# **3R-1054**

# Williams Lowery Tank Battery

# C-141 Subsequent Report

# **June 2018**

#### Fields, Vanessa, EMNRD

| From:    | Galer, Aaron <aaron.galer@williams.com></aaron.galer@williams.com> |
|----------|--|
| Sent:    | Monday, June 25, 2018 9:26 AM                                      |
| То:      | Fields, Vanessa, EMNRD   |
| Subject: | Project Updates  |

Vanessa,

Per our phone conversation this morning, here are the project updates:

- 1) Lowery Tank Battery: An application was submitted on 6/18/18 to the NMSLO for the three additional proposed monitoring wells. Approval is expected within the next 2 to 3 weeks.
- 2) Lateral L-2: A casual use request will be submitted to the BLM today for the additional proposed groundwater monitoring outside the pipeline right-of-way. Approval is expected within the next 4 to 6 weeks.
- 3) Hargrave: An application was submitted on 3/9/18 to the BLM for the installation of three additional proposed monitoring wells outside the pipeline right-of-way. Approval is expected within the next 2 to 3 weeks.

Let me know if you have any additional questions. Otherwise, I'll keep you updated when progress is made.



Aaron Galer | Williams | Environmental Specialist IV | Environmental Programs Office: 801-584-6746 | Cell: 801-244-1219 | 295 Chipeta Way, SLC, UT 84108

State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

| Release                                   | e Notificati | on and Co    | rrective         | Action                      |              |
|---|--------------|--------------|------------------|-----------------------------|--------------|
|   | OI           | PERATOR      | $\boxtimes$      | Initial Report (Subsequent) | Final Report |
| Name of Company Williams Four Corners Ll  | LC           | Contact      | <b>Aaron Gal</b> | ler                         |              |
| Address 1755 Arroyo Drive, Bloomfield, NI | M 87413      | Telephone N  | lo. 801-584-     | -6746                       |              |
| Facility Name Lowery Tank Battery         |              | Facility Typ | e Storage 7      | Fank                        |              |
| Surface Owner State of New Mexico Lands   | Mineral Owne | er           |                  | API No.                     |              |
|   | LOCATI       | ON OF DEL    | EACE             |                             |              |

|             |         |          | _     | LUCE          | ATION OF REL     | LEASE         |                |            |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|------------|
| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County     |
| I           | 16      | 26N      | 6W    |               |                  |               |                | Rio Arriba |

Latitude 36.484182 Longitude -107.465462

NATURE OF RELEASE

| Type of Release Produced Water   | Volume of Release Unknown               | Volume Recovered Unknown   |
|--|---|--|
| Source of Release Below-grade tank   | Date and Hour of Occurrence             | Date and Hour of Discovery   |
|  | 03/26/2013; 9:00 AM                     | 03/26/2013; 9:00 AM  |
| Was Immediate Notice Given?  | If YES, To Whom?                        |  |
| Yes No X Not Required  |   | MILL D D   |
| By Whom?   | Date and Hour                           | NMUCO  |
| Was a Watercourse Reached?   | If YES, Volume Impacting the Wate       | ercourse.  |
| Yes No   |   | MAY 3 0 2018   |
| If a Watercourse was Impacted, Describe Fully.*  |   | DISTRICT IN  |
| Describe Cause of Problem and Remedial Action Taken.* During remova  |   |  |
| soils were encountered. An investigation of the area beneath the below-gr  |   |  |
| November 2013, approximately 954 cubic yards of TPH and BTEX impa-   | eted soil were removed from the area b  | beneath the former BGT.  |
|  | C                                       |  |
| 9/12/2017 Update: Please see the attached Remediation Plan and Condition<br>1/23/2018 Update: Please see the attached Remedial Assessment Work P |   |  |
| 5/25/2018 Update: Please see the attached Remedial Assessment Rep  |   |  |
| Sizorzoro opuate. I tease see the attached Remediar Assessment Rep   | ort.                                    |  |
| Describe Area Affected and Cleanup Action Taken.* The investigation fin  | ndings are documented in the attached   | Remedial Assessment Report, Additional   |
| actions are proposed as documented in the report. Groundwater impacts h  | nave been identified extending beyond   |  |
| will submit the necessary access forms to the SLO within 3 days of identi  | fying the approved well locations.      |  |
|  |   |  |
| 9/12/2017 Update: Please see the attached Remediation Plan and Condition   |   |  |
| 1/23/2018 Update: Please see the attached Remedial Assessment Work P<br>5/25/2018 Update: Please see the attached Remedial Assessment Rep        |   |  |
| 5/25/2016 Opuate. Flease see the attached Remedial Assessment Rep  | ort.                                    |  |
| I hereby certify that the information given above is true and complete to the  | he best of my knowledge and understa    | nd that pursuant to NMOCD rules and  |
| regulations all operators are required to report and/or file certain release n   |   |  |
| public health or the environment. The acceptance of a C-141 report by the  | e NMOCD marked as "Final Report" d      | loes not relieve the operator of liability   |
| should their operations have failed to adequately investigate and remediate  | e contamination that pose a threat to g | round water, surface water, human health   |
| or the environment. In addition, NMOCD acceptance of a C-141 report d  | oes not relieve the operator of respons | ibility for compliance with any other  |
| federal, state, or local laws and/or regulations.  |   |  |
| Signature: 25-26   | OIL CONSERV                             | ATION DIVISION   |
| Signature.   | 6                                       | A  |
| Printed Name: Aaron Galer  |   |  |
| Timed Hane. Aaron Galet  | Approved by Environmental Specialis     | in the second se |
| Title: Environmental Specialist  | Annual Data Million                     |  |
| Title: Environmental Specialist  | Approval Date:                          | Expiration Date:   |
| E-mail Address: Aaron.Galer@Williams.com   | Conditions of Approval:                 |  |
| E man risdross, Aaron Galera II IIIailis.Com   | conditions of Approval.                 | Attached   |
| Date: 5/25/2018 Phone: 801-584-6746  |   |  |
| Attach Additional Sheets If Necessary  | DITI 1201                               | CLACS  |
| <i>j</i>   | NJK13310                                | 2202   |



