:	Chad Hensley	Bill to: (if different)	Jermey Haas
Company Name:	Talon LPE	Company Name:	EOG
Address:	408 W. Texas Ave.	Address:	
City, State ZIP:	Artesia, NM 88210	City, State ZIP:	
Phone:	575.746.8768	Email:	Chensley@talonlpe.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Marathon AGI State 2H	Turn Around	
Project Number:	700438.303.01	☑ Routine ☐ Rush	
Project Location:	Eddy county	Due Date:	
Sampler's Name:	Chad Hensley	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	N/A		

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TM005
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	22.2
Total Containers:		Corrected Temperature:	22.0

ANALYSIS REQUEST

Pres. Code | Parameters: CL | BTEX | TPH

890-3499 Chain of Custody

Preservative Codes

None: NO | DI Water: H_2O
Cool: Cool | MeOH: Me
HCL: HC | HNO_3: HN
H_2SO_4: H_2 | NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	CL	BTEX	TPH	Sample Comments
S-9	Soil	11/14/2022	10:01	12'	Grab/	1	x	X	X	
S-9	Soil	11/14/2022	10:56	16'	Grab/	1	x	X	X	
S-9	Soil	11/14/2022	11:49	17'	Grab/	1	x	X	X	
	Soil						x	X	X	
	Soil						x	X	X	
	Soil						x	X	X	
	Soil						x	X	X	
	Soil						x	X	X	
	Soil						x	X	X	
	Soil						x	X	X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		11-17-22 1427	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Talon/LPE

Job Number: 890-3499-1
SDG Number: 700438.303.01

Login Number: 3499
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
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.	N/A	Refer to Job Narrative for details.
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 <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Talon/LPE

Job Number: 890-3499-1
SDG Number: 700438.303.01

Login Number: 3499
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 11/21/22 08:46 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
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.	True	
Cooler Temperature is acceptable.	True	
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 <6mm (1/4").	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Chad Hensley
Talon/LPE
408 W. Texas St.
Artesia, New Mexico 88210

Generated 11/30/2022 9:58:19 AM

JOB DESCRIPTION

Marathon AGI State 2H
SDG NUMBER 700438.303.01

JOB NUMBER

890-3500-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

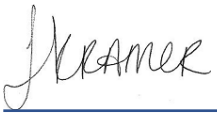
my EOL

Eurofins Carlsbad

Job Notes

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Generated
11/30/2022 9:58:19 AM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Laboratory Job ID: 890-3500-1
SDG: 700438.303.01

Table of Contents

Definitions/Glossary

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3500-1
SDG: 700438.303.01

Qualifiers

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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

Case Narrative

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3500-1
SDG: 700438.303.01

Job ID: 890-3500-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3500-1

Receipt
The samples were received on 11/17/2022 2:27 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 2.0°C

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

GC Semi VOA
Method 8015MOD_NM: The method blank for preparation batch 880-40341 and analytical batch 880-40260 contained Gasoline Range Organics (GRO)-C6-C10 and Diesel Range Organics (Over C10-C28) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-40341/2-A) and (LCSD 880-40341/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-40341 and analytical batch 880-40260 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: SWE (890-3500-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: SWW (890-3500-6). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike duplicate (MSD) recoveries for preparation batch 880-40005 and analytical batch 880-40250 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

Client Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3500-1
SDG: 700438.303.01

Client Sample ID: C-1

Lab Sample ID: 890-3500-1
Matrix: Solid
Date Collected: 11/17/22 10:09
Date Received: 11/17/22 14:27
Sample Depth: 20

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		11/28/22 14:18	11/29/22 17:35	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		11/28/22 14:18	11/29/22 17:35	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		11/28/22 14:18	11/29/22 17:35	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		11/28/22 14:18	11/29/22 17:35	1
o-Xylene	**0.000591**	**J**	0.00200	0.000343	mg/Kg		11/28/22 14:18	11/29/22 17:35	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		11/28/22 14:18	11/29/22 17:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*	*11/28/22 14:18*	*11/29/22 17:35*	*1*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*	*11/28/22 14:18*	*11/29/22 17:35*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg			11/30/22 09:51	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**20.2**	**J**	49.9	15.0	mg/Kg			11/28/22 12:39	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	49.9	15.0	mg/Kg		11/23/22 14:58	11/24/22 00:00	1
Diesel Range Organics (Over C10-C28)	**20.2**	**J B**	49.9	15.0	mg/Kg		11/23/22 14:58	11/24/22 00:00	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		11/23/22 14:58	11/24/22 00:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*114*		*70 - 130*	*11/23/22 14:58*	*11/24/22 00:00*	*1*
o-Terphenyl	*115*		*70 - 130*	*11/23/22 14:58*	*11/24/22 00:00*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**906**	**F1**	4.97	0.393	mg/Kg			11/23/22 10:46	1

Client Sample ID: C-2

Lab Sample ID: 890-3500-2
Matrix: Solid
Date Collected: 11/17/22 10:31
Date Received: 11/17/22 14:27
Sample Depth: 0 - 6

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		11/28/22 14:18	11/29/22 17:56	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		11/28/22 14:18	11/29/22 17:56	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		11/28/22 14:18	11/29/22 17:56	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		11/28/22 14:18	11/29/22 17:56	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		11/28/22 14:18	11/29/22 17:56	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		11/28/22 14:18	11/29/22 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*11/28/22 14:18*	*11/29/22 17:56*	*1*

Client Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3500-1
SDG: 700438.303.01

Client Sample ID: C-2

Lab Sample ID: 890-3500-2
Matrix: Solid
Date Collected: 11/17/22 10:31
Date Received: 11/17/22 14:27
Sample Depth: 0 - 6

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*	*11/28/22 14:18*	*11/29/22 17:56*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00398	0.00101	mg/Kg			11/30/22 09:51	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**17.7**	**J**	49.9	15.0	mg/Kg			11/28/22 12:39	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	49.9	15.0	mg/Kg		11/23/22 14:58	11/24/22 00:21	1
Diesel Range Organics (Over C10-C28)	**17.7**	**J B**	49.9	15.0	mg/Kg		11/23/22 14:58	11/24/22 00:21	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		11/23/22 14:58	11/24/22 00:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*11/23/22 14:58*	*11/24/22 00:21*	*1*
o-Terphenyl	*114*		*70 - 130*	*11/23/22 14:58*	*11/24/22 00:21*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1080**		4.96	0.392	mg/Kg			11/23/22 11:07	1

Client Sample ID: SWN

Lab Sample ID: 890-3500-3
Matrix: Solid
Date Collected: 11/17/22 10:29
Date Received: 11/17/22 14:27
Sample Depth: 4

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		11/28/22 14:18	11/29/22 18:16	1
Toluene	<0.000453	U	0.00199	0.000453	mg/Kg		11/28/22 14:18	11/29/22 18:16	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		11/28/22 14:18	11/29/22 18:16	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		11/28/22 14:18	11/29/22 18:16	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg		11/28/22 14:18	11/29/22 18:16	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		11/28/22 14:18	11/29/22 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*11/28/22 14:18*	*11/29/22 18:16*	*1*
1,4-Difluorobenzene (Surr)	*121*		*70 - 130*	*11/28/22 14:18*	*11/29/22 18:16*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00100	U	0.00398	0.00100	mg/Kg			11/30/22 09:51	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**23.1**	**J**	49.9	15.0	mg/Kg			11/28/22 12:39	1

Client Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3500-1
SDG: 700438.303.01

Client Sample ID: SWN

Lab Sample ID: 890-3500-3
Matrix: Solid
Date Collected: 11/17/22 10:29
Date Received: 11/17/22 14:27
Sample Depth: 4

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	23.1	J B	49.9	15.0	mg/Kg		11/23/22 14:58	11/24/22 00:43	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		11/23/22 14:58	11/24/22 00:43	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		11/23/22 14:58	11/24/22 00:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*11/23/22 14:58*	*11/24/22 00:43*	*1*
o-Terphenyl	*114*		*70 - 130*	*11/23/22 14:58*	*11/24/22 00:43*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1260		25.0	1.98	mg/Kg			11/23/22 11:15	5

Client Sample ID: SWE

Lab Sample ID: 890-3500-4
Matrix: Solid
Date Collected: 11/17/22 10:19
Date Received: 11/17/22 14:27
Sample Depth: 4

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		11/28/22 14:18	11/29/22 18:37	1
Toluene	<0.000459	U	0.00201	0.000459	mg/Kg		11/28/22 14:18	11/29/22 18:37	1
Ethylbenzene	<0.000568	U	0.00201	0.000568	mg/Kg		11/28/22 14:18	11/29/22 18:37	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102	mg/Kg		11/28/22 14:18	11/29/22 18:37	1
o-Xylene	<0.000346	U	0.00201	0.000346	mg/Kg		11/28/22 14:18	11/29/22 18:37	1
Xylenes, Total	<0.00102	U	0.00402	0.00102	mg/Kg		11/28/22 14:18	11/29/22 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*11/28/22 14:18*	*11/29/22 18:37*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*11/28/22 14:18*	*11/29/22 18:37*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00102	U	0.00402	0.00102	mg/Kg			11/30/22 09:51	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	33.0	J	49.8	14.9	mg/Kg			11/28/22 12:39	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	33.0	J B	49.8	14.9	mg/Kg		11/23/22 14:58	11/24/22 01:05	1
Diesel Range Organics (Over C10-C28)	<14.9	U	49.8	14.9	mg/Kg		11/23/22 14:58	11/24/22 01:05	1
Oil Range Organics (Over C28-C36)	<14.9	U	49.8	14.9	mg/Kg		11/23/22 14:58	11/24/22 01:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*135*	*S1+*	*70 - 130*	*11/23/22 14:58*	*11/24/22 01:05*	*1*
o-Terphenyl	*137*	*S1+*	*70 - 130*	*11/23/22 14:58*	*11/24/22 01:05*	*1*

