



# Technical Memorandum

To: Bhaven Patel, JCS Gas N Grub Inc. Date: August 29, 2023  
From: Maul Foster and Alongi, Inc. Project No.: M2551.01.002  
Re: JCS Gas N Grub Inc. Subsurface Investigation of Release from Underground Storage Tank System

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On behalf of JCS Gas N Grub Inc. (the Client), Maul Foster & Alongi, Inc. (MFA), has prepared this memorandum to provide background information and discuss a recent subsurface investigation of a release from the current underground storage tank (UST) system at the 76 Hillsboro gas station located at 106 Southwest Oak Street in Hillsboro, Oregon (the Site; see Figure 1). According to Washington County tax assessor records, the Client has owned the Site since September 2015.

## Site Background

In June 2023, MFA reviewed the Client-provided Phase I Environmental Site Assessment previously conducted at the Site, as well as other Site documents made publicly available by the Oregon Department of Environmental Quality (DEQ). Much of the following information is a summary of MFA's file review.

The Site has been occupied by a gas station since the 1970s and currently contains two 12,000-gallon underground storage tanks (USTs) containing fuel, five fuel dispensers and associated piping, and the Gas N Grub convenience store. The current USTs and associated piping were installed in 1988 and consist of two single-walled fiberglass USTs. The USTs were reportedly upgraded in 1998 or 1999. The Site has a pressure UST system, automatic tank gauging for monthly release detection, and the piping has electronic line leak detectors.

The Site previously contained eight USTs. Six of the eight former USTs contained fuel and were decommissioned by removal in 1986. One UST containing used oil was decommissioned by removal in 1998; the used oil UST was reportedly co-located with a heating oil tank, both located on the southern side of the convenience store. According to the Phase I ESA, the heating oil tank was presumed to be decommissioned in conjunction with the co-located used oil tank, but formal record of this was not found during MFA's file review. During a discussion on August 22, 2023 with Scott Gilfillan of CCS (and industrial service provider currently contracted by the Client for product recovery at the Site), Mr. Gilfillan reported that he was personally involved with the removal of "a heating oil tank and a waste oil tank located in the alley south of the convenience store at least 20 to 25 years ago", which is consistent with the abovementioned presumption.

The Site is listed in DEQ's UST database as UST Facility ID no. 1097 as well as DEQ's leaking underground storage tank (LUST) database, with historical releases associated with the Site. In August 1981, gasoline was identified in Site soil and groundwater during leak detection testing and was attributed to faulty piping (LUST File No. 34-81-001). DEQ records indicate the release was categorized as a spill and the file was administratively closed in November 1992. In February 1995,

gasoline was identified in Site soil and groundwater and was attributed to faulty turbine pipe equipment (LUST File No. 34-95-0018). Additionally, a release was identified in May 1998 at the former Truax Harris site, located across South 1st Avenue from the Site at 118 East Oak Street (LUST File No. 34-98-0380). Because groundwater flows to the south-southeast in the area, additional properties impacted by petroleum releases at the Site and Truax Harris site included the area beneath the South 1st Avenue right-of-way, and adjoining properties to the south and southeast of the two sites. Cleanup and remediation activities associated with the releases included quarterly groundwater monitoring of nine monitoring wells located on the Site and seven monitoring wells located on the Truax Harris site between 1998 and 2008, compliance soil and groundwater confirmation sample collection and analysis, and installation and operation of an air sparge and vapor extraction system on the Site between 2002 and 2004 and on the Truax Harris site between 2004 and 2006. DEQ records indicate the two LUST files (i.e., LUST File Nos. 34-95-0018 and 34-98-0380) were issued No Further Action determinations in June 2011.

The June 2011 No Further Action determination letter indicates that gasoline-range hydrocarbons, benzene, ethylbenzene, 1,2,3-trimethylbenzene, and naphthalene remain in Site soil at depths less than 3 feet below ground surface (bgs) or at approximately 10 feet bgs in and around the UST system and dispenser islands. DEQ indicated that the remaining contaminated soil left in-place would need to be evaluated (and potentially removed) as part of any future UST system decommissioning and replacement effort. DEQ restricted the use of groundwater from the Site except for temporary dewatering activities related to utility installation but did not implement any other formal restrictions for the Site. DEQ also recommended the nine monitoring wells be decommissioned.

During MFA's file review, MFA searched the Oregon Water Resources Department (OWRD) well log database and located the well ID numbers for the nine monitoring wells previously located at the Site (well ID nos. WASH 51510 through WASH 51514 and WASH 53438 through WASH 53441). OWRD well records indicate that the wells were installed in March 1998, but there was no regulatory record of decommissioning. However, during visits to the Site, MFA and the Client were unable to locate the wells, indicating they were decommissioned with no record of such an event formally submitted to or recorded by OWRD, or were possibly covered with asphalt.

## Current UST System Release

In April 2023, the City of Hillsboro (the City) discovered trace fuel/sheen in a storm sewer outfall in the Jackson Bottom wetland located approximately 2,000 feet south-southeast of the Site. A storm sewer pipe located in the South 1st Avenue right-of-way immediately east of the Site is connected to the outfall. Due to the documented historical releases at the Site, it's current use as a gas station with two 12,000-gallon USTs, and its proximity to the storm sewer pipe in the South 1st Avenue right-of-way, the City contacted the Client to request an inspection of the UST system at the Site. The inspection was conducted by DEQ in April 2023. DEQ observed that the leak protection features in the UST system (i.e., turbine sumps, spill buckets, dispenser containments, dispenser filters and meters) were free from leaks and product, but DEQ did identify light non-aqueous phase liquid (LNAPL) on top of the water table in two observation wells associated with the USTs. These observation wells are located within the UST excavation/concrete pad and are approximately 4 inches in diameter and 12 feet deep. DEQ noted that the LNAPL/product appeared to "observationally be newer product" (e.g., lighter in color, not degraded) and identified groundwater at approximately 8 feet bgs.

To date, the Client has remained in compliance with the City and DEQ requests to assess the extent of and recover LNAPL. In addition, the Client hired Graymar Environmental to remove LNAPL from the observation wells on five separate occasions between May 5 and 22, 2023.

## Subsurface Investigation

In July 2023, MFA conducted a subsurface investigation at the Site to evaluate whether a UST system release has occurred. The scope of work for the investigation summarized below was reviewed and approved by Todd Vanek of DEQ on July 11, 2023.

On July 28, 2023, MFA advanced four borings at the Site that were completed as monitoring wells MW-1 through MW-4 (see Figure 2). Three monitoring wells were installed adjacent to the USTs: MW-1 was located to the south (downgradient), MW-2 was located to the west (cross-gradient), and MW-3 was located to the north (upgradient) of the USTs. MW-4 was installed south and downgradient of the east dispenser island, which is cross-gradient from the USTs. Each monitoring well consists of 2-inch-diameter PVC casing to 5 feet bgs, and 15 feet of 2-inch-diameter well screen from 5 to 20 feet bgs. Soils observed by MFA at each monitoring well boring consisted of interbedded silty sands and sandy silts from 0 to 20 feet bgs.

Evidence of a release from the UST system was observed in the three borings adjacent to the USTs (MW-1 through MW-3) during drilling. A strong petroleum-like odor, staining, heavy sheen, free product saturating soils, and organic vapor readings greater than 999 parts per million were observed in soil in MW-1 through MW-3. Petroleum-like odors, staining, and organic vapor readings greater than 999 parts per million were also encountered in soil from boring MW-4 located downgradient of the east dispenser island. One soil sample was collected from each boring and submitted for analysis of gasoline-range hydrocarbons, benzene, toluene, ethylbenzene, xylene (BTEX), and naphthalene.

When MFA returned to the Site on July 31, 2023, to develop and sample groundwater from the monitoring wells, LNAPL was observed in each well, as follows:

- MW-1, LNAPL was encountered at 14.03 feet bgs, and groundwater was observed at 14.62 feet bgs, indicating 0.59 feet of LNAPL in the well.
- MW-2, LNAPL was encountered at 14.02 feet bgs, and groundwater was observed at 14.26 feet bgs, indicating 0.24 feet of LNAPL in the well.
- MW-3, LNAPL was encountered at 13.08 feet bgs, and groundwater was observed at 13.78 feet bgs, indicating 0.70 feet of LNAPL in the well.
- MW-4, groundwater observed at 13.67 feet bgs with only a trace sheen of LNAPL observed.

Due to the LNAPL presence, and consistent with the DEQ-approved scope of work, MFA did not develop or sample groundwater from the wells and instead, proposed use of the wells as LNAPL recovery wells.

## Soil Sample Results

Analytical results are provided in the attached laboratory report. Gasoline-range hydrocarbons, BTEX, and naphthalene were detected in the four soil samples from each well boring.

In the vicinity of the UST system (MW-1 through MW-3), gasoline-range hydrocarbons were detected at concentrations ranging from 2,450 to 13,700 milligrams per kilogram (mg/kg), benzene from 18 to 130 mg/kg, toluene from 124 to 1,020 mg/kg, ethylbenzene from 30.2 to 212 mg/kg, total

xylenes from 51.6 to 395 mg/kg, and naphthalene from 8.08 to 51.6 mg/kg. The concentrations of gasoline-related constituents detected in these samples are consistent with the field observations described above and confirm that a UST system release has occurred.

Concentrations of gasoline-related constituents detected in the sample collected from MW-4 (located downgradient of the east dispenser island and cross-gradient from the USTs) were as follows: gasoline-range hydrocarbons detected at 386 mg/kg, benzene at 4.12 mg/kg, toluene at 29.5 mg/kg, ethylbenzene at 4.91 mg/kg, total xylenes at 26 mg/kg, and naphthalene at 0.75 mg/kg. These concentrations confirm that gasoline-related impacts are present in this location, but the concentrations observed here were significantly lower than the concentrations observed in the vicinity of the USTs, likely due to MW-4 being located about 85 feet cross-gradient to the east of the USTs.