APTIM 6380 South Fiddlers Green, Suite 310 Greenwood Village, CO 80111 Tel: +1 303 741 7700 Fax: +1 303 741 7479

# **Remedial Assessment Report** Lowery Tank Battery

Lowery Tank Battery Rio Arriba County, New Mexico NMOCD MAY 3 0 2018 District 111

Project 155624

May 24, 2018

Prepared for:



Williams Four Corners LLC

Prepared by:

#### **APTIM Environmental & Infrastructure, Inc.**

6380 South Fiddlers Green, Suite 310 Greenwood Village, CO 80111 United States www.CBI.com\_



# **Table of Contents**

| 1.0 | INTF |  | 1 |
|-----|------|--|---|
|     | 1.1  | SITE LOCATION                            | 1 |
|     | 1.2  | BACKGROUND                               | 1 |
|     | 1.3  | SCOPE OF WORK OBJECTIVES                 | 2 |
| 2.0 | REN  | IEDIAL ASSESSMENT SCOPE                  |   |
|     | 2.1  | SOIL BORINGS                             | 3 |
|     | 2.2  | MONITORING WELLS                         |   |
|     |      | GROUNDWATER SAMPLING                     |   |
| 3.0 | REN  | IEDIAL ASSESSMENT RESULTS                |   |
|     | 3.1  | SITE GEOLOGY                             | 5 |
|     |      | HYDROGEOLOGY                             |   |
|     | 3.3  | SOIL DELINEATION                         | 5 |
|     | 3.4  | GROUNDWATER DELINEATION                  | 5 |
| 4.0 | ADD  | ITIONAL DELINEATION AND REMEDIAL TESTING | 7 |

# **List of Figures**

| Figure 1 S | e Location Map |
|------------|----------------|
|------------|----------------|

- Figure 2 Soil Map
- Figure 3 Potentiometric Surface Map
- Figure 4 Unsaturated Soil Concentration Map
- Figure 5 Benzene in Groundwater Concentration Map
- Figure 6 Proposed Monitoring Wells

#### **List of Tables**

- Table 1 Liquid Level Gauging Data
- Table 2 Soil Analytical Data
- Table 3Groundwater Analytical Data

# **List of Appendices**

| Appendix A | Logs            |
|------------|-----------------|
| Appendix B | Analytical Data |



# **1.0 INTRODUCTION**

#### **1.1 SITE LOCATION**

The Williams Field Services LLC (Williams) Lowery Tank Battery site (Site) is located in the northeast quarter of the southeast quarter of Section 16, Township 26 North, and Range 6 West in Rio Arriba County, New Mexico, as depicted on **Figure 1**. The Site currently consists of one 400-barrel (bbl) condensate/produced water tank, one 250-bbl below grade tank (BGT), two polyethylene tanks containing glycol and methanol, and all are located within a lined secondary containment. An investigation was conducted in December 2017 and April 2018 to delineate the extent of impact in the soil and groundwater. The results of these investigations are summarized in this report.

#### 1.2 BACKGROUND

While moving a BGT at the Site in early 2013, Williams observed petroleum hydrocarbon-impacted soil under the tank. The observed impact was believed to be from the historical unlined pit. A limited environmental site investigation and excavation was conducted in March 2013. Initial remediation and delineation activities are detailed in the previously submitted *Limited Site Investigation – Lowery Tank Battery*, dated September 3, 2013 by Southwest Geoscience, and in the *Interim Corrective Action and Supplemental Environmental Site Investigation Report*, dated June 16, 2015 by Apex TITAN.

In December 2017, the State of New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division (NMOCD) approved the "Interim Corrective Action and Supplemental Environmental Site Investigation Report" dated June 16, 2015 and authorized Williams to proceed with the proposed delineation activities at the Lowery Tank Battery site in Rio Arriba County, New Mexico. The initial phase of investigation was performed as summarized in the *Subsurface Investigation Report*, dated January 16, 2018, by LE Environmental, Inc. Based on the results of the 2017 assessment, additional investigation actions were performed and are presented in this report.

The primary contaminants of concern (COCs) are benzene; total benzene, toluene, ethylbenzene, xylenes (BTEX); total petroleum hydrocarbons-gasoline range organics (TPH-GRO), TPH-diesel range organics (TPH-DRO); and total petroleum hydrocarbons (TPH).

In response to the detection of the release, Williams initiated assessment activities.

- In 2013, impacted soils were discovered while removing a 250 bbl BGT associated with natural gas gathering;
- In November 2013, approximately 954 cubic yards of TPH and BTEX impacted soil were removed from the area beneath the former BGT. The impacted soil was transported to the Envirotech, Inc. landfill located near Hilltop, New Mexico for final disposition;
- In June 2015, Williams submitted "Interim Corrective Action and Supplemental Environmental Site Investigation Report" to NMOCD which summarized previous activities and outlined plans for assessment and corrective action;



- In August 2017, the NMOCD inquired on the progress of the project. The NMOCD subsequently approved the proposed delineation plan with the stipulation that the work was to be competed in 30 days;
- In December 2017, approval was received from the New Mexico State Land Office to proceed with the NMOCD required soil delineation. The phase II delineation activities were conducted the following week which included the collection of soil samples from borings SB-16 through SB-23. Groundwater was encountered at two of the soil borings, but one of the borings collapsed before a sample could be collected and the second sample collected was damaged in shipment and therefore, there were no groundwater analytical results during this phase.