Client Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3500-1
SDG: 700438.303.01

Client Sample ID: SWE

Lab Sample ID: 890-3500-4
Matrix: Solid
Date Collected: 11/17/22 10:19
Date Received: 11/17/22 14:27
Sample Depth: 4

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**124**		5.03	0.397	mg/Kg			11/23/22 11:22	1

Client Sample ID: SWS

Lab Sample ID: 890-3500-5
Matrix: Solid
Date Collected: 11/17/22 10:22
Date Received: 11/17/22 14:27
Sample Depth: 4

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		11/28/22 14:18	11/29/22 18:57	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		11/28/22 14:18	11/29/22 18:57	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		11/28/22 14:18	11/29/22 18:57	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		11/28/22 14:18	11/29/22 18:57	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		11/28/22 14:18	11/29/22 18:57	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		11/28/22 14:18	11/29/22 18:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*	*11/28/22 14:18*	*11/29/22 18:57*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*11/28/22 14:18*	*11/29/22 18:57*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00398	0.00101	mg/Kg			11/30/22 09:51	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**24.5**	**J**	49.8	14.9	mg/Kg			11/28/22 12:39	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**24.5**	**J B**	49.8	14.9	mg/Kg		11/23/22 14:58	11/24/22 01:27	1
Diesel Range Organics (Over C10-C28)	<14.9	U	49.8	14.9	mg/Kg		11/23/22 14:58	11/24/22 01:27	1
OII Range Organics (Over C28-C36)	<14.9	U	49.8	14.9	mg/Kg		11/23/22 14:58	11/24/22 01:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*125*		*70 - 130*	*11/23/22 14:58*	*11/24/22 01:27*	*1*
o-Terphenyl	*128*		*70 - 130*	*11/23/22 14:58*	*11/24/22 01:27*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14.9**		5.05	0.399	mg/Kg			11/23/22 11:29	1

Client Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3500-1
SDG: 700438.303.01

Client Sample ID: SWW

Date Collected: 11/17/22 10:15
Date Received: 11/17/22 14:27
Sample Depth: 4

Lab Sample ID: 890-3500-6

Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		11/28/22 14:18	11/29/22 19:18	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		11/28/22 14:18	11/29/22 19:18	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		11/28/22 14:18	11/29/22 19:18	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		11/28/22 14:18	11/29/22 19:18	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		11/28/22 14:18	11/29/22 19:18	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		11/28/22 14:18	11/29/22 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*	*11/28/22 14:18*	*11/29/22 19:18*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*11/28/22 14:18*	*11/29/22 19:18*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00398	0.00101	mg/Kg			11/30/22 09:51	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**21.6**	**J**	49.9	15.0	mg/Kg			11/28/22 12:39	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**21.6**	**J B**	49.9	15.0	mg/Kg		11/23/22 14:58	11/24/22 01:48	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		11/23/22 14:58	11/24/22 01:48	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		11/23/22 14:58	11/24/22 01:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*131*	*S1+*	*70 - 130*	*11/23/22 14:58*	*11/24/22 01:48*	*1*
o-Terphenyl	*134*	*S1+*	*70 - 130*	*11/23/22 14:58*	*11/24/22 01:48*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**265**		5.02	0.397	mg/Kg			11/23/22 11:51	1

Surrogate Summary

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3500-1
SDG: 700438.303.01

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3500-1	C-1	85	117
890-3500-2	C-2	101	116
890-3500-3	SWN	91	121
890-3500-4	SWE	98	112
890-3500-5	SWS	84	109
890-3500-6	SWW	78	102
LCS 880-40470/1-A	Lab Control Sample	87	111
LCSD 880-40470/2-A	Lab Control Sample Dup	83	107
MB 880-40470/5-A	Method Blank	72	109

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3500-1	C-1	114	115
890-3500-2	C-2	111	114
890-3500-3	SWN	110	114
890-3500-4	SWE	135 S1+	137 S1+
890-3500-5	SWS	125	128
890-3500-6	SWW	131 S1+	134 S1+
LCS 880-40341/2-A	Lab Control Sample	126	141 S1+
LCSD 880-40341/3-A	Lab Control Sample Dup	122	136 S1+
MB 880-40341/1-A	Method Blank	140 S1+	149 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3500-1
SDG: 700438.303.01

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-40470/5-A
Matrix: Solid
Analysis Batch: 40541

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40470

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		11/28/22 14:18	11/29/22 12:12	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		11/28/22 14:18	11/29/22 12:12	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		11/28/22 14:18	11/29/22 12:12	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		11/28/22 14:18	11/29/22 12:12	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		11/28/22 14:18	11/29/22 12:12	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		11/28/22 14:18	11/29/22 12:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*72*		*70 - 130*	*11/28/22 14:18*	*11/29/22 12:12*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*11/28/22 14:18*	*11/29/22 12:12*	*1*

Lab Sample ID: LCS 880-40470/1-A
Matrix: Solid
Analysis Batch: 40541

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40470

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09656		mg/Kg		97	70 - 130		
Toluene			0.100	0.1057		mg/Kg		106	70 - 130		
Ethylbenzene			0.100	0.09986		mg/Kg		100	70 - 130		
m-Xylene & p-Xylene			0.200	0.1780		mg/Kg		89	70 - 130		
o-Xylene			0.100	0.08731		mg/Kg		87	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: LCSD 880-40470/2-A
Matrix: Solid
Analysis Batch: 40541

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 40470

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09346		mg/Kg		93	70 - 130	3	35
Toluene			0.100	0.1020		mg/Kg		102	70 - 130	4	35
Ethylbenzene			0.100	0.09994		mg/Kg		100	70 - 130	0	35
m-Xylene & p-Xylene			0.200	0.1782		mg/Kg		89	70 - 130	0	35
o-Xylene			0.100	0.08553		mg/Kg		86	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

QC Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3500-1
SDG: 700438.303.01

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-40341/1-A
Matrix: Solid
Analysis Batch: 40260

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40341

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	24.85	J	50.0	15.0	mg/Kg		11/23/22 14:58	11/23/22 20:46	1
Diesel Range Organics (Over C10-C28)	23.92	J	50.0	15.0	mg/Kg		11/23/22 14:58	11/23/22 20:46	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		11/23/22 14:58	11/23/22 20:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*140*	*S1+*	*70 - 130*	*11/23/22 14:58*	*11/23/22 20:46*	*1*
o-Terphenyl	*149*	*S1+*	*70 - 130*	*11/23/22 14:58*	*11/23/22 20:46*	*1*

Lab Sample ID: LCS 880-40341/2-A
Matrix: Solid
Analysis Batch: 40260

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40341

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	981.4		mg/Kg		98	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1013		mg/Kg		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*126*		*70 - 130*
o-Terphenyl	*141*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-40341/3-A
Matrix: Solid
Analysis Batch: 40260

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 40341

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1015		mg/Kg		101	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	978.2		mg/Kg		98	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*122*		*70 - 130*
o-Terphenyl	*136*	*S1+*	*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-40005/1-A
Matrix: Solid
Analysis Batch: 40250

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			11/23/22 10:25	1

QC Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3500-1
SDG: 700438.303.01

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-40005/2-A
Matrix: Solid
Analysis Batch: 40250

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	234.2		mg/Kg		94	90 - 110		

Lab Sample ID: LCSD 880-40005/3-A
Matrix: Solid
Analysis Batch: 40250

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	235.5		mg/Kg		94	90 - 110	1	20

Lab Sample ID: 890-3500-1 MS
Matrix: Solid
Analysis Batch: 40250

Client Sample ID: C-1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	906	F1	249	1137		mg/Kg		93	90 - 110		

Lab Sample ID: 890-3500-1 MSD
Matrix: Solid
Analysis Batch: 40250

Client Sample ID: C-1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	906	F1	249	1115	F1	mg/Kg		84	90 - 110	2	20

QC Association Summary

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3500-1
SDG: 700438.303.01

GC VOA

Prep Batch: 40470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3500-1	C-1	Total/NA	Solid	5035	
890-3500-2	C-2	Total/NA	Solid	5035	
890-3500-3	SWN	Total/NA	Solid	5035	
890-3500-4	SWE	Total/NA	Solid	5035	
890-3500-5	SWS	Total/NA	Solid	5035	
890-3500-6	SWW	Total/NA	Solid	5035	
MB 880-40470/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-40470/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-40470/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 40541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3500-1	C-1	Total/NA	Solid	8021B	40470
890-3500-2	C-2	Total/NA	Solid	8021B	40470
890-3500-3	SWN	Total/NA	Solid	8021B	40470
890-3500-4	SWE	Total/NA	Solid	8021B	40470
890-3500-5	SWS	Total/NA	Solid	8021B	40470
890-3500-6	SWW	Total/NA	Solid	8021B	40470
MB 880-40470/5-A	Method Blank	Total/NA	Solid	8021B	40470
LCS 880-40470/1-A	Lab Control Sample	Total/NA	Solid	8021B	40470
LCSD 880-40470/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	40470