## Follow Up Actions

MFA, the Client, and Todd Vanek with DEQ met on Site on August 9, 2023, to discuss the results of the subsurface investigation. DEQ requested that the following actions be conducted as soon as possible: 1) continue to conduct LNAPL recovery via vacuum trucking and do so on a reoccurring basis until diminishing returns of LNAPL are observed in the observation and monitoring wells; 2) delineate the extent of LNAPL present at the Site, and 3) complete a preferential pathway assessment of subsurface utilities. Following completion of those items, DEQ will request that the Client complete additional delineation and assessment of the dissolved phase petroleum impacts in groundwater and develop a conceptual site model to assess risk to human health and the environment from the UST system release.

MFA prepared a scope of work for weekly product recovery from the two observation wells and monitoring wells MW-1 through MW-4, which was reviewed and approved by Todd Vanek of DEQ on August 17, 2023. Following the site meeting with DEQ on August 9, 2023, the Client continued to contract with Graymar Environmental to remove LNAPL from the monitoring wells. Since then, the Client has contracted with CCS to continue with weekly product recovery efforts. MFA will track and report the levels of LNAPL observed in the wells to DEQ, including any LNAPL observed in additional wells to be installed at the Site at a later date. MFA prepared a scope of work for this additional phase of monitoring well installation to further delineate the extent of LNAPL present at the Site. At the time of this report, the scope of work is under review by the Client and DEQ.

## Attachments

Limitations

Figures

Attachment—Analytical Laboratory Report

## Limitations

The services undertaken in completing this technical memorandum were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This technical memorandum is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

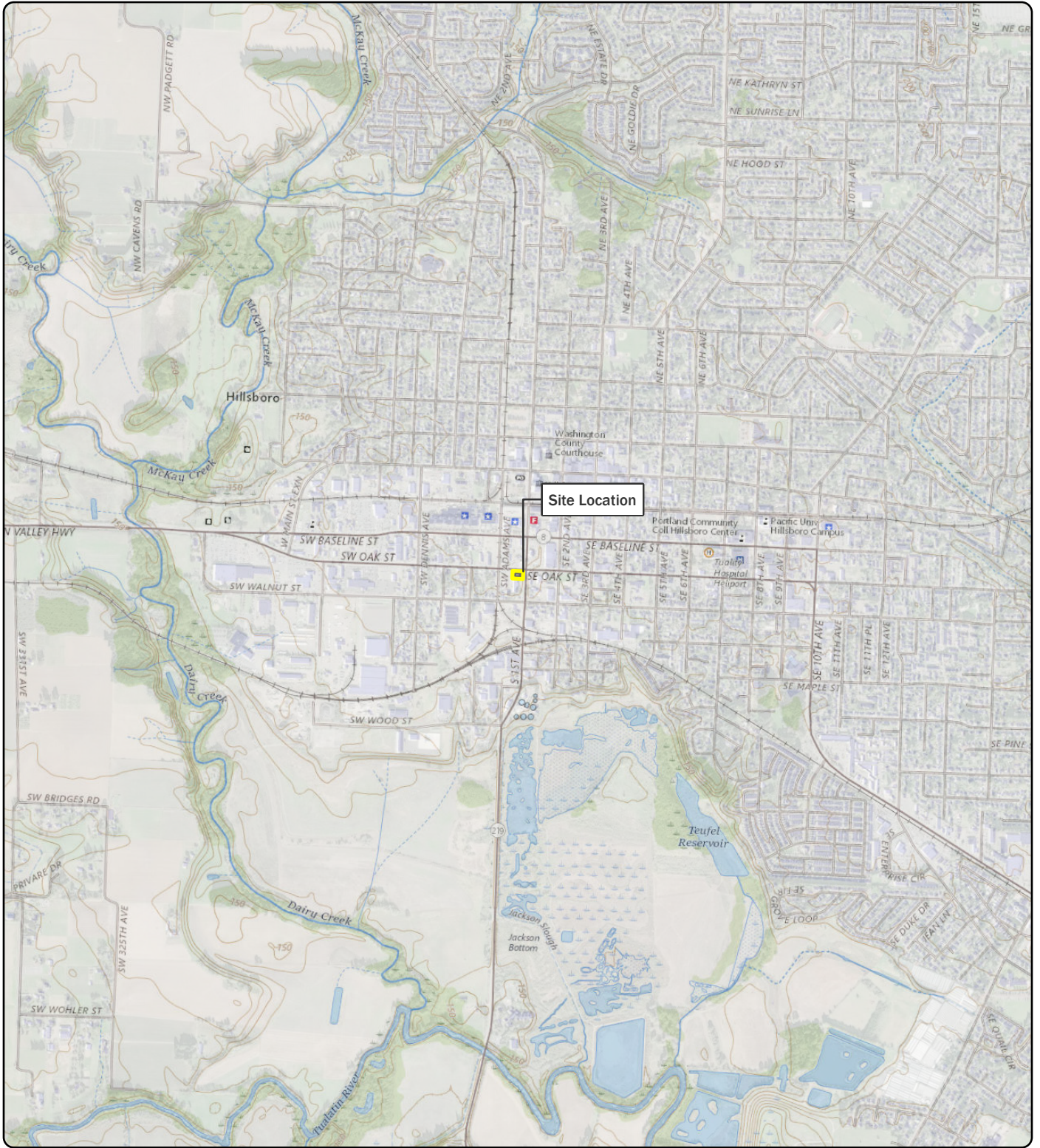
Opinions and recommendations contained in this technical memorandum apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this technical memorandum.

# Figures

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**Notes**  
 U.S. Geological Survey 7.5-minute topographic quadrangle (2020): Hillsboro.  
 Township 1 south, range 2 west, section 6.

**Data Source**  
 Property boundary obtained from Oregon Metro.

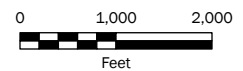
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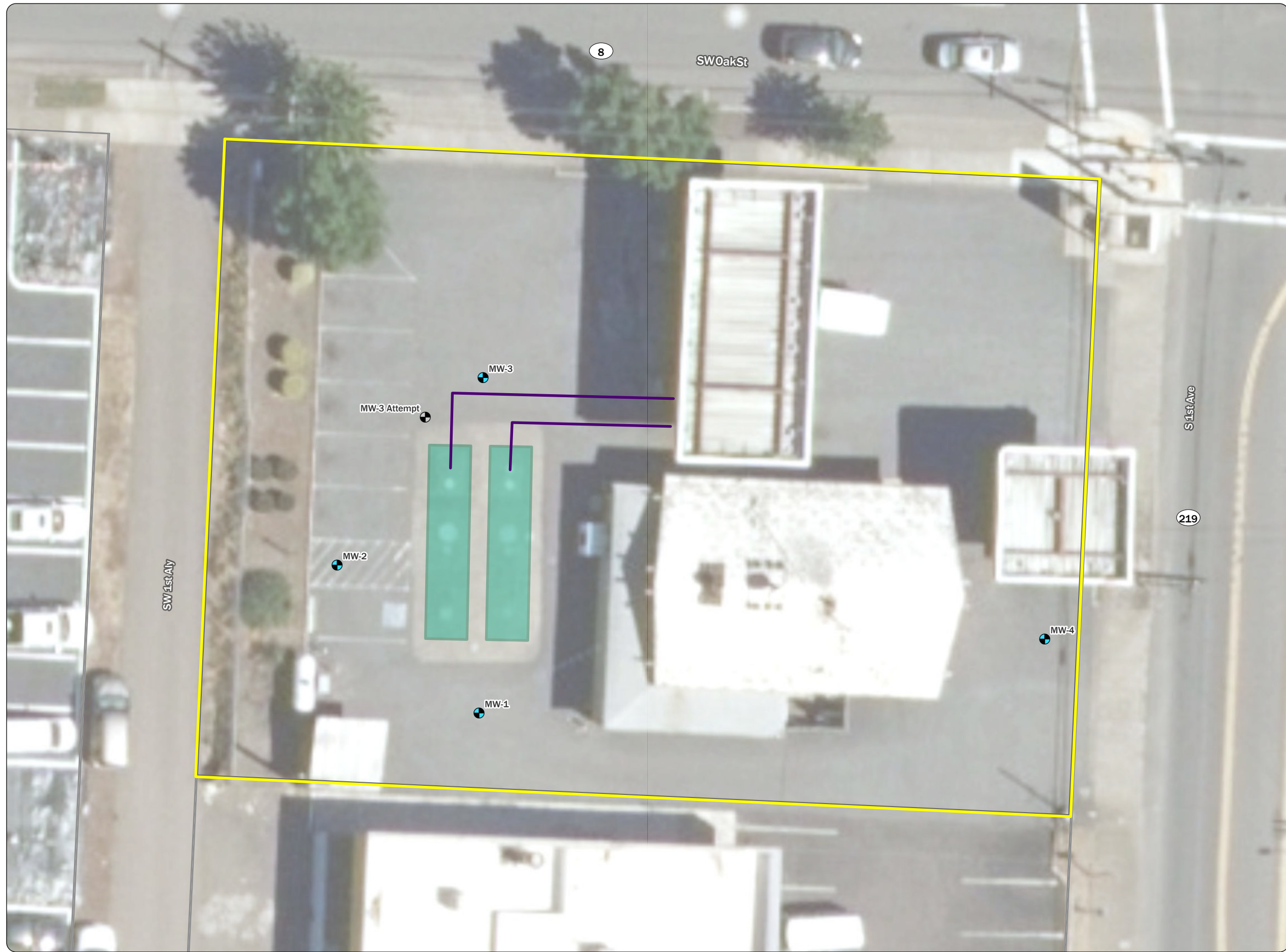
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**Legend**

 Site Boundary

**Figure 1**  
**Site Location**  
 JCS Gas N Grub  
 106 SW Oak Street  
 Hillsboro, OR





## Figure 2 Site Features

JCS Gas N Grub  
106 SW Oak Street  
Hillsboro, OR

### Legend

- Monitoring Well
- Attempted Monitoring Well
- Fuel Line
- Underground Storage Tank
- Site Boundary
- Tax Lot

**Note**  
All locations are approximate.



**Data Sources**  
Aerial photograph obtained from City of Portland (2022); tax lot data obtained from Oregon Metro.

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# Attachment

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## Analytical Laboratory Report



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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

Thursday, August 10, 2023

Sarah Colee  
Maul Foster & Alongi, INC.  
3140 NE Broadway Street  
Portland, OR 97232

RE: A3G1532 - Gas N Grub - M2551.01.002

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A3G1532, which was received by the laboratory on 7/28/2023 at 6:28:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: [pnerenberg@apex-labs.com](mailto:pnerenberg@apex-labs.com), or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

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Cooler Receipt Information

(See Cooler Receipt Form for details)

Default Cooler      3.9      degC

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This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.