Based on the December 2017 assessment activities, continued delineation was performed in the spring of 2018. As a result of prior assessment activities, the following key observations were made:

- Elevated concentrations of benzene, total BTEX, TPH-GRO, TPH-DRO and Total TPH exceeding the NMOCD action levels were detected in the soil at and near the former BGT location;
- The extent of hydrocarbons in unsaturated soils is delineated;
- The presence of hydrocarbons in subsurface soil at distances from the source appears indicative of contaminant migration with the presence of groundwater;
- Groundwater was observed generally at depths around 35 to 50 feet bgs;
- The groundwater flow is to the south-southwest at a hydraulic gradient of 0.006;
- The groundwater impact was delineated to the east and west; and,
- The extent of hydrocarbons in groundwater has not been delineated to the south.

#### **1.3 SCOPE OF WORK OBJECTIVES**

Based on the NMOCD site ranking of 30, the following remediation action levels apply: 10 milligrams per kilogram (mg/kg) for benzene, 50 mg/kg for total BTEX, and 100 mg/kg for TPH. This investigation scope of work was performed with the following objectives:

- Delineate the horizontal and vertical extent of impacted soils originated from the former 250 bbl BGT;
- Delineate the groundwater contamination; and,
- Collect data to support remedial planning efforts.



## 2.0 REMEDIAL ASSESSMENT SCOPE

Prior to the assessment, permitting activities were undertaken with the New Mexico State Land Office. As part of this permitting processes, an archaeology survey was completed from which two areas of potential significance were identified (see **Figure 2**). The limits of the assessment were bound by the area permitted with the New Mexico State Land Office.

#### 2.1 SOIL BORINGS

The delineation of hydrocarbons in the soil was completed through the advancement of soil borings, soil sampling, and laboratory analysis. The locations of the soil borings are presented on **Figure 2**. Locations were selected based on the previous soil boring data. Data for soil borings 1 to 15 were collected during the 2013 investigation, 16 to 23 in 2017, and BH01 to BH02 in 2018.

Specifically, the scope of work included:

- Soil borings were installed to an approximate total depth of 50 feet bgs using hollow-stem drilling techniques;
- The soil column from each soil boring was screened for volatile organic compound (VOC) vapors using a photoionization detector (PID) and the lithology logged;
- At each boring location, samples were continuously sampled for logging and field screening purposes. Soil samples from each boring were submitted for laboratory analysis of BTEX analysis using method 8260B and TPH-GRO (C6-C10), TPH-DRO (C10-C20), and total petroleum hydrocarbons-motor oil range (TPH-MRO) (C28-C40) using method 8015.

Soil boring logs for BH01/02 are presented in Appendix A.

#### 2.2 MONITORING WELLS

Monitoring wells were installed to evaluate the potential hydrocarbon impact to groundwater and to provide hydrogeological data of the shallow aquifer. The locations of the monitoring wells installed are presented on **Figure 2**.

The depth to groundwater was recorded to determine the direction of groundwater flow and the hydraulic gradient. The depth of the wells was determined by the on-site geologist based on historical data from previous investigations and field observations.

Specifically, the scope of work included:

- Installation of ten groundwater monitoring wells using hollow-stem drilling techniques;
- The total depth of the monitoring wells was generally 50 feet bgs or a minimum of 5 feet below the measured water table;
- Wells were constructed as follows:
  - o 2-inch diameter, schedule 40 polyvinyl chloride (PVC) casing,
  - o 20 feet of 2-inch diameter, 0.010-inch machine slotted, schedule 40 PVC well screen,
  - 20/40 silica filter sand extending from terminus of the borehole to 2 feet above the top of the well screen,
  - A minimum of 2 feet of bentonite chip annular seal on top of the filter pack,



- The remaining annulus space with was filled with bentonite grout or chips to 1 foot from the surface,
- Installation of either flush-mount or well box surface completion.
- The monitoring wells were developed to improve the hydraulic communication between the well and the surrounding formation; and,
- The wells were surveyed to the site benchmark.

Monitoring well logs are presented in Appendix A.

#### 2.3 GROUNDWATER SAMPLING

Groundwater sampling activities were performed immediately following well installation and development as part of the rapid delineation.

Specifically, the groundwater sampling scope of work included:

- Recording the depth to groundwater (and LNAPL if present) in all monitoring wells using an interface probe capable of measuring to 0.01 feet;
- Purging each well of three well volumes; and,
- Collecting groundwater samples and analyzing the samples for BTEX using method 8260B. Due to the immediacy of completing delineation, samples were not collected for attenuation parameters during these site actions.

Samples were maintained under chain-of-custody procedures and delivered to the designated laboratory.



# 3.0 REMEDIAL ASSESSMENT RESULTS

## 3.1 SITE GEOLOGY

The Site is located on the north sloping side of Dogie Canyon consisting primarily of unconsolidated silts and sands with a dendritic drainage pattern. The Site lithology consists primarily of alternating layers of dark brown silty sand (SP) and light brown, fine-medium grained sand (SP) through most of the vadose zone. Changing to light to dark gray sandy silt (ML) and fine sand (SP) with partially cemented zone in the capillary fringe and phreatic zone. The formation changes in color to grayish brown, gray, and dark gray with depth particularly in areas impacted by hydrocarbons. Bedrock was not encountered during this investigation.

#### 3.2 HYDROGEOLOGY

Liquid level gauging results for the wells are summarized in **Table 1**. A potentiometric surface map was prepared based upon liquid level measurements collected in April 2018 (**Figure 3**). It should be noted that the gauging was performed immediately after well development and therefore, certain wells may not have had groundwater levels return to static conditions prior to gauging.

In April 2018, the depth to groundwater range from 46.83 (elevation 6398.24) to 56.70 (elevation 6384.64). Groundwater flow was to the south at a hydraulic gradient of 0.006. The hydrocarbon migration in the shallow groundwater suggests that groundwater flow trends to the south-southwest.