Analysis Batch: 40668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3500-1	C-1	Total/NA	Solid	Total BTEX	
890-3500-2	C-2	Total/NA	Solid	Total BTEX	
890-3500-3	SWN	Total/NA	Solid	Total BTEX	
890-3500-4	SWE	Total/NA	Solid	Total BTEX	
890-3500-5	SWS	Total/NA	Solid	Total BTEX	
890-3500-6	SWW	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 40260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3500-1	C-1	Total/NA	Solid	8015B NM	40341
890-3500-2	C-2	Total/NA	Solid	8015B NM	40341
890-3500-3	SWN	Total/NA	Solid	8015B NM	40341
890-3500-4	SWE	Total/NA	Solid	8015B NM	40341
890-3500-5	SWS	Total/NA	Solid	8015B NM	40341
890-3500-6	SWW	Total/NA	Solid	8015B NM	40341
MB 880-40341/1-A	Method Blank	Total/NA	Solid	8015B NM	40341
LCS 880-40341/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	40341
LCSD 880-40341/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	40341

Prep Batch: 40341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3500-1	C-1	Total/NA	Solid	8015NM Prep	
890-3500-2	C-2	Total/NA	Solid	8015NM Prep	
890-3500-3	SWN	Total/NA	Solid	8015NM Prep	
890-3500-4	SWE	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3500-1
SDG: 700438.303.01

GC Semi VOA (Continued)

Prep Batch: 40341 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3500-5	SWS	Total/NA	Solid	8015NM Prep	
890-3500-6	SWW	Total/NA	Solid	8015NM Prep	
MB 880-40341/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-40341/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-40341/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 40460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3500-1	C-1	Total/NA	Solid	8015 NM	
890-3500-2	C-2	Total/NA	Solid	8015 NM	
890-3500-3	SWN	Total/NA	Solid	8015 NM	
890-3500-4	SWE	Total/NA	Solid	8015 NM	
890-3500-5	SWS	Total/NA	Solid	8015 NM	
890-3500-6	SWW	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 40005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3500-1	C-1	Soluble	Solid	DI Leach	
890-3500-2	C-2	Soluble	Solid	DI Leach	
890-3500-3	SWN	Soluble	Solid	DI Leach	
890-3500-4	SWE	Soluble	Solid	DI Leach	
890-3500-5	SWS	Soluble	Solid	DI Leach	
890-3500-6	SWW	Soluble	Solid	DI Leach	
MB 880-40005/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-40005/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-40005/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3500-1 MS	C-1	Soluble	Solid	DI Leach	
890-3500-1 MSD	C-1	Soluble	Solid	DI Leach	

Analysis Batch: 40250

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3500-1	C-1	Soluble	Solid	300.0	40005
890-3500-2	C-2	Soluble	Solid	300.0	40005
890-3500-3	SWN	Soluble	Solid	300.0	40005
890-3500-4	SWE	Soluble	Solid	300.0	40005
890-3500-5	SWS	Soluble	Solid	300.0	40005
890-3500-6	SWW	Soluble	Solid	300.0	40005
MB 880-40005/1-A	Method Blank	Soluble	Solid	300.0	40005
LCS 880-40005/2-A	Lab Control Sample	Soluble	Solid	300.0	40005
LCSD 880-40005/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	40005
890-3500-1 MS	C-1	Soluble	Solid	300.0	40005
890-3500-1 MSD	C-1	Soluble	Solid	300.0	40005

Lab Chronicle

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3500-1
SDG: 700438.303.01

Client Sample ID: C-1

Lab Sample ID: 890-3500-1
Matrix: Solid
Date Collected: 11/17/22 10:09
Date Received: 11/17/22 14:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	40470	11/28/22 14:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40541	11/29/22 17:35	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40668	11/30/22 09:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			40460	11/28/22 12:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	40341	11/23/22 14:58	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40260	11/24/22 00:00	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	40005	11/20/22 12:12	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40250	11/23/22 10:46	SMC	EET MID

Client Sample ID: C-2

Lab Sample ID: 890-3500-2
Matrix: Solid
Date Collected: 11/17/22 10:31
Date Received: 11/17/22 14:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	40470	11/28/22 14:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40541	11/29/22 17:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40668	11/30/22 09:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			40460	11/28/22 12:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	40341	11/23/22 14:58	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40260	11/24/22 00:21	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	40005	11/20/22 12:12	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40250	11/23/22 11:07	SMC	EET MID

Client Sample ID: SWN

Lab Sample ID: 890-3500-3
Matrix: Solid
Date Collected: 11/17/22 10:29
Date Received: 11/17/22 14:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	40470	11/28/22 14:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40541	11/29/22 18:16	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40668	11/30/22 09:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			40460	11/28/22 12:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	40341	11/23/22 14:58	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40260	11/24/22 00:43	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	40005	11/20/22 12:12	CH	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	40250	11/23/22 11:15	SMC	EET MID

Client Sample ID: SWE

Lab Sample ID: 890-3500-4
Matrix: Solid
Date Collected: 11/17/22 10:19
Date Received: 11/17/22 14:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	40470	11/28/22 14:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40541	11/29/22 18:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40668	11/30/22 09:51	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3500-1
SDG: 700438.303.01

Client Sample ID: SWE

Lab Sample ID: 890-3500-4
Matrix: Solid
Date Collected: 11/17/22 10:19
Date Received: 11/17/22 14:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			40460	11/28/22 12:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	40341	11/23/22 14:58	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40260	11/24/22 01:05	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	40005	11/20/22 12:12	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40250	11/23/22 11:22	SMC	EET MID

Client Sample ID: SWS

Lab Sample ID: 890-3500-5
Matrix: Solid
Date Collected: 11/17/22 10:22
Date Received: 11/17/22 14:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	40470	11/28/22 14:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40541	11/29/22 18:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40668	11/30/22 09:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			40460	11/28/22 12:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	40341	11/23/22 14:58	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40260	11/24/22 01:27	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	40005	11/20/22 12:12	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40250	11/23/22 11:29	SMC	EET MID

Client Sample ID: SWW

Lab Sample ID: 890-3500-6
Matrix: Solid
Date Collected: 11/17/22 10:15
Date Received: 11/17/22 14:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	40470	11/28/22 14:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40541	11/29/22 19:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40668	11/30/22 09:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			40460	11/28/22 12:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	40341	11/23/22 14:58	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40260	11/24/22 01:48	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	40005	11/20/22 12:12	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40250	11/23/22 11:51	SMC	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3500-1
SDG: 700438.303.01

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3500-1
SDG: 700438.303.01

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3500-1
SDG: 700438.303.01

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3500-1	C-1	Solid	11/17/22 10:09	11/17/22 14:27	20
890-3500-2	C-2	Solid	11/17/22 10:31	11/17/22 14:27	0 - 6
890-3500-3	SWN	Solid	11/17/22 10:29	11/17/22 14:27	4
890-3500-4	SWE	Solid	11/17/22 10:19	11/17/22 14:27	4
890-3500-5	SWS	Solid	11/17/22 10:22	11/17/22 14:27	4
890-3500-6	SWW	Solid	11/17/22 10:15	11/17/22 14:27	4

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Chad Hensley	Bill to: (if different)	Jermey Haas
Company Name:	Talon LPE	Company Name:	EOG
Address:	408 W. Texas Ave.	Address:	
City, State ZIP:	Artesia, NM 88210	City, State ZIP:	
Phone:	575.746.8768	Email:	Chensley@talonlpe.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Marathon AGI State 2H	Turn Around	
Project Number:	700438.303.01	☑ Routine ☐ Rush	
Project Location:	Eddy county	Due Date:	
Sampler's Name:	Chad Hensley	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	N/A		

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:	TM007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	2.2	
Total Containers:		Corrected Temperature:	2.0	

Preservative Codes

None: NO | DI Water: H_2O
Cool: Cool | MeOH: Me
HCL: HC | HNO_3: HN
H_2SO_4: H_2 | NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

890-3500 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: CL	BTEX	TPH	Sample Comments
C-1	Soil	11/17/2022	10:09	20'	Comp	1		x	X	X	
C-2	Soil	11/17/2022	10:31	0-6"	Comp	1		x	X	X	
SWN	Soil	11/17/2022	10:29	4'	Comp	1		x	X	X	
SWE	Soil	11/17/2022	10:19	4'	Comp	1		x	X	X	
SWS	Soil	11/17/2022	10:22	4'	Comp	1		x	X	X	
SWW	Soil	11/17/2022	10:15	4'	Comp	1		x	X	X	
	Soil							x	X	X	
	Soil							x	X	X	
	Soil							x	X	X	
	Soil							x	X	X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		11.17.22 1427	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Talon/LPE

Job Number: 890-3500-1
SDG Number: 700438.303.01

Login Number: 3500
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
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.	N/A	Refer to Job Narrative for details.
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 <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Talon/LPE

Job Number: 890-3500-1
SDG Number: 700438.303.01

Login Number: 3500
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 11/21/22 08:46 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
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.	True	
Cooler Temperature is acceptable.	True	
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 <6mm (1/4").	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Chad Hensley
Talon/LPE
408 W. Texas St.
Artesia, New Mexico 88210

Generated 12/9/2022 2:32:16 PM

JOB DESCRIPTION

Marathon AGI State #1
SDG NUMBER 700438.303.01

JOB NUMBER

890-3595-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

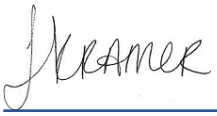
See page two for job notes and contact information.