All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

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Apex Laboratories

*The results in this report apply to the samples analyzed in accordance with the chain of custody document(s) and updated by any subsequent written communications. This analytical report must be reproduced in its entirety.*

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Philip Nerenberg, Lab Director



**ANALYTICAL REPORT**

**Apex Laboratories, LLC**

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|   |   |   |
|---|---|---|
| <b><u>Maul Foster &amp; Alongi, INC.</u></b><br>3140 NE Broadway Street<br>Portland, OR 97232 | Project: <b><u>Gas N Grub</u></b><br>Project Number: <b>M2551.01.002</b><br>Project Manager: <b>Sarah Colee</b> | <b>Report ID:</b><br><b>A3G1532 - 08 10 23 1354</b> |
|---|---|---|

**ANALYTICAL REPORT FOR SAMPLES**

**SAMPLE INFORMATION**

| Client Sample ID | Laboratory ID | Matrix | Date Sampled   | Date Received  |
|------------------|---------------|--------|----------------|----------------|
| MW-4-S-9.6       | A3G1532-01    | Soil   | 07/28/23 11:05 | 07/28/23 18:28 |
| MW-2-S-13        | A3G1532-02    | Soil   | 07/28/23 14:40 | 07/28/23 18:28 |
| MW-1-S-12.2      | A3G1532-03    | Soil   | 07/28/23 16:15 | 07/28/23 18:28 |
| MW-3-S-10.5      | A3G1532-04    | Soil   | 07/28/23 17:45 | 07/28/23 18:28 |

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| <b>Maul Foster &amp; Alongi, INC.</b><br>3140 NE Broadway Street<br>Portland, OR 97232 | Project: <b>Gas N Grub</b><br>Project Number: <b>M2551.01.002</b><br>Project Manager: <b>Sarah Colee</b> | <b>Report ID:</b><br><b>A3G1532 - 08 10 23 1354</b> |
|--|--|---|

**ANALYTICAL SAMPLE RESULTS**

**Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx**

| Analyte                                      | Sample Result | Detection Limit | Reporting Limit       | Units                   | Dilution | Date Analyzed         | Method Ref.          | Notes |
|--|---------------|-----------------|-----------------------|-------------------------|----------|-----------------------|----------------------|-------|
|  |               |                 | <b>Matrix: Soil</b>   |                         |          | <b>Batch: 23G1004</b> |                      |       |
| <b>MW-4-S-9.6 (A3G1532-01)</b>               |               |                 |                       |                         |          |                       |                      |       |
| <b>Gasoline Range Organics</b>               | <b>386</b>    | ---             | 20.8                  | mg/kg dry               | 200      | 07/31/23 22:02        | NWTPH-Gx (MS)        |       |
| <i>Surrogate: 4-Bromofluorobenzene (Sur)</i> |               |                 | <i>Recovery: 98 %</i> | <i>Limits: 50-150 %</i> | <i>1</i> | <i>07/31/23 22:02</i> | <i>NWTPH-Gx (MS)</i> |       |
| <i>1,4-Difluorobenzene (Sur)</i>             |               |                 | <i>100 %</i>          | <i>50-150 %</i>         | <i>1</i> | <i>07/31/23 22:02</i> | <i>NWTPH-Gx (MS)</i> |       |
|  |               |                 | <b>Matrix: Soil</b>   |                         |          | <b>Batch: 23G1004</b> |                      |       |
| <b>MW-2-S-13 (A3G1532-02)</b>                |               |                 |                       |                         |          |                       |                      |       |
| <b>Gasoline Range Organics</b>               | <b>2450</b>   | ---             | 127                   | mg/kg dry               | 1000     | 07/31/23 22:28        | NWTPH-Gx (MS)        |       |
| <i>Surrogate: 4-Bromofluorobenzene (Sur)</i> |               |                 | <i>Recovery: 96 %</i> | <i>Limits: 50-150 %</i> | <i>1</i> | <i>07/31/23 22:28</i> | <i>NWTPH-Gx (MS)</i> |       |
| <i>1,4-Difluorobenzene (Sur)</i>             |               |                 | <i>100 %</i>          | <i>50-150 %</i>         | <i>1</i> | <i>07/31/23 22:28</i> | <i>NWTPH-Gx (MS)</i> |       |
|  |               |                 | <b>Matrix: Soil</b>   |                         |          | <b>Batch: 23G1004</b> |                      |       |
| <b>MW-1-S-12.2 (A3G1532-03)</b>              |               |                 |                       |                         |          |                       |                      |       |
| <b>Gasoline Range Organics</b>               | <b>13700</b>  | ---             | 251                   | mg/kg dry               | 2000     | 07/31/23 22:54        | NWTPH-Gx (MS)        |       |
| <i>Surrogate: 4-Bromofluorobenzene (Sur)</i> |               |                 | <i>Recovery: 96 %</i> | <i>Limits: 50-150 %</i> | <i>1</i> | <i>07/31/23 22:54</i> | <i>NWTPH-Gx (MS)</i> |       |
| <i>1,4-Difluorobenzene (Sur)</i>             |               |                 | <i>100 %</i>          | <i>50-150 %</i>         | <i>1</i> | <i>07/31/23 22:54</i> | <i>NWTPH-Gx (MS)</i> |       |
|  |               |                 | <b>Matrix: Soil</b>   |                         |          | <b>Batch: 23G1004</b> |                      |       |
| <b>MW-3-S-10.5 (A3G1532-04)</b>              |               |                 |                       |                         |          |                       |                      |       |
| <b>Gasoline Range Organics</b>               | <b>5330</b>   | ---             | 244                   | mg/kg dry               | 2000     | 07/31/23 23:19        | NWTPH-Gx (MS)        |       |
| <i>Surrogate: 4-Bromofluorobenzene (Sur)</i> |               |                 | <i>Recovery: 97 %</i> | <i>Limits: 50-150 %</i> | <i>1</i> | <i>07/31/23 23:19</i> | <i>NWTPH-Gx (MS)</i> |       |
| <i>1,4-Difluorobenzene (Sur)</i>             |               |                 | <i>99 %</i>           | <i>50-150 %</i>         | <i>1</i> | <i>07/31/23 23:19</i> | <i>NWTPH-Gx (MS)</i> |       |

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Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

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| <b>Maul Foster &amp; Alongi, INC.</b><br>3140 NE Broadway Street<br>Portland, OR 97232 | Project: <b>Gas N Grub</b><br>Project Number: <b>M2551.01.002</b><br>Project Manager: <b>Sarah Colee</b> | <b>Report ID:</b><br><b>A3G1532 - 08 10 23 1354</b> |
|--|--|---|