### 3.3 SOIL DELINEATION

PID and laboratory analytical results for the soil samples are summarized in **Table 2** with historical soil analyses. Soil delineation was completed through the advancement of soil borings, soil sampling, and laboratory analysis. The locations of the final borings are presented on **Figure 2**. **Figure 4** presents unsaturated soil data where concentrations were observed above action levels of 50 mg/kg total BTEX and/or 100 mg/kg total petroleum hydrocarbons. Analytical data is presented in **Appendix B**.

Specific observations include:

- **Figure 4** presents analytical results above action levels of 50 mg/kg total BTEX and/or 100 mg/kg total petroleum hydrocarbons in unsaturated soils. The extent of unsaturated soil contamination above action levels appears limited to the area at and near the former BGT;
- At distances away from the BGT, soil concentrations appear representative of the groundwater migration zone, capillary fringe, and potential historic smear zone due to fluctuations in water levels.

#### 3.4 GROUNDWATER DELINEATION

Groundwater delineation was performed through the installation of monitoring wells and sampling of groundwater. Groundwater analytical results are presented in **Table 3**. **Figure 5** is a benzene concentration map.



Specific observations include:

- Groundwater flow is generally to the south, trending to the southwest;
- Elevated benzene concentrations in groundwater are found near the former BGT and distances greater than 500 feet downgradient; and,
- The extent of benzene concentrations has been delineated to the east and west, but not to the south.



# 4.0 ADDITIONAL DELINEATION AND REMEDIAL TESTING

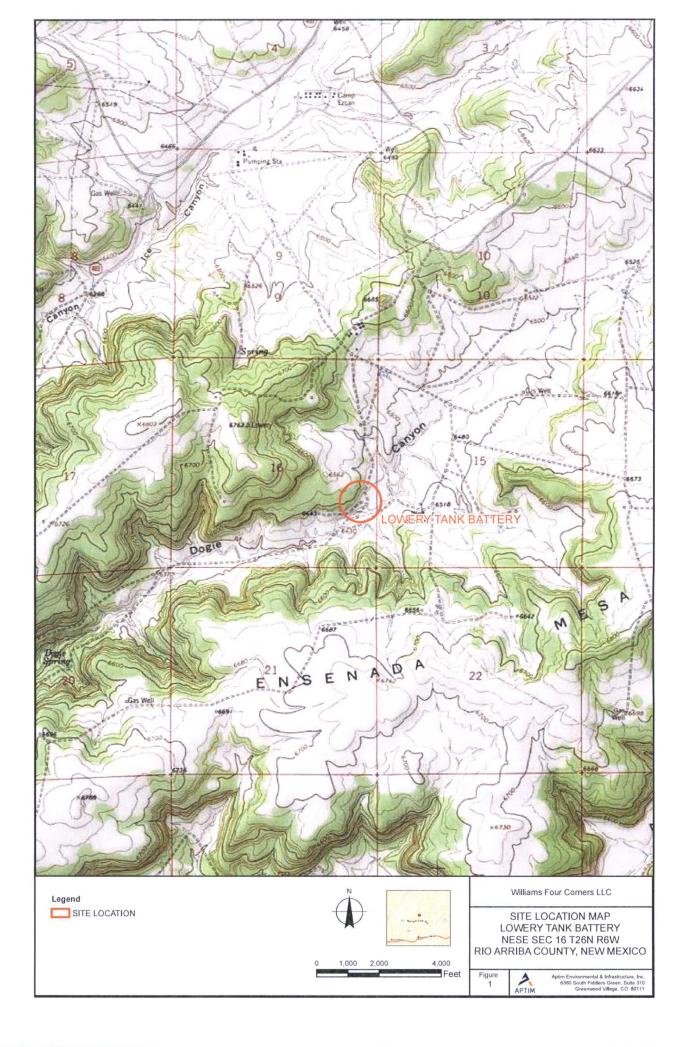
Additional groundwater data collection is required for delineation of the southern end of the plume. **Figure 6** presents the proposed locations of the additional groundwater monitoring wells.

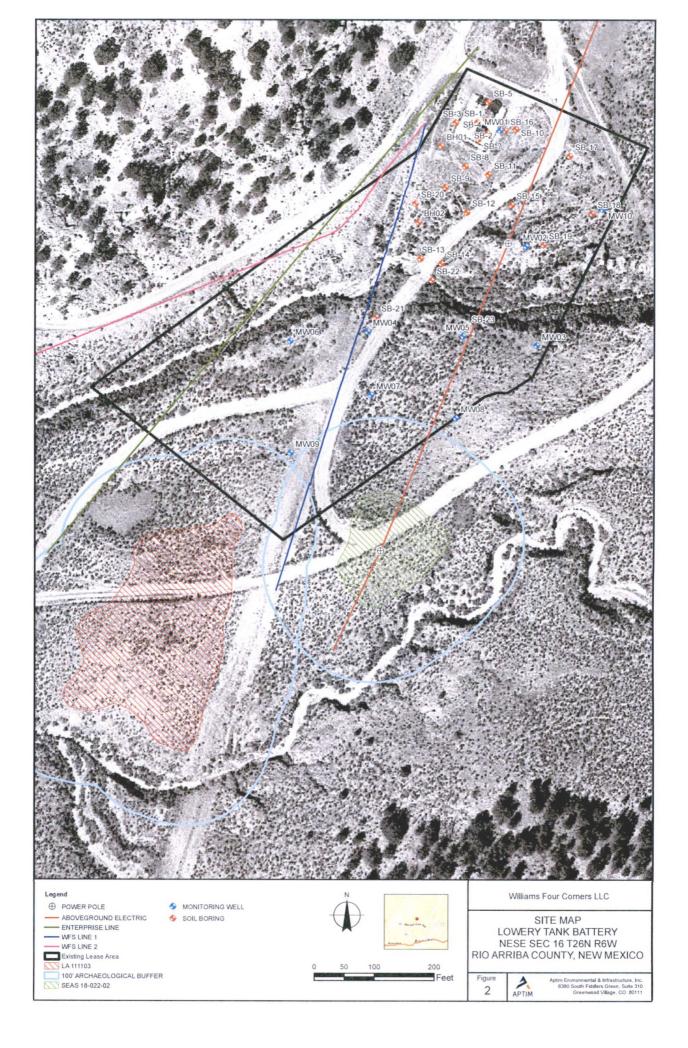
With the additional delineation, certain remedial testing is necessary for the evaluation and design of future remediation actions. Additional remedial testing proposed at this time includes:

- In addition to BTEX and TPH parameters, collect groundwater samples from all monitoring wells for biological process parameters. Parameters to be measured in the field include oxidation-reduction potential (ORP), pH, temperature, conductivity, dissolved oxygen (DO), and ferrous iron. Additional parameters to be included and analyzed by the laboratory include alkalinity, nitrate/nitrite, sulfate, and manganese.
- Performing a vacuum test at MW01 to evaluate the efficacy of vapor extraction in the source area. A minimum of three vacuum monitoring wells will be installed in the impacted interval of the formation to evaluate the effectiveness of this technology.
- Performing hydraulic slug tests at MW01, MW04, and MW09 to determine the hydraulic properties of the aquifer for remedial technology evaluation.

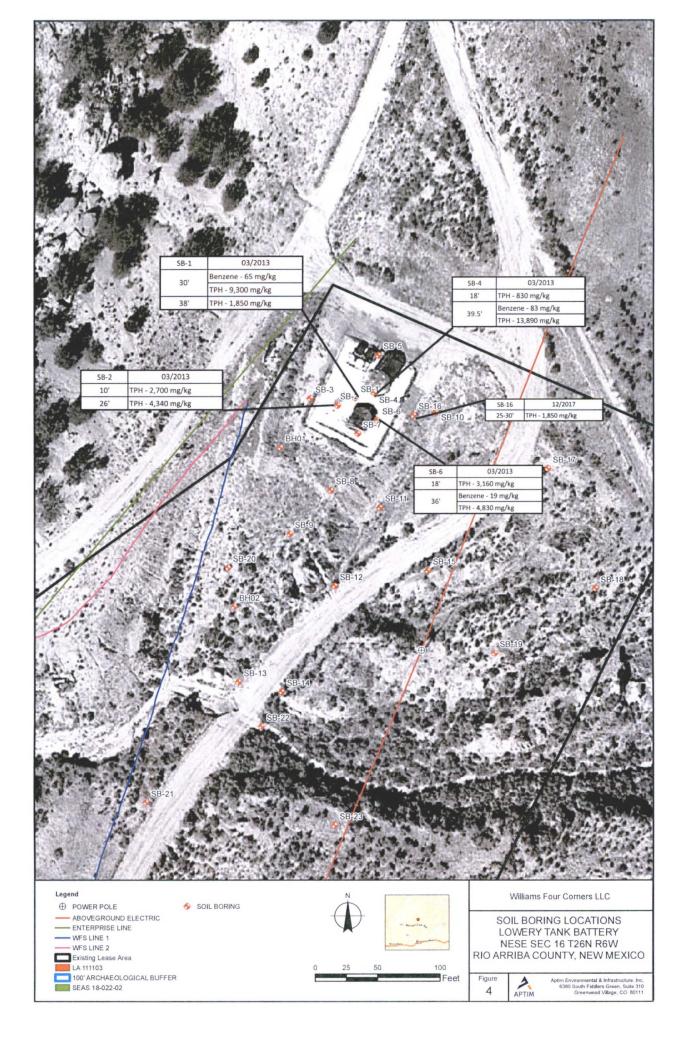
The additional delineation activities will be performed once approval is obtained from the State Land Office. The proposed remedial testing will be completed during the same mobilization with the additional delineation activities.