Eurofins Carlsbad

Job Notes

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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12/9/2022 2:32:16 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Client: Talon/LPE
Project/Site: Marathon AGI State #1

Laboratory Job ID: 890-3595-1
SDG: 700438.303.01

Table of Contents

Definitions/Glossary

Client: Talon/LPE
Project/Site: Marathon AGI State #1

Job ID: 890-3595-1
SDG: 700438.303.01

Qualifiers

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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

Case Narrative

Client: Talon/LPE
Project/Site: Marathon AGI State #1

Job ID: 890-3595-1
SDG: 700438.303.01

Job ID: 890-3595-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3595-1

Receipt
The samples were received on 12/7/2022 1:28 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 5.0°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: C-1 (890-3595-1), C-2 (890-3595-2), SWW-1 (890-3595-3), SWE-1 (890-3595-4), SWN-1 (890-3595-5) and SWS-1 (890-3595-6).

GC VOA
Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-41354 and analytical batch 880-41352 was outside the control limits.

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

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-41374 and analytical batch 880-41317 was outside the upper control limits.

Method 8015MOD_NM: The method blank for preparation batch 880-41374 and analytical batch 880-41317 contained Gasoline Range Organics (GRO)-C6-C10 above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

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

Client Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State #1

Job ID: 890-3595-1
SDG: 700438.303.01

Client Sample ID: C-1

Date Collected: 12/07/22 08:01
Date Received: 12/07/22 13:28
Sample Depth: 22

Lab Sample ID: 890-3595-1
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000386	U	0.00200	0.000386	mg/Kg		12/08/22 10:50	12/08/22 15:39	1
Toluene	<0.000457	U	0.00200	0.000457	mg/Kg		12/08/22 10:50	12/08/22 15:39	1
Ethylbenzene	<0.000566	U	0.00200	0.000566	mg/Kg		12/08/22 10:50	12/08/22 15:39	1
m-Xylene & p-Xylene	<0.00101	U	0.00401	0.00101	mg/Kg		12/08/22 10:50	12/08/22 15:39	1
o-Xylene	**0.000451**	**J**	0.00200	0.000345	mg/Kg		12/08/22 10:50	12/08/22 15:39	1
Xylenes, Total	<0.00101	U	0.00401	0.00101	mg/Kg		12/08/22 10:50	12/08/22 15:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*	*12/08/22 10:50*	*12/08/22 15:39*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*12/08/22 10:50*	*12/08/22 15:39*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00401	0.00101	mg/Kg			12/08/22 17:01	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**41.1**	**J**	50.0	15.0	mg/Kg			12/09/22 11:21	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**41.1**	**J B**	50.0	15.0	mg/Kg		12/08/22 12:54	12/08/22 21:36	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		12/08/22 12:54	12/08/22 21:36	1
Oll Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		12/08/22 12:54	12/08/22 21:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*12/08/22 12:54*	*12/08/22 21:36*	*1*
o-Terphenyl	*129*		*70 - 130*	*12/08/22 12:54*	*12/08/22 21:36*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**201**		5.00	0.395	mg/Kg			12/08/22 19:21	1

Client Sample ID: C-2

Date Collected: 12/07/22 08:07
Date Received: 12/07/22 13:28
Sample Depth: 2

Lab Sample ID: 890-3595-2
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		12/08/22 10:50	12/08/22 16:00	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		12/08/22 10:50	12/08/22 16:00	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		12/08/22 10:50	12/08/22 16:00	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		12/08/22 10:50	12/08/22 16:00	1
o-Xylene	**0.000542**	**J**	0.00200	0.000343	mg/Kg		12/08/22 10:50	12/08/22 16:00	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		12/08/22 10:50	12/08/22 16:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*79*		*70 - 130*	*12/08/22 10:50*	*12/08/22 16:00*	*1*

Client Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State #1

Job ID: 890-3595-1
SDG: 700438.303.01

Client Sample ID: C-2
Date Collected: 12/07/22 08:07
Date Received: 12/07/22 13:28
Sample Depth: 2

Lab Sample ID: 890-3595-2
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*12/08/22 10:50*	*12/08/22 16:00*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg			12/08/22 17:01	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**26.7**	**J**	49.9	15.0	mg/Kg			12/09/22 11:21	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**26.7**	**J B**	49.9	15.0	mg/Kg		12/08/22 12:54	12/08/22 22:37	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		12/08/22 12:54	12/08/22 22:37	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		12/08/22 12:54	12/08/22 22:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*12/08/22 12:54*	*12/08/22 22:37*	*1*
o-Terphenyl	*124*		*70 - 130*	*12/08/22 12:54*	*12/08/22 22:37*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**38.9**		5.04	0.398	mg/Kg			12/08/22 19:49	1

Client Sample ID: SWW-1
Date Collected: 12/07/22 08:16
Date Received: 12/07/22 13:28
Sample Depth: 1

Lab Sample ID: 890-3595-3
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000381	U	0.00198	0.000381	mg/Kg		12/08/22 10:50	12/08/22 16:20	1
Toluene	<0.000451	U	0.00198	0.000451	mg/Kg		12/08/22 10:50	12/08/22 16:20	1
Ethylbenzene	<0.000559	U	0.00198	0.000559	mg/Kg		12/08/22 10:50	12/08/22 16:20	1
m-Xylene & p-Xylene	<0.00100	U	0.00396	0.00100	mg/Kg		12/08/22 10:50	12/08/22 16:20	1
o-Xylene	<0.000341	U	0.00198	0.000341	mg/Kg		12/08/22 10:50	12/08/22 16:20	1
Xylenes, Total	<0.00100	U	0.00396	0.00100	mg/Kg		12/08/22 10:50	12/08/22 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*12/08/22 10:50*	*12/08/22 16:20*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*12/08/22 10:50*	*12/08/22 16:20*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00100	U	0.00396	0.00100	mg/Kg			12/08/22 17:01	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**32.5**	**J**	49.9	15.0	mg/Kg			12/09/22 11:21	1

Client Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State #1

Job ID: 890-3595-1
SDG: 700438.303.01

Client Sample ID: SWW-1
Date Collected: 12/07/22 08:16
Date Received: 12/07/22 13:28
Sample Depth: 1

Lab Sample ID: 890-3595-3
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	32.5	J B	49.9	15.0	mg/Kg		12/08/22 12:54	12/08/22 22:57	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		12/08/22 12:54	12/08/22 22:57	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		12/08/22 12:54	12/08/22 22:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*12/08/22 12:54*	*12/08/22 22:57*	*1*
o-Terphenyl	*127*		*70 - 130*	*12/08/22 12:54*	*12/08/22 22:57*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	329		5.03	0.397	mg/Kg			12/08/22 19:56	1

Client Sample ID: SWE-1
Date Collected: 12/07/22 08:11
Date Received: 12/07/22 13:28
Sample Depth: 1

Lab Sample ID: 890-3595-4
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000748	J	0.00202	0.000388	mg/Kg		12/08/22 10:50	12/08/22 16:41	1
Toluene	<0.000460	U	0.00202	0.000460	mg/Kg		12/08/22 10:50	12/08/22 16:41	1
Ethylbenzene	<0.000570	U	0.00202	0.000570	mg/Kg		12/08/22 10:50	12/08/22 16:41	1
m-Xylene & p-Xylene	<0.00102	U	0.00403	0.00102	mg/Kg		12/08/22 10:50	12/08/22 16:41	1
o-Xylene	0.000392	J	0.00202	0.000347	mg/Kg		12/08/22 10:50	12/08/22 16:41	1
Xylenes, Total	<0.00102	U	0.00403	0.00102	mg/Kg		12/08/22 10:50	12/08/22 16:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*12/08/22 10:50*	*12/08/22 16:41*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*12/08/22 10:50*	*12/08/22 16:41*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00114	J	0.00403	0.00102	mg/Kg			12/08/22 17:01	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	40.6	J	50.0	15.0	mg/Kg			12/09/22 11:21	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	40.6	J B	50.0	15.0	mg/Kg		12/08/22 12:54	12/08/22 23:17	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		12/08/22 12:54	12/08/22 23:17	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		12/08/22 12:54	12/08/22 23:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*12/08/22 12:54*	*12/08/22 23:17*	*1*
o-Terphenyl	*119*		*70 - 130*	*12/08/22 12:54*	*12/08/22 23:17*	*1*

Client Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State #1

Job ID: 890-3595-1
SDG: 700438.303.01

Client Sample ID: SWE-1
Date Collected: 12/07/22 08:11
Date Received: 12/07/22 13:28
Sample Depth: 1

Lab Sample ID: 890-3595-4
Matrix: Solid

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	317		5.05	0.399	mg/Kg			12/08/22 20:04	1

Client Sample ID: SWN-1
Date Collected: 12/07/22 08:21
Date Received: 12/07/22 13:28
Sample Depth: 1

Lab Sample ID: 890-3595-5
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		12/08/22 10:50	12/08/22 17:01	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		12/08/22 10:50	12/08/22 17:01	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		12/08/22 10:50	12/08/22 17:01	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		12/08/22 10:50	12/08/22 17:01	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		12/08/22 10:50	12/08/22 17:01	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		12/08/22 10:50	12/08/22 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*75*		*70 - 130*	*12/08/22 10:50*	*12/08/22 17:01*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*12/08/22 10:50*	*12/08/22 17:01*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00398	0.00101	mg/Kg			12/09/22 12:20	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	38.9	J	50.0	15.0	mg/Kg			12/09/22 11:21	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	38.9	J B	50.0	15.0	mg/Kg		12/08/22 12:54	12/08/22 23:37	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		12/08/22 12:54	12/08/22 23:37	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		12/08/22 12:54	12/08/22 23:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*12/08/22 12:54*	*12/08/22 23:37*	*1*
o-Terphenyl	*123*		*70 - 130*	*12/08/22 12:54*	*12/08/22 23:37*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	210		4.95	0.391	mg/Kg			12/08/22 20:12	1