**ANALYTICAL SAMPLE RESULTS**

**BTEX+N Compounds by EPA 8260D**

| Analyte                                      | Sample Result  | Detection Limit        | Reporting Limit | Units                   | Dilution | Date Analyzed         | Method Ref.        | Notes |
|--|----------------|------------------------|-----------------|-------------------------|----------|-----------------------|--------------------|-------|
| <b>MW-4-S-9.6 (A3G1532-01)</b>               |                |                        |                 | <b>Matrix: Soil</b>     |          | <b>Batch: 23G1004</b> |                    |       |
| <b>Benzene</b>                               | <b>4120</b>    | ---                    | 41.7            | ug/kg dry               | 200      | 07/31/23 22:02        | 5035A/8260D        |       |
| <b>Toluene</b>                               | <b>29500</b>   | ---                    | 208             | ug/kg dry               | 200      | 07/31/23 22:02        | 5035A/8260D        |       |
| <b>Ethylbenzene</b>                          | <b>4910</b>    | ---                    | 104             | ug/kg dry               | 200      | 07/31/23 22:02        | 5035A/8260D        |       |
| <b>Xylenes, total</b>                        | <b>26000</b>   | ---                    | 313             | ug/kg dry               | 200      | 07/31/23 22:02        | 5035A/8260D        |       |
| <i>Surrogate: 1,4-Difluorobenzene (Surr)</i> |                | <i>Recovery: 100 %</i> |                 | <i>Limits: 80-120 %</i> | <i>1</i> | <i>07/31/23 22:02</i> | <i>5035A/8260D</i> |       |
| <i>Toluene-d8 (Surr)</i>                     |                | <i>101 %</i>           |                 | <i>80-120 %</i>         | <i>1</i> | <i>07/31/23 22:02</i> | <i>5035A/8260D</i> |       |
| <i>4-Bromofluorobenzene (Surr)</i>           |                | <i>98 %</i>            |                 | <i>79-120 %</i>         | <i>1</i> | <i>07/31/23 22:02</i> | <i>5035A/8260D</i> |       |
| <b>MW-4-S-9.6 (A3G1532-01RE1)</b>            |                |                        |                 | <b>Matrix: Soil</b>     |          | <b>Batch: 23H0025</b> |                    |       |
| <b>Naphthalene</b>                           | <b>750</b>     | ---                    | 417             | ug/kg dry               | 200      | 08/01/23 15:35        | 5035A/8260D        |       |
| <i>Surrogate: 1,4-Difluorobenzene (Surr)</i> |                | <i>Recovery: 101 %</i> |                 | <i>Limits: 80-120 %</i> | <i>1</i> | <i>08/01/23 15:35</i> | <i>5035A/8260D</i> |       |
| <i>Toluene-d8 (Surr)</i>                     |                | <i>100 %</i>           |                 | <i>80-120 %</i>         | <i>1</i> | <i>08/01/23 15:35</i> | <i>5035A/8260D</i> |       |
| <i>4-Bromofluorobenzene (Surr)</i>           |                | <i>97 %</i>            |                 | <i>79-120 %</i>         | <i>1</i> | <i>08/01/23 15:35</i> | <i>5035A/8260D</i> |       |
| <b>MW-2-S-13 (A3G1532-02)</b>                |                |                        |                 | <b>Matrix: Soil</b>     |          | <b>Batch: 23G1004</b> |                    |       |
| <b>Benzene</b>                               | <b>18000</b>   | ---                    | 253             | ug/kg dry               | 1000     | 07/31/23 22:28        | 5035A/8260D        |       |
| <b>Toluene</b>                               | <b>124000</b>  | ---                    | 1270            | ug/kg dry               | 1000     | 07/31/23 22:28        | 5035A/8260D        |       |
| <b>Ethylbenzene</b>                          | <b>30200</b>   | ---                    | 633             | ug/kg dry               | 1000     | 07/31/23 22:28        | 5035A/8260D        |       |
| <b>Xylenes, total</b>                        | <b>174000</b>  | ---                    | 1900            | ug/kg dry               | 1000     | 07/31/23 22:28        | 5035A/8260D        |       |
| <i>Surrogate: 1,4-Difluorobenzene (Surr)</i> |                | <i>Recovery: 100 %</i> |                 | <i>Limits: 80-120 %</i> | <i>1</i> | <i>07/31/23 22:28</i> | <i>5035A/8260D</i> |       |
| <i>Toluene-d8 (Surr)</i>                     |                | <i>102 %</i>           |                 | <i>80-120 %</i>         | <i>1</i> | <i>07/31/23 22:28</i> | <i>5035A/8260D</i> |       |
| <i>4-Bromofluorobenzene (Surr)</i>           |                | <i>98 %</i>            |                 | <i>79-120 %</i>         | <i>1</i> | <i>07/31/23 22:28</i> | <i>5035A/8260D</i> |       |
| <b>MW-2-S-13 (A3G1532-02RE1)</b>             |                |                        |                 | <b>Matrix: Soil</b>     |          | <b>Batch: 23H0025</b> |                    |       |
| <b>Naphthalene</b>                           | <b>8080</b>    | ---                    | 2530            | ug/kg dry               | 1000     | 08/01/23 16:26        | 5035A/8260D        |       |
| <i>Surrogate: 1,4-Difluorobenzene (Surr)</i> |                | <i>Recovery: 100 %</i> |                 | <i>Limits: 80-120 %</i> | <i>1</i> | <i>08/01/23 16:26</i> | <i>5035A/8260D</i> |       |
| <i>Toluene-d8 (Surr)</i>                     |                | <i>101 %</i>           |                 | <i>80-120 %</i>         | <i>1</i> | <i>08/01/23 16:26</i> | <i>5035A/8260D</i> |       |
| <i>4-Bromofluorobenzene (Surr)</i>           |                | <i>97 %</i>            |                 | <i>79-120 %</i>         | <i>1</i> | <i>08/01/23 16:26</i> | <i>5035A/8260D</i> |       |
| <b>MW-1-S-12.2 (A3G1532-03)</b>              |                |                        |                 | <b>Matrix: Soil</b>     |          | <b>Batch: 23G1004</b> |                    |       |
| <b>Benzene</b>                               | <b>130000</b>  | ---                    | 503             | ug/kg dry               | 2000     | 07/31/23 22:54        | 5035A/8260D        |       |
| <b>Ethylbenzene</b>                          | <b>212000</b>  | ---                    | 1260            | ug/kg dry               | 2000     | 07/31/23 22:54        | 5035A/8260D        |       |
| <b>Xylenes, total</b>                        | <b>1200000</b> | ---                    | 3770            | ug/kg dry               | 2000     | 07/31/23 22:54        | 5035A/8260D        |       |
| <b>Naphthalene</b>                           | <b>51600</b>   | ---                    | 5030            | ug/kg dry               | 2000     | 07/31/23 22:54        | 5035A/8260D        |       |

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|--|--|---|
| <b>Maul Foster &amp; Alongi, INC.</b><br>3140 NE Broadway Street<br>Portland, OR 97232 | Project: <b>Gas N Grub</b><br>Project Number: <b>M2551.01.002</b><br>Project Manager: <b>Sarah Colee</b> | <b>Report ID:</b><br><b>A3G1532 - 08 10 23 1354</b> |
|--|--|---|

**ANALYTICAL SAMPLE RESULTS**

**BTEX+N Compounds by EPA 8260D**

| Analyte                                      | Sample Result  | Detection Limit | Reporting Limit        | Units                   | Dilution | Date Analyzed         | Method Ref.        | Notes |
|--|----------------|-----------------|------------------------|-------------------------|----------|-----------------------|--------------------|-------|
| <b>MW-1-S-12.2 (A3G1532-03)</b>              |                |                 |                        | <b>Matrix: Soil</b>     |          | <b>Batch: 23G1004</b> |                    |       |
| <i>Surrogate: 1,4-Difluorobenzene (Surr)</i> |                |                 | <i>Recovery: 100 %</i> | <i>Limits: 80-120 %</i> | <i>1</i> | <i>07/31/23 22:54</i> | <i>5035A/8260D</i> |       |
| <i>Toluene-d8 (Surr)</i>                     |                |                 | <i>103 %</i>           | <i>80-120 %</i>         | <i>1</i> | <i>07/31/23 22:54</i> | <i>5035A/8260D</i> |       |
| <i>4-Bromofluorobenzene (Surr)</i>           |                |                 | <i>97 %</i>            | <i>79-120 %</i>         | <i>1</i> | <i>07/31/23 22:54</i> | <i>5035A/8260D</i> |       |
| <b>MW-1-S-12.2 (A3G1532-03RE1)</b>           |                |                 |                        | <b>Matrix: Soil</b>     |          | <b>Batch: 23H0025</b> |                    |       |
| <b>Toluene</b>                               | <b>1020000</b> | ---             | 12600                  | ug/kg dry               | 10000    | 08/01/23 16:52        | 5035A/8260D        |       |
| <i>Surrogate: 1,4-Difluorobenzene (Surr)</i> |                |                 | <i>Recovery: 100 %</i> | <i>Limits: 80-120 %</i> | <i>1</i> | <i>08/01/23 16:52</i> | <i>5035A/8260D</i> |       |
| <i>Toluene-d8 (Surr)</i>                     |                |                 | <i>100 %</i>           | <i>80-120 %</i>         | <i>1</i> | <i>08/01/23 16:52</i> | <i>5035A/8260D</i> |       |
| <i>4-Bromofluorobenzene (Surr)</i>           |                |                 | <i>95 %</i>            | <i>79-120 %</i>         | <i>1</i> | <i>08/01/23 16:52</i> | <i>5035A/8260D</i> |       |
| <b>MW-3-S-10.5 (A3G1532-04)</b>              |                |                 |                        | <b>Matrix: Soil</b>     |          | <b>Batch: 23G1004</b> |                    |       |
| <b>Benzene</b>                               | <b>40900</b>   | ---             | 488                    | ug/kg dry               | 2000     | 07/31/23 23:19        | 5035A/8260D        |       |
| <b>Toluene</b>                               | <b>298000</b>  | ---             | 2440                   | ug/kg dry               | 2000     | 07/31/23 23:19        | 5035A/8260D        |       |
| <b>Ethylbenzene</b>                          | <b>69300</b>   | ---             | 1220                   | ug/kg dry               | 2000     | 07/31/23 23:19        | 5035A/8260D        |       |
| <b>Xylenes, total</b>                        | <b>395000</b>  | ---             | 3660                   | ug/kg dry               | 2000     | 07/31/23 23:19        | 5035A/8260D        |       |
| <b>Naphthalene</b>                           | <b>14500</b>   | ---             | 4880                   | ug/kg dry               | 2000     | 07/31/23 23:19        | 5035A/8260D        |       |
| <i>Surrogate: 1,4-Difluorobenzene (Surr)</i> |                |                 | <i>Recovery: 99 %</i>  | <i>Limits: 80-120 %</i> | <i>1</i> | <i>07/31/23 23:19</i> | <i>5035A/8260D</i> |       |
| <i>Toluene-d8 (Surr)</i>                     |                |                 | <i>101 %</i>           | <i>80-120 %</i>         | <i>1</i> | <i>07/31/23 23:19</i> | <i>5035A/8260D</i> |       |
| <i>4-Bromofluorobenzene (Surr)</i>           |                |                 | <i>100 %</i>           | <i>79-120 %</i>         | <i>1</i> | <i>07/31/23 23:19</i> | <i>5035A/8260D</i> |       |

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| <b>Maul Foster &amp; Alongi, INC.</b><br>3140 NE Broadway Street<br>Portland, OR 97232 | Project: <b>Gas N Grub</b><br>Project Number: <b>M2551.01.002</b><br>Project Manager: <b>Sarah Colee</b> | <b>Report ID:</b><br><b>A3G1532 - 08 10 23 1354</b> |
|--|--|---|

**ANALYTICAL SAMPLE RESULTS**

**Percent Dry Weight**

| Analyte                         | Sample Result | Detection Limit | Reporting Limit | Units               | Dilution | Date Analyzed         | Method Ref. | Notes |
|---------------------------------|---------------|-----------------|-----------------|---------------------|----------|-----------------------|-------------|-------|
| <b>MW-4-S-9.6 (A3G1532-01)</b>  |               |                 |                 | <b>Matrix: Soil</b> |          | <b>Batch: 23G0988</b> |             |       |
| % Solids                        | 81.2          | ---             | 1.00            | %                   | 1        | 08/01/23 15:03        | EPA 8000D   |       |
| <b>MW-2-S-13 (A3G1532-02)</b>   |               |                 |                 | <b>Matrix: Soil</b> |          | <b>Batch: 23G0988</b> |             |       |
| % Solids                        | 74.3          | ---             | 1.00            | %                   | 1        | 08/01/23 15:03        | EPA 8000D   |       |
| <b>MW-1-S-12.2 (A3G1532-03)</b> |               |                 |                 | <b>Matrix: Soil</b> |          | <b>Batch: 23G0988</b> |             |       |
| % Solids                        | 74.5          | ---             | 1.00            | %                   | 1        | 08/01/23 15:03        | EPA 8000D   |       |
| <b>MW-3-S-10.5 (A3G1532-04)</b> |               |                 |                 | <b>Matrix: Soil</b> |          | <b>Batch: 23G0988</b> |             |       |
| % Solids                        | 76.5          | ---             | 1.00            | %                   | 1        | 08/01/23 15:03        | EPA 8000D   |       |