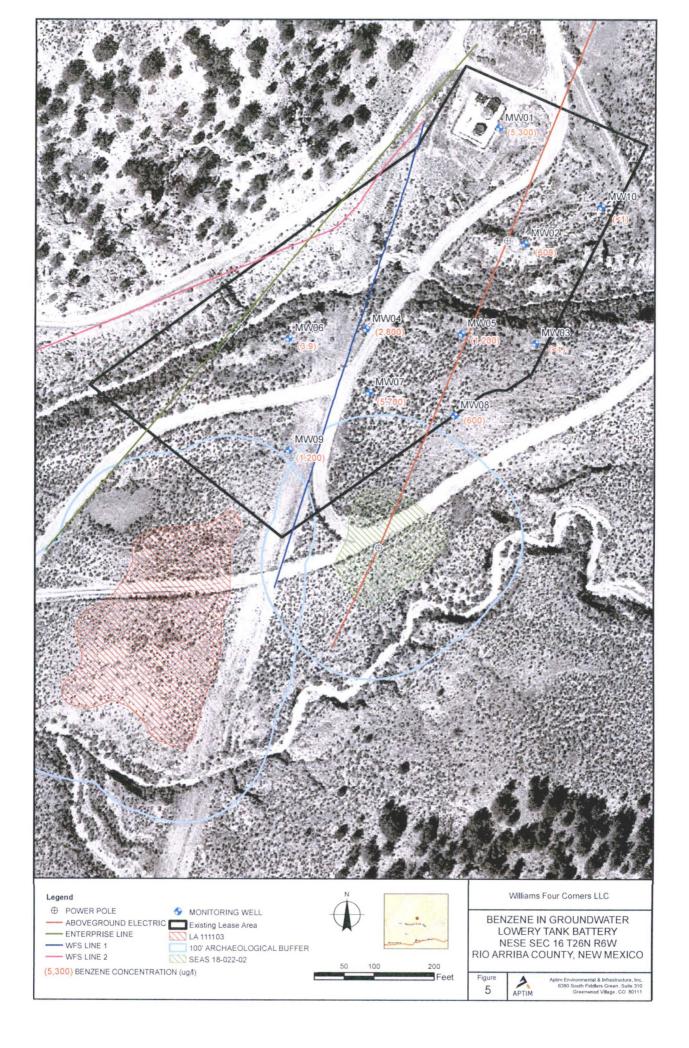
Figures

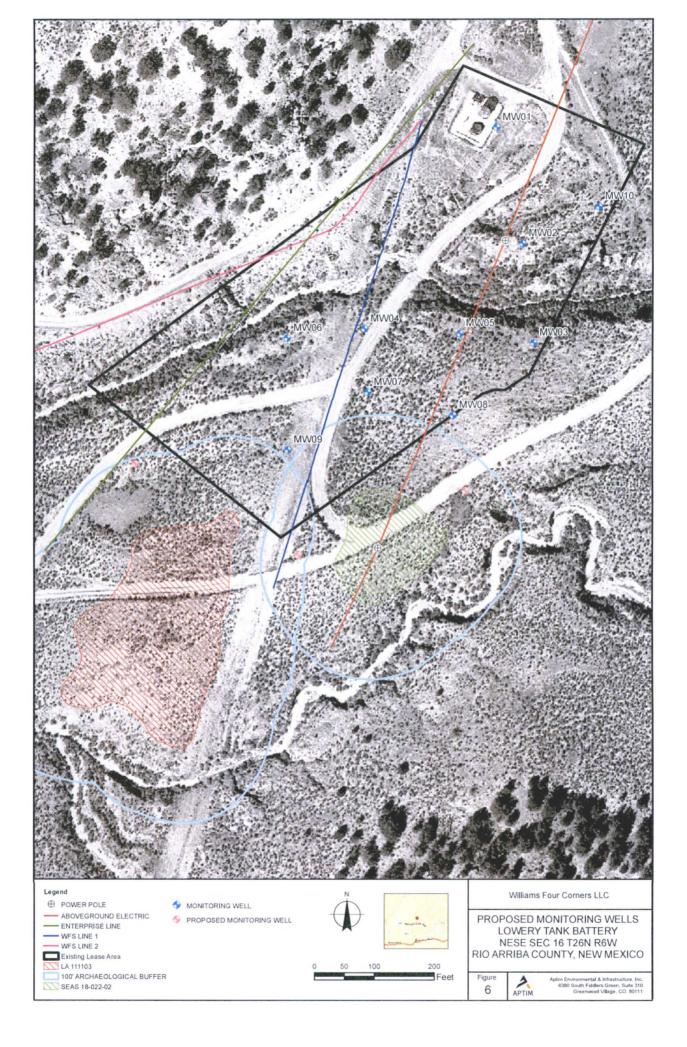












Tables

#### Table 1 LOWERY TANK BATTERY LIQUID LEVEL GAUGING DATA WILLIAMS FOUR CORNERS, LLC

| ID.   | LAT        | LONG   | Total Depth | Top of Casing<br>Elevation | Depth to GW                     | Depth to Product | Product<br>Thickness | Corrected GW<br>Elevation |
|-------|------------|--|-------------|----------------------------|---------------------------------|------------------|----------------------|---------------------------|
|       |            |  |             |                            | (ft below TOC)                  | (ft below TOC)   | (ft)                 | (ft AMSL)(1)              |
|       |            |  |             | (ft AMSL)                  |                                 | Apr              | -18                  | 1                         |
| MW-01 | 36.4841567 | -107.4653257   | 6385.12     | 6445.07                    | 46.83                           |                  |                      | 6398.24                   |
| MW-01 | 36.4841567 | -107.4653257   | 6385.12     | 6445.07                    | 46.88                           |                  |                      | 6398.19                   |
| MW-02 | 36.4837333 | -107.4652058   | 6388.10     | 6446.52                    | 49.72                           |                  |                      | 6396.80                   |
| MW-03 | 36.4833673 | -107.4651518   | 6394.40     | 6446.43                    | 50.28                           |                  |                      | 6396.15                   |
| MW-04 | 36.4834180 | -107.4659332   | 6383.46     | 6436.76                    | 40.42                           |                  |                      | 6396.34                   |
| MW-05 | 36.4834012 | -107.4654950   | 6385.07     | 6443.95                    | 47.87                           |                  |                      | 6396.08                   |
| MW-05 | 36.4834012 | -107.4654950   | 6385.46     | 6443.95                    | 48.86                           |                  |                      | 6395.09                   |
| MW-06 | 36.4833855 | -107.4662855   | 6380.54     | 6441.34                    | 56.70                           |                  |                      | 6384.64                   |
| MW-06 | 36.4833855 | -107.4662855   | 6383.02     | 6441.34                    | 52.84                           |                  |                      | 6388.50                   |
| MW-07 | 36.4831826 | -107.4659171   | 6384.77     | 6444.29                    | 48.76                           |                  |                      | 6395.53                   |
| MW-07 | 36.4831826 | -107.4659171   | 6385.10     | 6444.29                    | 49.19                           |                  |                      | 6395.10                   |
| MW-07 | 36.4831826 | -107.4659171   | 6384.82     | 6444.29                    | 49.17                           |                  |                      | 6395.12                   |
| MW-08 | 36.4830998 | -107.4655286   | 6391.13     | 6449.86                    | 54.49                           |                  |                      | 6395.37                   |
| MW-09 | 36.4829553 | -107.4662874   | 6385.37     | 6443.81                    | 49.47                           |                  |                      | 6394.34                   |
| MW-09 | 36.4829553 | -107.4662874   | 6385.39     | 6443.81                    | 49.92                           |                  |                      | 6393.89                   |
| MW-10 | 36.4838679 | -107.4648573   | 6395.64     | 6447.33                    | 50.23                           |                  |                      | 6397.10                   |
|       |            | a a reacha a baga a tha an |             |                            | The second second second second |                  |                      |                           |

Depth to water measured from casing top of monitor well.