Client Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State #1

Job ID: 890-3595-1
SDG: 700438.303.01

Client Sample ID: SWS-1
Date Collected: 12/07/22 08:29
Date Received: 12/07/22 13:28
Sample Depth: 1

Lab Sample ID: 890-3595-6
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		12/08/22 10:50	12/08/22 20:12	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		12/08/22 10:50	12/08/22 20:12	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		12/08/22 10:50	12/08/22 20:12	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		12/08/22 10:50	12/08/22 20:12	1
o-Xylene	**0.000467**	**J**	0.00200	0.000343	mg/Kg		12/08/22 10:50	12/08/22 20:12	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		12/08/22 10:50	12/08/22 20:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*76*		*70 - 130*	*12/08/22 10:50*	*12/08/22 20:12*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*12/08/22 10:50*	*12/08/22 20:12*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg			12/09/22 12:20	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**31.8**	**J**	50.0	15.0	mg/Kg			12/09/22 11:21	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**31.8**	**J B**	50.0	15.0	mg/Kg		12/08/22 12:54	12/08/22 23:57	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		12/08/22 12:54	12/08/22 23:57	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		12/08/22 12:54	12/08/22 23:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*114*		*70 - 130*	*12/08/22 12:54*	*12/08/22 23:57*	*1*
o-Terphenyl	*127*		*70 - 130*	*12/08/22 12:54*	*12/08/22 23:57*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**277**		5.03	0.397	mg/Kg			12/09/22 08:50	1

Surrogate Summary

Client: Talon/LPE
Project/Site: Marathon AGI State #1

Job ID: 890-3595-1
SDG: 700438.303.01

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3595-1	C-1	78	98
890-3595-2	C-2	79	100
890-3595-3	SWW-1	92	105
890-3595-4	SWE-1	90	108
890-3595-5	SWN-1	75	105
890-3595-6	SWS-1	76	104
LCS 880-41354/1-A	Lab Control Sample	87	111
LCSD 880-41354/2-A	Lab Control Sample Dup	78	101
MB 880-41354/5-A	Method Blank	69 S1-	102

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3595-1	C-1	109	129
890-3595-1 MS	C-1	115	114
890-3595-1 MSD	C-1	117	115
890-3595-2	C-2	108	124
890-3595-3	SWW-1	112	127
890-3595-4	SWE-1	106	119
890-3595-5	SWN-1	110	123
890-3595-6	SWS-1	114	127
LCS 880-41374/2-A	Lab Control Sample	86	96
LCSD 880-41374/3-A	Lab Control Sample Dup	81	91
MB 880-41374/1-A	Method Blank	94	145 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State #1

Job ID: 890-3595-1
SDG: 700438.303.01

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-41354/5-A
Matrix: Solid
Analysis Batch: 41352

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 41354

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		12/08/22 10:50	12/08/22 14:50	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		12/08/22 10:50	12/08/22 14:50	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		12/08/22 10:50	12/08/22 14:50	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		12/08/22 10:50	12/08/22 14:50	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		12/08/22 10:50	12/08/22 14:50	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		12/08/22 10:50	12/08/22 14:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*69*	*S1-*	*70 - 130*	*12/08/22 10:50*	*12/08/22 14:50*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*12/08/22 10:50*	*12/08/22 14:50*	*1*

Lab Sample ID: LCS 880-41354/1-A
Matrix: Solid
Analysis Batch: 41352

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 41354

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08787		mg/Kg		88	70 - 130
Toluene	0.100	0.07899		mg/Kg		79	70 - 130
Ethylbenzene	0.100	0.09052		mg/Kg		91	70 - 130
m-Xylene & p-Xylene	0.200	0.1589		mg/Kg		79	70 - 130
o-Xylene	0.100	0.07767		mg/Kg		78	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: LCSD 880-41354/2-A
Matrix: Solid
Analysis Batch: 41352

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 41354

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09484		mg/Kg		95	70 - 130	8	35
Toluene	0.100	0.1060		mg/Kg		106	70 - 130	29	35
Ethylbenzene	0.100	0.1011		mg/Kg		101	70 - 130	11	35
m-Xylene & p-Xylene	0.200	0.1739		mg/Kg		87	70 - 130	9	35
o-Xylene	0.100	0.08367		mg/Kg		84	70 - 130	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

QC Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State #1

Job ID: 890-3595-1
SDG: 700438.303.01

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-41374/1-A
Matrix: Solid
Analysis Batch: 41317

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 41374

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	19.91	J	50.0	15.0	mg/Kg		12/08/22 12:54	12/08/22 20:36	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		12/08/22 12:54	12/08/22 20:36	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		12/08/22 12:54	12/08/22 20:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*12/08/22 12:54*	*12/08/22 20:36*	*1*
o-Terphenyl	*145*	*S1+*	*70 - 130*	*12/08/22 12:54*	*12/08/22 20:36*	*1*

Lab Sample ID: LCS 880-41374/2-A
Matrix: Solid
Analysis Batch: 41317

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 41374

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	777.3		mg/Kg		78	70 - 130
Diesel Range Organics (Over C10-C28)	1000	902.1		mg/Kg		90	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*86*		*70 - 130*
o-Terphenyl	*96*		*70 - 130*

Lab Sample ID: LCSD 880-41374/3-A
Matrix: Solid
Analysis Batch: 41317

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 41374

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	756.0		mg/Kg		76	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	876.3		mg/Kg		88	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*81*		*70 - 130*
o-Terphenyl	*91*		*70 - 130*

Lab Sample ID: 890-3595-1 MS
Matrix: Solid
Analysis Batch: 41317

Client Sample ID: C-1
Prep Type: Total/NA
Prep Batch: 41374

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	41.1	J B	999	1034		mg/Kg		99	70 - 130
Diesel Range Organics (Over C10-C28)	<15.0	U	999	965.1		mg/Kg		97	70 - 130

QC Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State #1

Job ID: 890-3595-1
SDG: 700438.303.01

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-3595-1 MS
Matrix: Solid
Analysis Batch: 41317

Client Sample ID: C-1
Prep Type: Total/NA
Prep Batch: 41374

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*115*		*70 - 130*
o-Terphenyl	*114*		*70 - 130*

Lab Sample ID: 890-3595-1 MSD
Matrix: Solid
Analysis Batch: 41317

Client Sample ID: C-1
Prep Type: Total/NA
Prep Batch: 41374

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	41.1	J B	997	1036		mg/Kg		100	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<15.0	U	997	972.3		mg/Kg		98	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*117*		*70 - 130*
o-Terphenyl	*115*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-41363/1-A
Matrix: Solid
Analysis Batch: 41403

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			12/08/22 18:53	1

Lab Sample ID: LCS 880-41363/2-A
Matrix: Solid
Analysis Batch: 41403

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	252.0		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-41363/3-A
Matrix: Solid
Analysis Batch: 41403

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	252.2		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 890-3595-1 MS
Matrix: Solid
Analysis Batch: 41403

Client Sample ID: C-1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	201		250	451.5		mg/Kg		100	90 - 110

QC Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State #1

Job ID: 890-3595-1
SDG: 700438.303.01

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-3595-1 MSD
Matrix: Solid
Analysis Batch: 41403

Client Sample ID: C-1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	201		250	452.2		mg/Kg		100	90 - 110	0	20

QC Association Summary

Client: Talon/LPE
Project/Site: Marathon AGI State #1

Job ID: 890-3595-1
SDG: 700438.303.01

GC VOA

Analysis Batch: 41352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3595-1	C-1	Total/NA	Solid	8021B	41354
890-3595-2	C-2	Total/NA	Solid	8021B	41354
890-3595-3	SWW-1	Total/NA	Solid	8021B	41354
890-3595-4	SWE-1	Total/NA	Solid	8021B	41354
890-3595-5	SWN-1	Total/NA	Solid	8021B	41354
890-3595-6	SWS-1	Total/NA	Solid	8021B	41354
MB 880-41354/5-A	Method Blank	Total/NA	Solid	8021B	41354
LCS 880-41354/1-A	Lab Control Sample	Total/NA	Solid	8021B	41354
LCSD 880-41354/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	41354

Prep Batch: 41354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3595-1	C-1	Total/NA	Solid	5035	
890-3595-2	C-2	Total/NA	Solid	5035	
890-3595-3	SWW-1	Total/NA	Solid	5035	
890-3595-4	SWE-1	Total/NA	Solid	5035	
890-3595-5	SWN-1	Total/NA	Solid	5035	
890-3595-6	SWS-1	Total/NA	Solid	5035	
MB 880-41354/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-41354/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-41354/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 41404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3595-1	C-1	Total/NA	Solid	Total BTEX	
890-3595-2	C-2	Total/NA	Solid	Total BTEX	
890-3595-3	SWW-1	Total/NA	Solid	Total BTEX	
890-3595-4	SWE-1	Total/NA	Solid	Total BTEX	
890-3595-5	SWN-1	Total/NA	Solid	Total BTEX	
890-3595-6	SWS-1	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 41317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3595-1	C-1	Total/NA	Solid	8015B NM	41374
890-3595-2	C-2	Total/NA	Solid	8015B NM	41374
890-3595-3	SWW-1	Total/NA	Solid	8015B NM	41374
890-3595-4	SWE-1	Total/NA	Solid	8015B NM	41374
890-3595-5	SWN-1	Total/NA	Solid	8015B NM	41374
890-3595-6	SWS-1	Total/NA	Solid	8015B NM	41374
MB 880-41374/1-A	Method Blank	Total/NA	Solid	8015B NM	41374
LCS 880-41374/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	41374
LCSD 880-41374/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	41374
890-3595-1 MS	C-1	Total/NA	Solid	8015B NM	41374
890-3595-1 MSD	C-1	Total/NA	Solid	8015B NM	41374