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| <b>Maul Foster &amp; Alongi, INC.</b><br>3140 NE Broadway Street<br>Portland, OR 97232 | Project: <b>Gas N Grub</b><br>Project Number: <b>M2551.01.002</b><br>Project Manager: <b>Sarah Colee</b> | <b>Report ID:</b><br><b>A3G1532 - 08 10 23 1354</b> |
|--|--|---|

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx**

| Analyte                                       | Result | Detection Limit       | Reporting Limit                                   | Units                   | Dilution | Spike Amount                                      | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes       |
|---|--------|-----------------------|---|-------------------------|----------|---|---------------|-------|--------------|-----|-----------|-------------|
| <b>Batch 23G1004 - EPA 5035A</b>              |        |                       |   |                         |          | <b>Soil</b>                                       |               |       |              |     |           |             |
| <b>Blank (23G1004-BLK1)</b>                   |        |                       | Prepared: 07/31/23 09:59 Analyzed: 07/31/23 13:06 |                         |          |   |               |       |              |     |           |             |
| <u>NWTPH-Gx (MS)</u>                          |        |                       |   |                         |          |   |               |       |              |     |           |             |
| Gasoline Range Organics                       | ND     | ---                   | 5.00  | mg/kg wet               | 50       | ---   | ---           | ---   | ---          | --- | ---       |             |
| <i>Surr: 4-Bromofluorobenzene (Sur)</i>       |        | <i>Recovery: 98 %</i> |   | <i>Limits: 50-150 %</i> |          | <i>Dilution: 1x</i>                               |               |       |              |     |           |             |
| <i>1,4-Difluorobenzene (Sur)</i>              |        | <i>102 %</i>          |   | <i>50-150 %</i>         |          | <i>"</i>  |               |       |              |     |           |             |
| <b>LCS (23G1004-BS2)</b>                      |        |                       |   |                         |          | Prepared: 07/31/23 09:59 Analyzed: 07/31/23 12:34 |               |       |              |     |           |             |
| <u>NWTPH-Gx (MS)</u>                          |        |                       |   |                         |          |   |               |       |              |     |           |             |
| Gasoline Range Organics                       | 26.2   | ---                   | 5.00  | mg/kg wet               | 50       | 25.0  | ---           | 105   | 80-120%      | --- | ---       |             |
| <i>Surr: 4-Bromofluorobenzene (Sur)</i>       |        | <i>Recovery: 95 %</i> |   | <i>Limits: 50-150 %</i> |          | <i>Dilution: 1x</i>                               |               |       |              |     |           |             |
| <i>1,4-Difluorobenzene (Sur)</i>              |        | <i>101 %</i>          |   | <i>50-150 %</i>         |          | <i>"</i>  |               |       |              |     |           |             |
| <b>Duplicate (23G1004-DUP1)</b>               |        |                       |   |                         |          | Prepared: 07/28/23 16:50 Analyzed: 07/31/23 16:05 |               |       |              |     |           | <b>V-15</b> |
| <u>QC Source Sample: Non-SDG (A3G1518-01)</u> |        |                       |   |                         |          |   |               |       |              |     |           |             |
| Gasoline Range Organics                       | ND     | ---                   | 6.20  | mg/kg dry               | 50       | ---   | ND            | ---   | ---          | --- | 30%       |             |
| <i>Surr: 4-Bromofluorobenzene (Sur)</i>       |        | <i>Recovery: 97 %</i> |   | <i>Limits: 50-150 %</i> |          | <i>Dilution: 1x</i>                               |               |       |              |     |           |             |
| <i>1,4-Difluorobenzene (Sur)</i>              |        | <i>98 %</i>           |   | <i>50-150 %</i>         |          | <i>"</i>  |               |       |              |     |           |             |

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|---------------------------------------|-------------------------------------|--------------------------------|
| <b>Maul Foster &amp; Alongi, INC.</b> | Project: <b>Gas N Grub</b>          |                                |
| 3140 NE Broadway Street               | Project Number: <b>M2551.01.002</b> | <b>Report ID:</b>              |
| Portland, OR 97232                    | Project Manager: <b>Sarah Colee</b> | <b>A3G1532 - 08 10 23 1354</b> |

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**BTEX+N Compounds by EPA 8260D**

| Analyte                                       | Result | Detection Limit        | Reporting Limit                                   | Units                   | Dilution | Spike Amount        | Source Result | % REC | % REC Limits | RPD | RPD Limit   | Notes |
|---|--------|------------------------|---|-------------------------|----------|---------------------|---------------|-------|--------------|-----|-------------|-------|
| <b>Batch 23G1004 - EPA 5035A</b>              |        |                        |   |                         |          | <b>Soil</b>         |               |       |              |     |             |       |
| <b>Blank (23G1004-BLK1)</b>                   |        |                        | Prepared: 07/31/23 09:59 Analyzed: 07/31/23 13:06 |                         |          |                     |               |       |              |     |             |       |
| <u>5035A/8260D</u>                            |        |                        |   |                         |          |                     |               |       |              |     |             |       |
| Benzene                                       | ND     | ---                    | 10.0  | ug/kg wet               | 50       | ---                 | ---           | ---   | ---          | --- | ---         |       |
| Toluene                                       | ND     | ---                    | 50.0  | ug/kg wet               | 50       | ---                 | ---           | ---   | ---          | --- | ---         |       |
| Ethylbenzene                                  | ND     | ---                    | 25.0  | ug/kg wet               | 50       | ---                 | ---           | ---   | ---          | --- | ---         |       |
| Xylenes, total                                | ND     | ---                    | 75.0  | ug/kg wet               | 50       | ---                 | ---           | ---   | ---          | --- | ---         |       |
| Naphthalene                                   | ND     | ---                    | 100   | ug/kg wet               | 50       | ---                 | ---           | ---   | ---          | --- | ---         |       |
| <i>Surr: 1,4-Difluorobenzene (Surr)</i>       |        | <i>Recovery: 101 %</i> |   | <i>Limits: 80-120 %</i> |          | <i>Dilution: 1x</i> |               |       |              |     |             |       |
| <i>Toluene-d8 (Surr)</i>                      |        | <i>100 %</i>           |   | <i>80-120 %</i>         |          | <i>"</i>            |               |       |              |     |             |       |
| <i>4-Bromofluorobenzene (Surr)</i>            |        | <i>98 %</i>            |   | <i>79-120 %</i>         |          | <i>"</i>            |               |       |              |     |             |       |
| <b>LCS (23G1004-BS1)</b>                      |        |                        | Prepared: 07/31/23 09:59 Analyzed: 07/31/23 12:09 |                         |          |                     |               |       |              |     |             |       |
| <u>5035A/8260D</u>                            |        |                        |   |                         |          |                     |               |       |              |     |             |       |
| Benzene                                       | 984    | ---                    | 10.0  | ug/kg wet               | 50       | 1000                | ---           | 98    | 80-120%      | --- | ---         |       |
| Toluene                                       | 971    | ---                    | 50.0  | ug/kg wet               | 50       | 1000                | ---           | 97    | 80-120%      | --- | ---         |       |
| Ethylbenzene                                  | 1000   | ---                    | 25.0  | ug/kg wet               | 50       | 1000                | ---           | 100   | 80-120%      | --- | ---         |       |
| Xylenes, total                                | 3000   | ---                    | 75.0  | ug/kg wet               | 50       | 3000                | ---           | 100   | 80-120%      | --- | ---         |       |
| Naphthalene                                   | 996    | ---                    | 100   | ug/kg wet               | 50       | 1000                | ---           | 100   | 80-120%      | --- | ---         |       |
| <i>Surr: 1,4-Difluorobenzene (Surr)</i>       |        | <i>Recovery: 101 %</i> |   | <i>Limits: 80-120 %</i> |          | <i>Dilution: 1x</i> |               |       |              |     |             |       |
| <i>Toluene-d8 (Surr)</i>                      |        | <i>100 %</i>           |   | <i>80-120 %</i>         |          | <i>"</i>            |               |       |              |     |             |       |
| <i>4-Bromofluorobenzene (Surr)</i>            |        | <i>98 %</i>            |   | <i>79-120 %</i>         |          | <i>"</i>            |               |       |              |     |             |       |
| <b>Duplicate (23G1004-DUP1)</b>               |        |                        | Prepared: 07/28/23 16:50 Analyzed: 07/31/23 16:05 |                         |          |                     |               |       |              |     | <b>V-15</b> |       |
| <u>QC Source Sample: Non-SDG (A3G1518-01)</u> |        |                        |   |                         |          |                     |               |       |              |     |             |       |
| Benzene                                       | ND     | ---                    | 12.4  | ug/kg dry               | 50       | ---                 | ND            | ---   | ---          | --- | 30%         |       |
| Toluene                                       | ND     | ---                    | 62.0  | ug/kg dry               | 50       | ---                 | ND            | ---   | ---          | --- | 30%         |       |
| Ethylbenzene                                  | ND     | ---                    | 31.0  | ug/kg dry               | 50       | ---                 | ND            | ---   | ---          | --- | 30%         |       |
| Xylenes, total                                | ND     | ---                    | 93.0  | ug/kg dry               | 50       | ---                 | ND            | ---   | ---          | --- | 30%         |       |
| Naphthalene                                   | ND     | ---                    | 124   | ug/kg dry               | 50       | ---                 | ND            | ---   | ---          | --- | 30%         |       |
| <i>Surr: 1,4-Difluorobenzene (Surr)</i>       |        | <i>Recovery: 99 %</i>  |   | <i>Limits: 80-120 %</i> |          | <i>Dilution: 1x</i> |               |       |              |     |             |       |
| <i>Toluene-d8 (Surr)</i>                      |        | <i>100 %</i>           |   | <i>80-120 %</i>         |          | <i>"</i>            |               |       |              |     |             |       |
| <i>4-Bromofluorobenzene (Surr)</i>            |        | <i>97 %</i>            |   | <i>79-120 %</i>         |          | <i>"</i>            |               |       |              |     |             |       |
| <b>Matrix Spike (23G1004-MS1)</b>             |        |                        | Prepared: 07/28/23 10:28 Analyzed: 07/31/23 19:29 |                         |          |                     |               |       |              |     |             |       |