NM Not Measured

ft feet

TOC Top of Casing

(1) 0.80 specific gravity used for corrected groundwater elevations

|  | <61.4     | <47     | <9.5     | <4.9     | 0.0        | <0.098        | <0.049       | <0.049  | <0.025  | 1.4        | 40'    | 4/25/2018             | -107.4651518 | 36,4833673 | MW-03     |
|--|-----------|---------|----------|----------|------------|---------------|--------------|---------|---------|------------|--------|-----------------------|--------------|------------|-----------|
|  | <51.6     | <39     | <7.8     | <4.8     | 0.0        | <0.097        | <0.048       | <0.048  | <0.024  | 16.1       | 55'    | 4/23/2018             | -107.4652058 | 36.4837333 | MW-02     |
|  | <60       | <46     | <9.2     | <4.8     | 0.0        | <0.096        | <0.048       | <0.048  | <0.024  | 165.0      | 65     | 4/19/2018             | -107.4653257 | 35.4841557 | NVW-UT    |
| Saturated Soil / Capillary Fringe  |           | 58      | 650      | 530      | 29.1       | 25            | 1.9          | 2.2     | <0.23   | 1931       | 25'    |                       |              |            |           |
|  | <61.3     | <47     | <9.5     | <4.8     | 0.0        | <0.097        | <0.048       | <0.048  | <0.024  | 0.3        | 65'    | 4/24/2018             |              |            | BH-02     |
|  |           | <45     | <9.0     | <4.6     | 0.0        | <0.093        | <0.046       | <0.046  | <0.023  | 217        | 49'    | 4/19/2018             |              |            | BH-01     |
| Saturated Soil / Capillary Fringe  |           | <46     | 87       | 360      | 33,19      | 23            | 1.8          | 8.1     | 0.29    | 1718       | 45'    |                       |              |            |           |
|  | <65.0     | <50     | <10      | <5.0     | <0.224     | <0.099        | <0.050       | <0.049  | <0.025  | 0 .4       | 43-45' | 12/14/2017            | -107.465472  | 36.483448  | SB-23     |
|  | 501.1     | 541     | <9.4     | <4.1     | CC 02      | <0.094        | <0.047       | <0.047  | <0.023  | 24.1       | 40 201 |                       |              |            |           |
| Saturated Soil / Capillary Fringe  |           | <47     | 42       | 1,200    | 9.41       | 7.9           | 1.0          | <0.48   | 0.51    | 1,425      | 28-30  | 12/15/2017            | -107.465633  | 36,483625  | SB-22     |
|  |           | <50     | <10      | <4.7     | 0.13       | 0.13          | <0.047       | <0.047  | <0.023  | 346        | 43-45' |                       |              |            |           |
| Saturated Soil / Capillary Fringe  | 2,455     | <47     | 55       | 2,400    | 85.5       | 48            | 5.0          | 30      | 2.5     | 2,038      | 33-35' | 12/14/2017            | -107.465888  | 36.483488  | SB-21     |
|  | <61.2     | <47     | <9.5     | <4.7     | <0.213     | <0.095        | <0.047       | <0.047  | <0.024  | 558        | 40-45' | 121112011             | -107.403707  | 30,463807  | 02-20     |
|  | 9.5       | <46     | <9.1     | 9.6      | <0.213     | <0.095        | <0.047       | <0.047  | <0.024  | 2,269      | 35-40' | 710011100             | -107 465707  | 200587 35  | SB-20     |
|  | <62.4     | <48     | <9.6     | <4.8     | <0.215     | <0.095        | <0.048       | <0.048  | <0.024  | 0          | 43-45' | 1/10/2017             | -107.40012   | 30,483730  | 28-19     |
|  | <62.5     | <48     | <9.5     | <4.9     | <0.219     | <0.097        | <0.049       | <0.049  | <0.024  | 1.2        | 23-25' | 10/16/00/17           | 107 40510    | 201700     | 2         |
|  | <64.5     | <50     | <9.9     | <4.6     | <0.206     | <0.091        | <0.046       | <0.046  | <0.023  | 0          | 38-40' | 12/14/2017            | -107.464899  | 36.48387   | SB-18     |
|  | <62.4     | <48     | <9.5     | <4.9     | < 0.219    | <0.097        | <0.049       | <0.049  | <0.024  | 0          | 13-15' |                       |              |            |           |
|  | <58.8     | <45     | <9.1     | <4.7     | <0.210     | <0,093        | <0.047       | <0.047  | <0.023  | 0.2        | 40-45' | 12/11/2017            | -107.465003  | 36,484082  | SB-17     |
|  |           | <48     | <9.7     | <4.7     | <0.210     | <0.093        | <0.047       | <0.047  | <0.023  | 1.9        | 0-5'   | 101110017             | 101 101000   |            | 2         |
| Saturated Soil / Capillary Fringe  |           | <49     | 68       | 3,000    | 144.5      | 75            | 7.5          | 51      | 11      | 1,601      | 47-50' | 12/11/2017            | -107.465299  | 36.484177  | SB-16     |
|  | 1,850     | <46     | 350      | 1,500    | 87.1       | 57            | 4.4          | 25      | 0.71    | 2850       | 25-30' |                       |              |            |           |
|  |           | NA      | <10      | 6.7      | <0.0236    | <0.095        | <0.047       | <0.047  | <0.047  |            | 40.0   | 3/10/2014             | -107.465268  | 36.483902  | SB-15     |
| Saturated Soil / Capillary Fringe  |           | NA      | 1,100    | 9,000    | 619        | 250           | 24           | 290     | 55      |            | 34.0   |                       |              |            |           |
|  |           | NA      | <10      | <4.7     | <0.236     | <0.095        | <0.047       | <0.047  | <0.047  |            | 44.0   | 3/10/2014             | -107.465589  | 36,483687  | SB-14     |
| Saturated Soil / Capillary Fringe  |           | NA      | 210      | 1,900    | 124        | 51            | 5.1          | 57      | 11      |            | 34.0   |                       |              |            |           |