Prep Batch: 41374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3595-1	C-1	Total/NA	Solid	8015NM Prep	
890-3595-2	C-2	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Talon/LPE
Project/Site: Marathon AGI State #1

Job ID: 890-3595-1
SDG: 700438.303.01

GC Semi VOA (Continued)

Prep Batch: 41374 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3595-3	SWW-1	Total/NA	Solid	8015NM Prep	
890-3595-4	SWE-1	Total/NA	Solid	8015NM Prep	
890-3595-5	SWN-1	Total/NA	Solid	8015NM Prep	
890-3595-6	SWS-1	Total/NA	Solid	8015NM Prep	
MB 880-41374/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-41374/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-41374/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3595-1 MS	C-1	Total/NA	Solid	8015NM Prep	
890-3595-1 MSD	C-1	Total/NA	Solid	8015NM Prep	

Analysis Batch: 41448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3595-1	C-1	Total/NA	Solid	8015 NM	
890-3595-2	C-2	Total/NA	Solid	8015 NM	
890-3595-3	SWW-1	Total/NA	Solid	8015 NM	
890-3595-4	SWE-1	Total/NA	Solid	8015 NM	
890-3595-5	SWN-1	Total/NA	Solid	8015 NM	
890-3595-6	SWS-1	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 41363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3595-1	C-1	Soluble	Solid	DI Leach	
890-3595-2	C-2	Soluble	Solid	DI Leach	
890-3595-3	SWW-1	Soluble	Solid	DI Leach	
890-3595-4	SWE-1	Soluble	Solid	DI Leach	
890-3595-5	SWN-1	Soluble	Solid	DI Leach	
890-3595-6	SWS-1	Soluble	Solid	DI Leach	
MB 880-41363/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-41363/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-41363/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3595-1 MS	C-1	Soluble	Solid	DI Leach	
890-3595-1 MSD	C-1	Soluble	Solid	DI Leach	

Analysis Batch: 41403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3595-1	C-1	Soluble	Solid	300.0	41363
890-3595-2	C-2	Soluble	Solid	300.0	41363
890-3595-3	SWW-1	Soluble	Solid	300.0	41363
890-3595-4	SWE-1	Soluble	Solid	300.0	41363
890-3595-5	SWN-1	Soluble	Solid	300.0	41363
890-3595-6	SWS-1	Soluble	Solid	300.0	41363
MB 880-41363/1-A	Method Blank	Soluble	Solid	300.0	41363
LCS 880-41363/2-A	Lab Control Sample	Soluble	Solid	300.0	41363
LCSD 880-41363/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	41363
890-3595-1 MS	C-1	Soluble	Solid	300.0	41363
890-3595-1 MSD	C-1	Soluble	Solid	300.0	41363

Lab Chronicle

Client: Talon/LPE
Project/Site: Marathon AGI State #1

Job ID: 890-3595-1
SDG: 700438.303.01

Client Sample ID: C-1
Date Collected: 12/07/22 08:01
Date Received: 12/07/22 13:28

Lab Sample ID: 890-3595-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	41354	12/08/22 10:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	41352	12/08/22 15:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			41404	12/08/22 17:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			41448	12/09/22 11:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	41374	12/08/22 12:54	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41317	12/08/22 21:36	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	41363	12/08/22 12:11	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	41403	12/08/22 19:21	CH	EET MID

Client Sample ID: C-2
Date Collected: 12/07/22 08:07
Date Received: 12/07/22 13:28

Lab Sample ID: 890-3595-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	41354	12/08/22 10:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	41352	12/08/22 16:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			41404	12/08/22 17:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			41448	12/09/22 11:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	41374	12/08/22 12:54	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41317	12/08/22 22:37	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	41363	12/08/22 12:11	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	41403	12/08/22 19:49	CH	EET MID

Client Sample ID: SWW-1
Date Collected: 12/07/22 08:16
Date Received: 12/07/22 13:28

Lab Sample ID: 890-3595-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	41354	12/08/22 10:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	41352	12/08/22 16:20	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			41404	12/08/22 17:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			41448	12/09/22 11:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	41374	12/08/22 12:54	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41317	12/08/22 22:57	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	41363	12/08/22 12:11	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	41403	12/08/22 19:56	CH	EET MID

Client Sample ID: SWE-1
Date Collected: 12/07/22 08:11
Date Received: 12/07/22 13:28

Lab Sample ID: 890-3595-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	41354	12/08/22 10:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	41352	12/08/22 16:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			41404	12/08/22 17:01	SM	EET MID

Lab Chronicle

Client: Talon/LPE
Project/Site: Marathon AGI State #1

Job ID: 890-3595-1
SDG: 700438.303.01

Client Sample ID: SWE-1
Date Collected: 12/07/22 08:11
Date Received: 12/07/22 13:28

Lab Sample ID: 890-3595-4
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	8015 NM		1			41448	12/09/22 11:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	41374	12/08/22 12:54	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41317	12/08/22 23:17	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	41363	12/08/22 12:11	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	41403	12/08/22 20:04	CH	EET MID

Client Sample ID: SWN-1
Date Collected: 12/07/22 08:21
Date Received: 12/07/22 13:28

Lab Sample ID: 890-3595-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	41354	12/08/22 10:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	41352	12/08/22 17:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			41404	12/09/22 12:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			41448	12/09/22 11:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	41374	12/08/22 12:54	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41317	12/08/22 23:37	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	41363	12/08/22 12:11	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	41403	12/08/22 20:12	CH	EET MID

Client Sample ID: SWS-1
Date Collected: 12/07/22 08:29
Date Received: 12/07/22 13:28

Lab Sample ID: 890-3595-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	41354	12/08/22 10:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	41352	12/08/22 20:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			41404	12/09/22 12:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			41448	12/09/22 11:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	41374	12/08/22 12:54	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41317	12/08/22 23:57	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	41363	12/08/22 12:11	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	41403	12/09/22 08:50	CH	EET MID

Laboratory References:
EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Talon/LPE
Project/Site: Marathon AGI State #1

Job ID: 890-3595-1
SDG: 700438.303.01

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Talon/LPE
Project/Site: Marathon AGI State #1

Job ID: 890-3595-1
SDG: 700438.303.01

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Talon/LPE
Project/Site: Marathon AGI State #1

Job ID: 890-3595-1
SDG: 700438.303.01

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3595-1	C-1	Solid	12/07/22 08:01	12/07/22 13:28	22
890-3595-2	C-2	Solid	12/07/22 08:07	12/07/22 13:28	2
890-3595-3	SWW-1	Solid	12/07/22 08:16	12/07/22 13:28	1
890-3595-4	SWE-1	Solid	12/07/22 08:11	12/07/22 13:28	1
890-3595-5	SWN-1	Solid	12/07/22 08:21	12/07/22 13:28	1
890-3595-6	SWS-1	Solid	12/07/22 08:29	12/07/22 13:28	1

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

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Project Manager:	Chad Hensley	Bill to: (if different)	Jermay Haass
Company Name:	Talon LPE	Company Name:	EOG
Address:	408 W. Texas Ave.	Address:	
City, State ZIP:	Artesia, NM 88210	City, State ZIP:	
Phone:	575.746.8768	Email:	Chensley@talonlpe.com

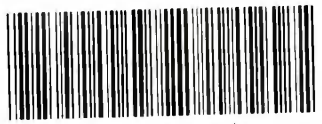
Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Marathon AGI State #1	Turn Around	
Project Number:	700438.303.01	☐ Routine ☑ Rush	
Project Location:	Rural Eddy, NM	Due Date: 1 Day ASAP	
Sampler's Name:	Chad Hensley	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	N/A		

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	TMM007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	5.2
Total Containers:		Corrected Temperature:	5.0

ANALYSIS REQUEST



Preservative Codes

None: NO | DI Water: H_2O
Cool: Cool | MeOH: Me
HCL: HC | HNO_3: HN
H_2SO_4: H_2 | NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Parameters: CL	BTEX	TPH	Sample Comments
C-1	Soil	12/7/2022	8:01	22'	Comp	1	x	X	X	
C-2	Soil	12/7/2022	8:07	2'	Comp	1	x	X	X	
SWW-1	Soil	12/7/2022	8:16	1'	Comp	1	x	X	X	
SWE-1	Soil	12/7/2022	8:11	1'	Comp	1	x	X	X	
SWN-1	Soil	12/7/2022	8:21	1'	Comp	1	x	X	X	
SWS-1	Soil	12/7/2022	8:29	1'	Comp	1	x	X	X	
	Soil					1	x	X	X	
	Soil					1	x	X	X	
	Soil					1	x	X	X	
	Soil					1	x	X	X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		12-07-22	2	12.7.22	1329
3			4		
5		12:37 PM	6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Talon/LPE

Job Number: 890-3595-1
SDG Number: 700438.303.01

Login Number: 3595
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
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.	N/A	Refer to Job Narrative for details.
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 <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Talon/LPE

Job Number: 890-3595-1
SDG Number: 700438.303.01

Login Number: 3595
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 12/08/22 11:44 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
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.	True	
Cooler Temperature is acceptable.	True	
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 <6mm (1/4").	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Chad Hensley
Talon/LPE
408 W. Texas St.
Artesia, New Mexico 88210

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JOB DESCRIPTION

Marathon AGI State 2H
SDG NUMBER 700438.303.01

JOB NUMBER

890-3651-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

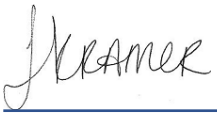
my EOL

Eurofins Carlsbad

Job Notes

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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12/21/2022 2:23:26 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Laboratory Job ID: 890-3651-1
SDG: 700438.303.01

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Definitions/Glossary

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3651-1
SDG: 700438.303.01

Qualifiers

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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

Case Narrative

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3651-1
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Job ID: 890-3651-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3651-1

Receipt
The sample was received on 12/14/2022 8:54 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 9.0°C

Receipt Exceptions
The following samples > were received and analyzed from an unpreserved bulk soil jar: SWN (890-3651-1).