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| <b>Maul Foster &amp; Alongi, INC.</b><br>3140 NE Broadway Street<br>Portland, OR 97232 | Project: <b>Gas N Grub</b><br>Project Number: <b>M2551.01.002</b><br>Project Manager: <b>Sarah Colee</b> | <b>Report ID:</b><br><b>A3G1532 - 08 10 23 1354</b> |
|--|--|---|

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**BTEX+N Compounds by EPA 8260D**

| Analyte                                       | Result | Detection Limit       | Reporting Limit                                   | Units                   | Dilution | Spike Amount        | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|--------|-----------------------|---|-------------------------|----------|---------------------|---------------|-------|--------------|-----|-----------|-------|
| <b>Batch 23G1004 - EPA 5035A</b>              |        |                       |   |                         |          | <b>Soil</b>         |               |       |              |     |           |       |
| <b>Matrix Spike (23G1004-MS1)</b>             |        |                       | Prepared: 07/28/23 10:28 Analyzed: 07/31/23 19:29 |                         |          |                     |               |       |              |     |           |       |
| <b>QC Source Sample: Non-SDG (A3G1506-03)</b> |        |                       |   |                         |          |                     |               |       |              |     |           |       |
| <b>5035A/8260D</b>                            |        |                       |   |                         |          |                     |               |       |              |     |           |       |
| Benzene                                       | 1150   | ---                   | 11.1  | ug/kg dry               | 50       | 1110                | ND            | 103   | 77-121%      | --- | ---       |       |
| Toluene                                       | 1140   | ---                   | 55.7  | ug/kg dry               | 50       | 1110                | ND            | 102   | 77-121%      | --- | ---       |       |
| Ethylbenzene                                  | 1190   | ---                   | 27.9  | ug/kg dry               | 50       | 1110                | ND            | 107   | 76-122%      | --- | ---       |       |
| Xylenes, total                                | 3560   | ---                   | 83.6  | ug/kg dry               | 50       | 3340                | ND            | 107   | 78-124%      | --- | ---       |       |
| Naphthalene                                   | 1130   | ---                   | 111   | ug/kg dry               | 50       | 1110                | ND            | 101   | 62-129%      | --- | ---       |       |
| <i>Surr: 1,4-Difluorobenzene (Surr)</i>       |        | <i>Recovery: 99 %</i> |   | <i>Limits: 80-120 %</i> |          | <i>Dilution: 1x</i> |               |       |              |     |           |       |
| <i>Toluene-d8 (Surr)</i>                      |        | <i>99 %</i>           |   | <i>80-120 %</i>         |          | <i>"</i>            |               |       |              |     |           |       |
| <i>4-Bromofluorobenzene (Surr)</i>            |        | <i>98 %</i>           |   | <i>79-120 %</i>         |          | <i>"</i>            |               |       |              |     |           |       |

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

|                                       |                                     |                                |
|---------------------------------------|-------------------------------------|--------------------------------|
| <b>Maul Foster &amp; Alongi, INC.</b> | Project: <b>Gas N Grub</b>          |                                |
| 3140 NE Broadway Street               | Project Number: <b>M2551.01.002</b> | <b>Report ID:</b>              |
| Portland, OR 97232                    | Project Manager: <b>Sarah Colee</b> | <b>A3G1532 - 08 10 23 1354</b> |

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**BTEX+N Compounds by EPA 8260D**

| Analyte                                       | Result | Detection Limit        | Reporting Limit | Units                   | Dilution | Spike Amount                                      | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|--------|------------------------|-----------------|-------------------------|----------|---|---------------|-------|--------------|-----|-----------|-------|
| <b>Batch 23H0025 - EPA 5035A</b>              |        |                        |                 |                         |          |   |               |       |              |     |           |       |
| <b>Soil</b>                                   |        |                        |                 |                         |          |   |               |       |              |     |           |       |
| <b>Blank (23H0025-BLK1)</b>                   |        |                        |                 |                         |          |   |               |       |              |     |           |       |
|   |        |                        |                 |                         |          | Prepared: 08/01/23 10:11 Analyzed: 08/01/23 12:36 |               |       |              |     |           |       |
| <u>5035A/8260D</u>                            |        |                        |                 |                         |          |   |               |       |              |     |           |       |
| Benzene                                       | ND     | ---                    | 10.0            | ug/kg wet               | 50       | ---   | ---           | ---   | ---          | --- | ---       |       |
| Toluene                                       | ND     | ---                    | 50.0            | ug/kg wet               | 50       | ---   | ---           | ---   | ---          | --- | ---       |       |
| Ethylbenzene                                  | ND     | ---                    | 25.0            | ug/kg wet               | 50       | ---   | ---           | ---   | ---          | --- | ---       |       |
| Xylenes, total                                | ND     | ---                    | 75.0            | ug/kg wet               | 50       | ---   | ---           | ---   | ---          | --- | ---       |       |
| Naphthalene                                   | ND     | ---                    | 100             | ug/kg wet               | 50       | ---   | ---           | ---   | ---          | --- | ---       |       |
| <i>Surr: 1,4-Difluorobenzene (Surr)</i>       |        | <i>Recovery: 101 %</i> |                 | <i>Limits: 80-120 %</i> |          | <i>Dilution: 1x</i>                               |               |       |              |     |           |       |
| <i>Toluene-d8 (Surr)</i>                      |        | <i>100 %</i>           |                 | <i>80-120 %</i>         |          | <i>"</i>  |               |       |              |     |           |       |
| <i>4-Bromofluorobenzene (Surr)</i>            |        | <i>97 %</i>            |                 | <i>79-120 %</i>         |          | <i>"</i>  |               |       |              |     |           |       |
| <b>LCS (23H0025-BS1)</b>                      |        |                        |                 |                         |          |   |               |       |              |     |           |       |
|   |        |                        |                 |                         |          | Prepared: 08/01/23 10:11 Analyzed: 08/01/23 11:40 |               |       |              |     |           |       |
| <u>5035A/8260D</u>                            |        |                        |                 |                         |          |   |               |       |              |     |           |       |
| Benzene                                       | 990    | ---                    | 10.0            | ug/kg wet               | 50       | 1000  | ---           | 99    | 80-120%      | --- | ---       |       |
| Toluene                                       | 1010   | ---                    | 50.0            | ug/kg wet               | 50       | 1000  | ---           | 101   | 80-120%      | --- | ---       |       |
| Ethylbenzene                                  | 1030   | ---                    | 25.0            | ug/kg wet               | 50       | 1000  | ---           | 103   | 80-120%      | --- | ---       |       |
| Xylenes, total                                | 3070   | ---                    | 75.0            | ug/kg wet               | 50       | 3000  | ---           | 102   | 80-120%      | --- | ---       |       |
| Naphthalene                                   | 1040   | ---                    | 100             | ug/kg wet               | 50       | 1000  | ---           | 104   | 80-120%      | --- | ---       |       |
| <i>Surr: 1,4-Difluorobenzene (Surr)</i>       |        | <i>Recovery: 99 %</i>  |                 | <i>Limits: 80-120 %</i> |          | <i>Dilution: 1x</i>                               |               |       |              |     |           |       |
| <i>Toluene-d8 (Surr)</i>                      |        | <i>100 %</i>           |                 | <i>80-120 %</i>         |          | <i>"</i>  |               |       |              |     |           |       |
| <i>4-Bromofluorobenzene (Surr)</i>            |        | <i>99 %</i>            |                 | <i>79-120 %</i>         |          | <i>"</i>  |               |       |              |     |           |       |
| <b>Duplicate (23H0025-DUP1)</b>               |        |                        |                 |                         |          |   |               |       |              |     |           |       |
|   |        |                        |                 |                         |          | Prepared: 07/26/23 14:00 Analyzed: 08/01/23 20:42 |               |       |              |     |           |       |
| <u>QC Source Sample: Non-SDG (A3G1546-01)</u> |        |                        |                 |                         |          |   |               |       |              |     |           |       |
| Benzene                                       | ND     | ---                    | 74.6            | ug/kg dry               | 200      | ---   | ND            | ---   | ---          | --- | 30%       |       |
| Toluene                                       | ND     | ---                    | 373             | ug/kg dry               | 200      | ---   | ND            | ---   | ---          | --- | 30%       |       |
| Ethylbenzene                                  | ND     | ---                    | 187             | ug/kg dry               | 200      | ---   | ND            | ---   | ---          | --- | 30%       |       |
| Xylenes, total                                | 724    | ---                    | 560             | ug/kg dry               | 200      | ---   | 668           | ---   | ---          | 8   | 30%       |       |
| Naphthalene                                   | ND     | ---                    | 2990            | ug/kg dry               | 200      | ---   | ND            | ---   | ---          | --- | 30%       | R-02  |
| <i>Surr: 1,4-Difluorobenzene (Surr)</i>       |        | <i>Recovery: 99 %</i>  |                 | <i>Limits: 80-120 %</i> |          | <i>Dilution: 1x</i>                               |               |       |              |     |           |       |
| <i>Toluene-d8 (Surr)</i>                      |        | <i>99 %</i>            |                 | <i>80-120 %</i>         |          | <i>"</i>  |               |       |              |     |           |       |
| <i>4-Bromofluorobenzene (Surr)</i>            |        | <i>98 %</i>            |                 | <i>79-120 %</i>         |          | <i>"</i>  |               |       |              |     |           |       |
| <b>Matrix Spike (23H0025-MS1)</b>             |        |                        |                 |                         |          |   |               |       |              |     |           |       |
|   |        |                        |                 |                         |          | Prepared: 07/27/23 15:24 Analyzed: 08/01/23 14:44 |               |       |              |     |           |       |

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Philip Nerenberg, Lab Director

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|--|--|---|
| <b>Maul Foster &amp; Alongi, INC.</b><br>3140 NE Broadway Street<br>Portland, OR 97232 | Project: <b>Gas N Grub</b><br>Project Number: <b>M2551.01.002</b><br>Project Manager: <b>Sarah Colee</b> | <b>Report ID:</b><br><b>A3G1532 - 08 10 23 1354</b> |
|--|--|---|