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-41982/5) and (LCSD 880-41926/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The method blank for preparation batch 880-41926 and analytical batch 880-41982 contained Gasoline Range Organics (GRO)-C6-C10 above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-41926 and analytical batch 880-41982 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28).

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

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

Client Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3651-1
SDG: 700438.303.01

Client Sample ID: SWN

Date Collected: 12/14/22 08:02
Date Received: 12/14/22 08:54
Sample Depth: 4

Lab Sample ID: 890-3651-1

Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		12/20/22 15:23	12/21/22 13:12	1
Toluene	<0.000458	U	0.00201	0.000458	mg/Kg		12/20/22 15:23	12/21/22 13:12	1
Ethylbenzene	<0.000567	U	0.00201	0.000567	mg/Kg		12/20/22 15:23	12/21/22 13:12	1
m-Xylene & p-Xylene	<0.00101	U	0.00402	0.00101	mg/Kg		12/20/22 15:23	12/21/22 13:12	1
o-Xylene	<0.000345	U	0.00201	0.000345	mg/Kg		12/20/22 15:23	12/21/22 13:12	1
Xylenes, Total	<0.00101	U	0.00402	0.00101	mg/Kg		12/20/22 15:23	12/21/22 13:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*12/20/22 15:23*	*12/21/22 13:12*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*12/20/22 15:23*	*12/21/22 13:12*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00402	0.00101	mg/Kg			12/21/22 14:46	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.9	15.0	mg/Kg			12/16/22 14:51	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	49.9	15.0	mg/Kg		12/15/22 14:18	12/16/22 12:11	1
Diesel Range Organics (Over C10-C28)	<15.0	U *1	49.9	15.0	mg/Kg		12/15/22 14:18	12/16/22 12:11	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		12/15/22 14:18	12/16/22 12:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*12/15/22 14:18*	*12/16/22 12:11*	*1*
o-Terphenyl	*101*		*70 - 130*	*12/15/22 14:18*	*12/16/22 12:11*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**80.6**		5.00	0.395	mg/Kg			12/15/22 19:43	1

Surrogate Summary

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3651-1
SDG: 700438.303.01

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-3651-1	SWN	105	101
LCS 880-42329/1-A	Lab Control Sample	98	100
LCSD 880-42329/2-A	Lab Control Sample Dup	96	99
MB 880-42329/5-A	Method Blank	87	101

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-3651-1	SWN	102	101
LCS 880-41926/2-A	Lab Control Sample	98	111
LCSD 880-41926/3-A	Lab Control Sample Dup	128	134 S1+
MB 880-41926/1-A	Method Blank	112	115

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3651-1
SDG: 700438.303.01

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-42329/5-A
Matrix: Solid
Analysis Batch: 42368

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 42329

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		12/20/22 15:23	12/21/22 11:22	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		12/20/22 15:23	12/21/22 11:22	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		12/20/22 15:23	12/21/22 11:22	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		12/20/22 15:23	12/21/22 11:22	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		12/20/22 15:23	12/21/22 11:22	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		12/20/22 15:23	12/21/22 11:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*	*12/20/22 15:23*	*12/21/22 11:22*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*12/20/22 15:23*	*12/21/22 11:22*	*1*

Lab Sample ID: LCS 880-42329/1-A
Matrix: Solid
Analysis Batch: 42368

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 42329

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09235		mg/Kg		92	70 - 130		
Toluene			0.100	0.08850		mg/Kg		89	70 - 130		
Ethylbenzene			0.100	0.08780		mg/Kg		88	70 - 130		
m-Xylene & p-Xylene			0.200	0.1828		mg/Kg		91	70 - 130		
o-Xylene			0.100	0.08816		mg/Kg		88	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 880-42329/2-A
Matrix: Solid
Analysis Batch: 42368

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 42329

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09353		mg/Kg		94	70 - 130	1	35
Toluene			0.100	0.08701		mg/Kg		87	70 - 130	2	35
Ethylbenzene			0.100	0.08572		mg/Kg		86	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.1790		mg/Kg		90	70 - 130	2	35
o-Xylene			0.100	0.08705		mg/Kg		87	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

QC Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3651-1
SDG: 700438.303.01

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-41926/1-A
Matrix: Solid
Analysis Batch: 41982

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 41926

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	19.96	J	50.0	15.0	mg/Kg		12/15/22 14:18	12/16/22 08:33	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		12/15/22 14:18	12/16/22 08:33	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		12/15/22 14:18	12/16/22 08:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*12/15/22 14:18*	*12/16/22 08:33*	*1*
o-Terphenyl	*115*		*70 - 130*	*12/15/22 14:18*	*12/16/22 08:33*	*1*

Lab Sample ID: LCS 880-41926/2-A
Matrix: Solid
Analysis Batch: 41982

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 41926

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	918.4		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	1000	903.8		mg/Kg		90	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*98*		*70 - 130*
o-Terphenyl	*111*		*70 - 130*

Lab Sample ID: LCSD 880-41926/3-A
Matrix: Solid
Analysis Batch: 41982

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 41926

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1055		mg/Kg		105	70 - 130	14	20
Diesel Range Organics (Over C10-C28)	1000	1147	*1	mg/Kg		115	70 - 130	24	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*128*		*70 - 130*
o-Terphenyl	*134*	*S1+*	*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-41907/1-A
Matrix: Solid
Analysis Batch: 41937

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			12/15/22 19:28	1

QC Sample Results

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3651-1
SDG: 700438.303.01

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-41907/2-A
Matrix: Solid
Analysis Batch: 41937

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	239.2		mg/Kg		96	90 - 110		

Lab Sample ID: LCSD 880-41907/3-A
Matrix: Solid
Analysis Batch: 41937

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	234.5		mg/Kg		94	90 - 110	2	20

Lab Sample ID: 890-3651-1 MS
Matrix: Solid
Analysis Batch: 41937

Client Sample ID: SWN
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	80.6		250	326.6		mg/Kg		98	90 - 110		

Lab Sample ID: 890-3651-1 MSD
Matrix: Solid
Analysis Batch: 41937

Client Sample ID: SWN
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	80.6		250	323.1		mg/Kg		97	90 - 110	1	20

QC Association Summary

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3651-1
SDG: 700438.303.01

GC VOA

Prep Batch: 42329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3651-1	SWN	Total/NA	Solid	5035	
MB 880-42329/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-42329/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-42329/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 42368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3651-1	SWN	Total/NA	Solid	8021B	42329
MB 880-42329/5-A	Method Blank	Total/NA	Solid	8021B	42329
LCS 880-42329/1-A	Lab Control Sample	Total/NA	Solid	8021B	42329
LCSD 880-42329/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	42329

Analysis Batch: 42428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3651-1	SWN	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 41926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3651-1	SWN	Total/NA	Solid	8015NM Prep	
MB 880-41926/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-41926/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-41926/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 41982

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3651-1	SWN	Total/NA	Solid	8015B NM	41926
MB 880-41926/1-A	Method Blank	Total/NA	Solid	8015B NM	41926
LCS 880-41926/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	41926
LCSD 880-41926/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	41926

Analysis Batch: 42054

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3651-1	SWN	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 41907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3651-1	SWN	Soluble	Solid	DI Leach	
MB 880-41907/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-41907/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-41907/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3651-1 MS	SWN	Soluble	Solid	DI Leach	
890-3651-1 MSD	SWN	Soluble	Solid	DI Leach	

Analysis Batch: 41937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3651-1	SWN	Soluble	Solid	300.0	41907
MB 880-41907/1-A	Method Blank	Soluble	Solid	300.0	41907
LCS 880-41907/2-A	Lab Control Sample	Soluble	Solid	300.0	41907

QC Association Summary

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3651-1
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HPLC/IC (Continued)

Analysis Batch: 41937 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-41907/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	41907
890-3651-1 MS	SWN	Soluble	Solid	300.0	41907
890-3651-1 MSD	SWN	Soluble	Solid	300.0	41907

Lab Chronicle

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3651-1
SDG: 700438.303.01

Client Sample ID: SWN
Date Collected: 12/14/22 08:02
Date Received: 12/14/22 08:54

Lab Sample ID: 890-3651-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	42329	12/20/22 15:23	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42368	12/21/22 13:12	SM	EET MID
Total/NA	Analysis	Total BTEX		1			42428	12/21/22 14:46	SM	EET MID
Total/NA	Analysis	8015 NM		1			42054	12/16/22 14:51	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	41926	12/15/22 14:18	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41982	12/16/22 12:11	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	41907	12/15/22 11:04	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	41937	12/15/22 19:43	CH	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3651-1
SDG: 700438.303.01