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**BTEX+N Compounds by EPA 8260D**

| Analyte                                       | Result | Detection Limit        | Reporting Limit                                   | Units                   | Dilution | Spike Amount        | Source Result | % REC | % REC Limits | RPD | RPD Limit | Notes |
|---|--------|------------------------|---|-------------------------|----------|---------------------|---------------|-------|--------------|-----|-----------|-------|
| <b>Batch 23H0025 - EPA 5035A</b>              |        |                        |   |                         |          | <b>Soil</b>         |               |       |              |     |           |       |
| <b>Matrix Spike (23H0025-MS1)</b>             |        |                        | Prepared: 07/27/23 15:24 Analyzed: 08/01/23 14:44 |                         |          |                     |               |       |              |     |           |       |
| <b>QC Source Sample: Non-SDG (A3G1540-03)</b> |        |                        |   |                         |          |                     |               |       |              |     |           |       |
| <b>5035A/8260D</b>                            |        |                        |   |                         |          |                     |               |       |              |     |           |       |
| Benzene                                       | 1300   | ---                    | 11.9  | ug/kg dry               | 50       | 1190                | ND            | 110   | 77-121%      | --- | ---       |       |
| Toluene                                       | 1300   | ---                    | 59.5  | ug/kg dry               | 50       | 1190                | ND            | 109   | 77-121%      | --- | ---       |       |
| Ethylbenzene                                  | 1340   | ---                    | 29.8  | ug/kg dry               | 50       | 1190                | ND            | 112   | 76-122%      | --- | ---       |       |
| Xylenes, total                                | 3970   | ---                    | 89.3  | ug/kg dry               | 50       | 3570                | ND            | 111   | 78-124%      | --- | ---       |       |
| Naphthalene                                   | 1230   | ---                    | 119   | ug/kg dry               | 50       | 1190                | ND            | 103   | 62-129%      | --- | ---       |       |
| <i>Surr: 1,4-Difluorobenzene (Surr)</i>       |        | <i>Recovery: 100 %</i> |   | <i>Limits: 80-120 %</i> |          | <i>Dilution: 1x</i> |               |       |              |     |           |       |
| <i>Toluene-d8 (Surr)</i>                      |        | <i>101 %</i>           |   | <i>80-120 %</i>         |          | <i>"</i>            |               |       |              |     |           |       |
| <i>4-Bromofluorobenzene (Surr)</i>            |        | <i>96 %</i>            |   | <i>79-120 %</i>         |          | <i>"</i>            |               |       |              |     |           |       |

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|--|--|---|

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Percent Dry Weight**

| Analyte   | Result | Detection Limit | Reporting Limit                                   | Units | Dilution | Spike Amount | Source Result | % REC | % REC Limits | RPD  | RPD Limit | Notes |
|---|--------|-----------------|---|-------|----------|--------------|---------------|-------|--------------|------|-----------|-------|
| <b>Batch 23G0988 - Total Solids (Dry Weight) - 2022</b> |        |                 |   |       |          |              | <b>Soil</b>   |       |              |      |           |       |
| <b>Duplicate (23G0988-DUP1)</b>                         |        |                 | Prepared: 07/31/23 08:36 Analyzed: 08/01/23 15:03 |       |          |              |               |       |              |      |           |       |
| <u>QC Source Sample: Non-SDG (A3G1498-11)</u>           |        |                 |   |       |          |              |               |       |              |      |           |       |
| % Solids  | 88.5   | ---             | 1.00  | %     | 1        | ---          | 88.5          | ---   | ---          | 0.04 | 10%       |       |
| <b>Duplicate (23G0988-DUP2)</b>                         |        |                 | Prepared: 07/31/23 08:36 Analyzed: 08/01/23 15:03 |       |          |              |               |       |              |      |           |       |
| <u>QC Source Sample: Non-SDG (A3G1498-04)</u>           |        |                 |   |       |          |              |               |       |              |      |           |       |
| % Solids  | 89.6   | ---             | 1.00  | %     | 1        | ---          | 89.3          | ---   | ---          | 0.3  | 10%       |       |
| <b>Duplicate (23G0988-DUP3)</b>                         |        |                 | Prepared: 07/31/23 08:36 Analyzed: 08/01/23 15:03 |       |          |              |               |       |              |      |           |       |
| <u>QC Source Sample: Non-SDG (A3G1498-05)</u>           |        |                 |   |       |          |              |               |       |              |      |           |       |
| % Solids  | 88.5   | ---             | 1.00  | %     | 1        | ---          | 88.1          | ---   | ---          | 0.5  | 10%       |       |
| <b>Duplicate (23G0988-DUP4)</b>                         |        |                 | Prepared: 07/31/23 08:36 Analyzed: 08/01/23 15:03 |       |          |              |               |       |              |      |           |       |
| <u>QC Source Sample: Non-SDG (A3G1498-07)</u>           |        |                 |   |       |          |              |               |       |              |      |           |       |
| % Solids  | 85.1   | ---             | 1.00  | %     | 1        | ---          | 85.1          | ---   | ---          | 0.02 | 10%       |       |
| <b>Duplicate (23G0988-DUP5)</b>                         |        |                 | Prepared: 07/31/23 08:36 Analyzed: 08/01/23 15:03 |       |          |              |               |       |              |      |           |       |
| <u>QC Source Sample: Non-SDG (A3G1498-08)</u>           |        |                 |   |       |          |              |               |       |              |      |           |       |
| % Solids  | 85.7   | ---             | 1.00  | %     | 1        | ---          | 85.5          | ---   | ---          | 0.3  | 10%       |       |
| <b>Duplicate (23G0988-DUP6)</b>                         |        |                 | Prepared: 07/31/23 08:36 Analyzed: 08/01/23 15:03 |       |          |              |               |       |              |      |           |       |
| <u>QC Source Sample: Non-SDG (A3G1498-10)</u>           |        |                 |   |       |          |              |               |       |              |      |           |       |
| % Solids  | 88.9   | ---             | 1.00  | %     | 1        | ---          | 88.5          | ---   | ---          | 0.4  | 10%       |       |
| <b>Duplicate (23G0988-DUP7)</b>                         |        |                 | Prepared: 07/31/23 19:07 Analyzed: 08/01/23 15:03 |       |          |              |               |       |              |      |           |       |
| <u>QC Source Sample: Non-SDG (A3G1558-02)</u>           |        |                 |   |       |          |              |               |       |              |      |           |       |
| % Solids  | 64.8   | ---             | 1.00  | %     | 1        | ---          | 73.2          | ---   | ---          | 12   | 10%       | Q-17  |

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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Philip Nerenberg, Lab Director

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|--|--|---|

**SAMPLE PREPARATION INFORMATION**

**Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx**

| Prep: EPA 5035A       |        |               |                |                | Sample        | Default       | RL Prep |
|-----------------------|--------|---------------|----------------|----------------|---------------|---------------|---------|
| Lab Number            | Matrix | Method        | Sampled        | Prepared       | Initial/Final | Initial/Final | Factor  |
| <u>Batch: 23G1004</u> |        |               |                |                |               |               |         |
| A3G1532-01            | Soil   | NWTPH-Gx (MS) | 07/28/23 11:05 | 07/28/23 11:05 | 7.59g/5mL     | 5g/5mL        | 0.66    |
| A3G1532-02            | Soil   | NWTPH-Gx (MS) | 07/28/23 14:40 | 07/28/23 14:40 | 7.32g/5mL     | 5g/5mL        | 0.68    |
| A3G1532-03            | Soil   | NWTPH-Gx (MS) | 07/28/23 16:15 | 07/28/23 16:15 | 7.33g/5mL     | 5g/5mL        | 0.68    |
| A3G1532-04            | Soil   | NWTPH-Gx (MS) | 07/28/23 17:45 | 07/28/23 17:45 | 7.16g/5mL     | 5g/5mL        | 0.70    |

**BTEX+N Compounds by EPA 8260D**

| Prep: EPA 5035A       |        |             |                |                | Sample        | Default       | RL Prep |
|-----------------------|--------|-------------|----------------|----------------|---------------|---------------|---------|
| Lab Number            | Matrix | Method      | Sampled        | Prepared       | Initial/Final | Initial/Final | Factor  |
| <u>Batch: 23G1004</u> |        |             |                |                |               |               |         |
| A3G1532-01            | Soil   | 5035A/8260D | 07/28/23 11:05 | 07/28/23 11:05 | 7.59g/5mL     | 5g/5mL        | 0.66    |
| A3G1532-02            | Soil   | 5035A/8260D | 07/28/23 14:40 | 07/28/23 14:40 | 7.32g/5mL     | 5g/5mL        | 0.68    |
| A3G1532-03            | Soil   | 5035A/8260D | 07/28/23 16:15 | 07/28/23 16:15 | 7.33g/5mL     | 5g/5mL        | 0.68    |
| A3G1532-04            | Soil   | 5035A/8260D | 07/28/23 17:45 | 07/28/23 17:45 | 7.16g/5mL     | 5g/5mL        | 0.70    |
| <u>Batch: 23H0025</u> |        |             |                |                |               |               |         |
| A3G1532-01RE1         | Soil   | 5035A/8260D | 07/28/23 11:05 | 07/28/23 11:05 | 7.59g/5mL     | 5g/5mL        | 0.66    |
| A3G1532-02RE1         | Soil   | 5035A/8260D | 07/28/23 14:40 | 07/28/23 14:40 | 7.32g/5mL     | 5g/5mL        | 0.68    |
| A3G1532-03RE1         | Soil   | 5035A/8260D | 07/28/23 16:15 | 07/28/23 16:15 | 7.33g/5mL     | 5g/5mL        | 0.68    |

**Percent Dry Weight**

| Prep: Total Solids (Dry Weight) - 2022 |        |           |                |                | Sample        | Default       | RL Prep |
|--|--------|-----------|----------------|----------------|---------------|---------------|---------|
| Lab Number                             | Matrix | Method    | Sampled        | Prepared       | Initial/Final | Initial/Final | Factor  |
| <u>Batch: 23G0988</u>                  |        |           |                |                |               |               |         |
| A3G1532-01                             | Soil   | EPA 8000D | 07/28/23 11:05 | 07/31/23 08:36 |               |               | NA      |
| A3G1532-02                             | Soil   | EPA 8000D | 07/28/23 14:40 | 07/31/23 08:36 |               |               | NA      |
| A3G1532-03                             | Soil   | EPA 8000D | 07/28/23 16:15 | 07/31/23 08:36 |               |               | NA      |
| A3G1532-04                             | Soil   | EPA 8000D | 07/28/23 17:45 | 07/31/23 08:36 |               |               | NA      |

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|--|--|---|

QUALIFIER DEFINITIONS

**Client Sample and Quality Control (QC) Sample Qualifier Definitions:**

**Apex Laboratories**

- Q-17** RPD between original and duplicate sample is outside of established control limits.
- R-02** The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.
- V-15** Sample aliquot was subsampled from the sample container. The subsampled aliquot was preserved in the laboratory within 48 hours of sampling.