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

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
Total BTEX		Solid	Total BTEX

Method Summary

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3651-1
SDG: 700438.303.01

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Talon/LPE
Project/Site: Marathon AGI State 2H

Job ID: 890-3651-1
SDG: 700438.303.01

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3651-1	SWN	Solid	12/14/22 08:02	12/14/22 08:54	4

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

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Project Manager:	Chad Hensley	Bill to: (if different)	Jeremy
Company Name:	Talon LPE	Company Name:	EOG
Address:	408 W. Texas Ave.	Address:	
City, State ZIP:	Artesia, NM 88210	City, State ZIP:	
Phone:	575.746.8768	Email:	Chensley@talonlpe.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Marathon AGI State 2H	Turn Around	
Project Number:	700438.303.01	☐ Routine ☑ Rush 2	Pres. Code
Project Location:	Rual Eddy, NM	Due Date:	12/16/202
Sampler's Name:	Chad Hensley	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	N/A		

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	IR #07
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	9.2
Total Containers:		Corrected Temperature:	9.0

ANALYSIS REQUEST

Parameters: Cl, BTEX, TPH

890-3651 Chain of Custody

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2S0_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Cl	BTEX	TPH	Sample Comments
SWN	Soil	12/14/2022	8:02	4	Comp	1	x	X	X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Chad	Clue	12.14.22 854			
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Eurofins Carlsbad
1089 N Canal St
Carlsbad, NM 88220
Phone. 575-988-3199 Fax 575-988-3199

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer, Jessica	Carrier Tracking No(s)	COC No: 890-1064 1
Client Contact: Shipping/Receiving	Phone	E-Mail: Jessica.Kramer@et.eurofinsus com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-3651-1
Address: 1211 W Florida Ave ,	Due Date Requested: 12/16/2022			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: marathon agi state 2h	Project #: 89000060			
Site:	SSOW#:			

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8016MOD_NM/8016NM_S_Prep Full TPH	8016MOD_Calc	8021B/5035FP_Calc BTEX	Total_BTEX_GCV	300_ORGFM_28D/DI_LEACH Chloride	Total Number of containers	Special Instructions/Note.
			Preservation Code:										
SWN (890-3651-1)	12/14/22	08 02 Mountain		Solid			X	X	X	X	X	1	

Preservation Codes

A HCL	M Hexane		
B NaOH	N None		
C Zn Acetate	O - AsNaO2		
D Nitric Acid	P Na2O4S		
E - NaHSO4	Q Na2SO3		
F MeOH	R Na2S2O3		
G Amchlor	S H2SO4		
H Ascorbic Acid	T TSP Dodecahydrate		
I - Ice	U Acetone		
J DI Water	V MCAA		
K - EDTA	W pH 4-5		
L EDA	Y - Trizma		
	Z other (specify)		

Other:

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank. 2	Special Instructions/QC Requirements.

Empty Kit Relinquished by	Date	Time.	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	Relinquished by	Date/Time	Company	Received by	Date/Time:	Company
	Relinquished by	Date/Time:	Company	Received by	Date/Time:	Company

Custody Seals Intact. Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks

Ver: 06/08/2021

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Phone: 575-988-3199 Fax 575-988-3199

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s)	COC No: 890-1064 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Jessica.Kramer@et.eurofinsus.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-3651-1
Address: 1211 W Florida Ave	Due Date Requested: 12/16/2022			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: marathon agi state 2h	Project #: 89000060			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep Full TPH	8015MOD_Calc	8021B/5035FP_Calc BTEX	Total_BTEX_GCV	300_ORGFM_28D/DI_LEACH Chloride	Total Number of containers	Special Instructions/Note.
			Preservation Code:										
SWN (890-3651-1)	12/14/22	08 02 Mountain		Solid			X	X	X	X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central LLC

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I, II III IV Other (specify) Primary Deliverable Rank. 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time:	Method of Shipment:

Relinquished by	Date/Time:	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Talon/LPE

Job Number: 890-3651-1
SDG Number: 700438.303.01

Login Number: 3651
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
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.	N/A	Refer to Job Narrative for details.
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 <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Talon/LPE

Job Number: 890-3651-1
SDG Number: 700438.303.01

Login Number: 3651
List Number: 2
Creator: Teel, Brianna

List Source: Eurofins Midland
List Creation: 12/15/22 11:29 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

Appendix V

C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

nKmw1102555534

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	OGRID Number	Contact
Yates Petroleum Corporation	25575	Robert Asher
Address 104 S. 4TH Street		Telephone No. 575-748-1471
Facility Name Marathon AGI State #2-H	API Number 30-015-34144	Facility Type Battery

Surface Owner	Mineral Owner	Lease No.
State	State	V-2480

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	33	17S	24E	660	North	660	West	Eddy

Latitude 32.79729 Longitude 104.59979

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 14 B/PW	Volume Recovered 0 B/PW
Source of Release Production tank	Date and Hour of Occurrence 1/18/2011, AM	Date and Hour of Discovery 1/18/2011, AM
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour N/A	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

RECEIVED
JAN 24 2011
NMOCD ARTESIA

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*
Hole in side of production tank. Called vacuum truck and roustabout crew.

Describe Area Affected and Cleanup Action Taken.*
An approximate area of 10' X 10', produced water collected in depression of removed tank (battery had two tanks, but one removed where PW collected). No produced water was recovered. Current production tank repaired (hole plugged/tank recoated).Vertical and horizontal delineation samples will be taken and analysis ran for TPH & BTEX (chlorides for documentation). If initial analytical results for TPH & BTEX are under RRAL's a Final Report, C-141 will be submitted to the OCD requesting closure. If the analytical results are above the RRAL a work plan will be submitted to the OCD. **Depth to Ground Water: >100' (approx. 290', Section 26, T17S-R24E, per New Mexico Office of the State Engineer and 225', per the ChevronTexaco trend map), Wellhead Protection Area: No, Distance to Surface Water Body: >1000', SITE RANKING IS 0.**

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:

Printed Name: Robert Asher

Title: Environmental Regulatory Agent

E-mail Address: boba@yatespetroleum.com

Date: Monday, January 24, 2011 Phone: 575-748-4217

* Attach Additional Sheets If Necessary

OIL CONSERVATION DIVISION

Approved by District Supervisor: Signed By Mike Bratcher

Approval Date: 2/17/2011 Expiration Date:

Conditions of Approval: Attached ☐

Remediation per OCD Rules & Guidelines. **SUBMIT REMEDIATION PROPOSAL NOT LATER THAN:** 3/17/2011

2RP-582

State of New Mexico
Oil Conservation Division

Incident ID	NKMW1102555534
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	N/A (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☐ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NKMW1102555534
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Jeremy Haass Title: Sr. Safety & Enviromental Specialist

Signature: Jy Haass Date: 12/27/2022

email: jeremy_Haass@eogresources.com Telephone: _____

OCD Only

Received by: Jocelyn Harimon Date: 12/27/2022

Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	NKMW1102555534
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Jeremy Haass Title: Sr. Safety & Enviromental Specialist

Signature: Jeremy Haass Date: 12/27/2022

email: jeremy_Haass@eogresources.com Telephone: _____

OCD Only

Received by: Jocelyn Harimon Date: 12/27/2022

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Ashley Maxwell Date: 2/03/2023

Printed Name: Ashley Maxwell Title: Environmental Specialist

Appendix VI

Correspondence

Chad Hensley

From: Jeremy Haass <Jeremy_Haass@eogresources.com>
Sent: Tuesday, November 15, 2022 8:43 AM
To: Chad Hensley
Subject: FW: [EXTERNAL] Marathon AGI State 2H (NKM1102555534) Sample Notification

This message originated from an **External Source**. Please use proper judgment and caution when opening attachments, clicking links, or responding to this email.

FYI

Jeremy Haass
Safety & Environmental Specialist
EOG Resources – Artesia Division
104 S. 4th Street
Artesia, NM 88210
Office: (575) 748-4311
Fax: (575) 748-4131
Cell: (575) 513-9235
jeremy_haass@eogresources.com

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Tuesday, November 15, 2022 8:42 AM
To: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>
Cc: Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: FW: [EXTERNAL] Marathon AGI State 2H (NKM1102555534) Sample Notification

FYI

From: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Sent: Tuesday, November 15, 2022 8:30 AM
To: Tina Huerta <Tina_Huerta@eogresources.com>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Billings, Bradford, EMNRD <Bradford.Billings@emnrd.nm.gov>
Subject: RE: [EXTERNAL] Marathon AGI State 2H (NKM1102555534) Sample Notification

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Jocelyn Harimon ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505

(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
http:// www.emnrd.nm.gov

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Tuesday, November 15, 2022 8:24 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; Griffin, Becky R. <bgriffin@slo.state.nm.us>; wbarnes <wbarnes@slo.state.nm.us>
Cc: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: [EXTERNAL] Marathon AGI State 2H (NKM1102555534) Sample Notification

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Good Morning,

EOG Resources, Inc. respectfully submits notification of sampling to be conducted at the below location.

Marathon AGI State 2H
D-33-17S-24E
Eddy County, NM
NKMW1102555534

Sampling will begin at 10:00 a.m. on Thursday, November 17, 2022.

Thank you,

Tina Huerta
Regulatory Specialist
Direct: 575.748.4168
Cell: 575.703.3121
Email: tina_huerta@eogresources.com

eog resources
Artesia Division

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 170075

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 170075
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	2/3/2023