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|--|--|---|

**REPORTING NOTES AND CONVENTIONS:**

**Abbreviations:**

- DET Analyte DETECTED at or above the detection or reporting limit.
- ND Analyte NOT DETECTED at or above the detection or reporting limit.
- NR Result Not Reported
- RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

**Detection Limits: Limit of Detection (LOD)**

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).  
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

**Reporting Limits: Limit of Quantitation (LOQ)**

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

**Reporting Conventions:**

Basis: Results for soil samples are generally reported on a 100% dry weight basis.  
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

- " dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")  
See Percent Solids section for details of dry weight analysis.
- " wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.
- " " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

Results for Volatiles analyses on soils and sediments that are reported on a "dry weight" basis include the water miscible solvent (WMS) correction referenced in the EPA 8000 Method guidance documents. Solid and Liquid samples reported on an "As Received" basis do not have the WMS correction applied, as dry weight was not performed.

**QC Source:**


In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

**Miscellaneous Notes:**

- " --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
- " \*\*\* " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

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Portland, OR 97232

Project: **Gas N Grub**  
Project Number: **M2551.01.002**  
Project Manager: **Sarah Colee**

**Report ID:**  
**A3G1532 - 08 10 23 1354**

REPORTING NOTES AND CONVENTIONS (Cont.):

**Blanks:**

- Standard practice is to evaluate the results from Blank QC Samples down to a level equal to 1/2 the Reporting Limit (RL).
  - For Blank hits falling between 1/2 the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
  - For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
- For further details, please request a copy of this document.
- Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.
- 'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level, if results are not reported to the MDL.

**Preparation Notes:**

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

**Sampling and Preservation Notes:**

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

Apex Laboratories

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Table with 3 columns: Client (Maul Foster & Alongi, INC.), Project (Gas N Grub), and Report ID (A3G1532 - 08 10 23 1354).

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Table header with columns: Matrix, Analysis, TNI\_ID, Analyte, TNI\_ID, Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation. Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provided by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

Handwritten signature of Philip Nerenberg

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
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503-718-2323  
ORELAP ID: OR100062

|  |  |   |
|--|--|---|
| <b>Maul Foster &amp; Alongi, INC.</b><br>3140 NE Broadway Street<br>Portland, OR 97232 | Project: <b>Gas N Grub</b><br>Project Number: <b>M2551.01.002</b><br>Project Manager: <b>Sarah Colee</b> | <b>Report ID:</b><br><b>A3G1532 - 08 10 23 1354</b> |
|--|--|---|

**CHAIN OF CUSTODY**

**APEX LABS**  
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

Lab # A3G1532 COC 1 of 1

|  |                                 |                                 |                                |      |
|--|---------------------------------|---------------------------------|--------------------------------|------|
| Company: <u>Maul Foster &amp; Alongi</u>         | Project Mgr: <u>Sarah Colee</u> | Project Name: <u>Gas N Grub</u> | Project #: <u>M2551.01.002</u> | PO # |
| Address: <u>3140 NE Broadway St Portland, OR</u> |                                 | Email: <u>sc@mfalongi.com</u>   |                                |      |
| Phone: <u>503-718-2323</u>                       |                                 | ANALYSIS REQUEST                |                                |      |
| Sampled by: <u>Calvin Schuster</u>               |                                 |                                 |                                |      |
| Site Location: _____                             |                                 |                                 |                                |      |
| State: <u>OR</u>                                 |                                 |                                 |                                |      |
| County: _____                                    |                                 |                                 |                                |      |

| SAMPLE ID   | DATE    | TIME | MATRIX | # OF CONTAINERS | N/TPH-H/D | N/TPH-DX | N/TPH-GX | 8260 BTEX | 8260 RBDM VOCs | 8260 Halo VOCs | 8260 VOCs Full List | 8270 SIM PAHs | 8270 Semi-Vols Full List | 8082 PCBs | 8081 Pesticides | RCRA Metals (9) | Priority Metals (13)<br>Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, TL, V, Zn, TOTAL DISS. TCLP | TCLP Metals (9) | NATHALVENE 8260P | Hold Sample | Frozen Archive |
|-------------|---------|------|--------|-----------------|-----------|----------|----------|-----------|----------------|----------------|---------------------|---------------|--------------------------|-----------|-----------------|-----------------|--|-----------------|------------------|-------------|----------------|
|             |         |      |        |                 |           |          |          |           |                |                |                     |               |                          |           |                 |                 |  |                 |                  |             |                |
| MW-4-S-9.6  | 7/28/23 | 1105 | S      | 3               |           | X        | X        | X         |                |                |                     |               |                          |           |                 |                 |  |                 | X                |             |                |
| MW-2-S-13   | 7/28/23 | 1440 | S      | 3               |           | X        | X        | X         |                |                |                     |               |                          |           |                 |                 |  |                 | X                |             |                |
| MW-1-S-12.2 | 7/28/23 | 1615 | S      | 3               |           | X        | X        | X         |                |                |                     |               |                          |           |                 |                 |  |                 | X                |             |                |
| MW-3-S-10.5 | 7/28/23 | 1745 | S      | 3               |           | X        | X        | X         |                |                |                     |               |                          |           |                 |                 |  |                 | X                |             |                |

Standard Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day    2 Day    3 Day    5 Day    Standard    Other: \_\_\_\_\_

SAMPLES ARE HELD FOR 30 DAYS

| RELINQUISHED BY:                     |                      | RECEIVED BY:                       |                      |
|--------------------------------------|----------------------|------------------------------------|----------------------|
| Signature: <u>[Signature]</u>        | Date: <u>7/28/23</u> | Signature: <u>[Signature]</u>      | Date: <u>7/28/23</u> |
| Printed Name: <u>Calvin Schuster</u> | Time: <u>1750</u>    | Printed Name: <u>Isabel Garcia</u> | Time: <u>1750</u>    |
| Company: <u>MFA</u>                  |                      | Company: <u>MFA</u>                |                      |

SPECIAL INSTRUCTIONS:

| RELINQUISHED BY:                   |                      | RECEIVED BY:                           |                      |
|------------------------------------|----------------------|--|----------------------|
| Signature: <u>[Signature]</u>      | Date: <u>7/28/23</u> | Signature: <u>[Signature]</u>          | Date: <u>7/28/23</u> |
| Printed Name: <u>Isabel Garcia</u> | Time: <u>1828</u>    | Printed Name: <u>Kathrina Murrison</u> | Time: <u>7:28 PM</u> |
| Company: <u>MFA</u>                |                      | Company: <u>Apex</u>                   |                      |

Form Y-002 R-00

Apex Laboratories

*Philip Nerenberg*

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Philip Nerenberg, Lab Director



ANALYTICAL REPORT

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

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|--|--|---|
| <b>Maul Foster &amp; Alongi, INC.</b><br>3140 NE Broadway Street<br>Portland, OR 97232 | Project: <b>Gas N Grub</b><br>Project Number: <b>M2551.01.002</b><br>Project Manager: <b>Sarah Colee</b> | <b>Report ID:</b><br><b>A3G1532 - 08 10 23 1354</b> |
|--|--|---|

**APEX LABS COOLER RECEIPT FORM**

Client: Maul Foster & Alongi Element WO#: A3G1532

Project/Project #: Gas N Grub / M2551.01.002

**Delivery Info:**  
Date/time received: 7/28/23 @ 18:28 By: RAM  
Delivered by: Apex  Client  FedEx  UPS  Radio  Morgan  SDS  Evergreen  Other

**Cooler Inspection** Date/time inspected: 7/28/23 @ 18:28 By: RAM  
Chain of Custody included? Yes  No   
Signed/dated by client? Yes  No

|                            | Cooler #1   | Cooler #2 | Cooler #3 | Cooler #4 | Cooler #5 | Cooler #6 | Cooler #7 |
|----------------------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Temperature (°C)           | <u>3.9</u>  |           |           |           |           |           |           |
| Custody seals? (Y/N)       | <u>N</u>    |           |           |           |           |           |           |
| Received on ice? (Y/N)     | <u>Y</u>    |           |           |           |           |           |           |
| Temp. blanks? (Y/N)        | <u>N</u>    |           |           |           |           |           |           |
| Ice type: (Gel/Real/Other) | <u>Real</u> |           |           |           |           |           |           |
| Condition (In/Out):        | <u>IN</u>   |           |           |           |           |           |           |

Cooler out of temp? (Y/N)  Possible reason why: \_\_\_\_\_  
 Green dots applied to out of temperature samples? Yes  No   
 Out of temperature samples form initiated? Yes  No   
**Sample Inspection:** Date/time inspected: 7/28/23 @ 19:09 By: RAM  
 All samples intact? Yes  No  Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 Bottle labels/COCs agree? Yes  No  Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 COC/container discrepancies form initiated? Yes  No   
 Containers/volumes received appropriate for analysis? Yes  No  Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 Do VOA vials have visible headspace? Yes  No  NA   
 Comments: \_\_\_\_\_  
 Water samples: pH checked: Yes  No  NA  pH appropriate? Yes  No  NA   
 Comments: \_\_\_\_\_  
 \_\_\_\_\_  
**Additional information:**  
 \_\_\_\_\_  
 \_\_\_\_\_  
 Labeled by: RAM Witness: RHP Cooler Inspected by: RAM Form Y-003 R-00

Apex Laboratories

*Philip Nerenberg*

Philip Nerenberg, Lab Director

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