|  |           | NA      | <9.9     | <4.9     | <0.245     | <0.098        | <0.049       | <0.049  | <0.049  |            | 20.0   | 3/10/2014             | -107.465683  | 36,483705  | SB-13     |
| Saturated Soil / Capillary Fringe  |           | NA      | 130      | 2,600    | 181        | 76            | 7.3          | 85      | 13      |            | 32.0   | 3/10/2014             | -107.465471  | 36,483875  | SB-12     |
| Saturated Soil / Canillary Fringe  |           | NA      | 260      | 2 600    | 196        | 80            | 7.8          | 93      | 15      |            | 36.0   | 3/27/2013             | -107.465373  | 36.484014  | SB-11     |
| oaturated oon / Capinary Finitige  |           | NA      | 15       | C80      | 4.0        | 0.0<br>0      | <0.97        | 1 1     | <0.24   |            | 0.05   | 012112010             | -107:40220   | 30,404102  | 01-00     |
| Saturated Soil / Canillary Fringe  |           | NA      | RA       | 000      | 102.01     | 8.8           | <0.97        | 4.0     | <0.040  |            | 36.0   | 2070013               | -107.48525   | 36 484182  | SB-10     |
|  |           | NA      | <10      | <4.6     | <0.231     | <0.093        | <0.046       | <0.046  | <0.046  |            | 38.0   | 3/27/2013             | -107 465571  | 36 483967  | SR-9      |
| Saturated Soil / Capillary Fringe  |           | NA      | 140      | 800      | 82         | 45            | 3.8          | 32      | 1.0     |            | 44.0   | 3/27/2013             | -107.46548   | 36.484044  | SB-8      |
| Saturated Soil / Capillary Fringe  |           | NA      | 58       | 89       | 4.4        | 3.1           | 0.33         | 1.0     | <0.047  |            | 42.0   |                       |              |            |           |
|  |           | NA      | 14       | <4.7     | <0.241     | <0.094        | <0.040       | <0.040  | <0.047  |            | 40.0   | 3/27/2013             | -107.465421  | 36.484145  | SB-7      |
| Saturated Soil / Capillary Fringe  |           | NA      | 530      | 4,300    | 353        | 160           | 14           | UBL     | 19      |            | 36.0   |                       |              |            |           |
| Soil interval excavated  |           | NA      | 660      | 2,500    | 180        | 130           | 12           | 38      | <2.4    |            | 18.0   | 3/26/2013             | -107.465379  | 36.484168  | SB-6      |
|  |           | NA      | 9.8      | <4.8     | <0.24      | <0.096        | <0.048       | <0.048  | <0.048  |            | 36.0   | 010010                | 1011100010   | 00,101200  | 00-0      |
|  |           | NA      | <9.9     | <4.9     | <0.244     | <0.097        | <0.049       | <0.049  | <0.049  |            | 32.0   | 3/26/2013             | -107 465376  | 36 484283  | SR-5      |
| Saturated Soil / Capillary Fringe  |           | NA      | 068      | 13,000   | 910        | 370           | 37           | 420     | 83      |            | 39.5   | 3/26/2013             | -107.465385  | 36,484217  | SB-4      |
| Soil interval excavated  |           | NA      | 400      | 430      | 19.2       | 16            | 1.5          | 1.7     | <0.47   |            | 18.0   | 5                     | 2            |            |           |
|  |           | NA      | <9.9     | <4.8     | <0.24      | <0.096        | <0.048       | <0.048  | <0.048  |            | 28.0   |                       |              |            |           |
|  |           | NA      | <9.7     | <4.8     | <0.24      | <0.096        | <0.048       | <0.048  | <0.048  |            | 16.0   | 3/26/2013             | -107.465526  | 36.484207  | SB-3      |
|  |           | NA      | 6.62     | <4.7     | <0.232     | <0.094        | <0 047       | <0.047  | <0 047  |            | 50     |                       |              |            |           |
| CON HINDINGI DAVIDINANA  |           | NA      | 540      | 3,800    | 290        | 150           | 15           | 100     | C4 0    |            | 0.01   | 3/26/2013             | -107.465466  | 36,484195  | SB-2      |
| Soli internal exception y minge  |           | AN NA   | 1 000    | 1,000    | 75         | 50            | <i>p</i> c   | 50      | 5.0     |            | 10.0   |                       |              |            |           |
| Saturated Soil / Canillary Frince  |           | NA      | 250      | 4 800    | 404        | 58            | מ מ          | 30      | 2.2     |            | 38.0   | 012012010             | - 101.100120 | 00.101200  | 00-1      |
| Soli interval excavated  |           | NA      | 600      | 4,700    | 400        | 200           | 23           | 330     | 5,4     |            | 30.0   | 3/26/2013             | -107 465426  | 36 484208  | Sp-1      |
| A CHI TO A CHI AND A CHI A | 100       |         | -        |          | 50         | ~~~           | ~            | 100     | 10      |            | >>>    | Action Level          | Actio        |            |           |
|  | (mg/kg)   | (mg/kg) | (Bx/Bul) | (Bx/Bul) | (By/Bul)   | (mg/kg)       | (mg/kg)      | (mg/kg) | (mg/kg) |            |        |                       |              |            |           |
| Comments   | TPH Total | MRO     | DRO      | GRO      | Total BTEX | Total Xylenes | Ethylbenzene | Toluene | Benzene | PID (ppmV) | Depth  | Sampling Date         | Longitude    | Latitude   | Sample ID |
|  |           | ТРН     | 11       |          |            |               | VOLATILES    | V       |         |            |        | ANALYTICAL PARAMETERS | ANALYTICAL   |            |           |
|  |           |         |          |          |            |               |              |         |         |            |        |                       |              |            |           |

# Table 2 LOWERY TANK BATTERY SOIL ANALYTICAL RESULTS WILLIAMS FOUR CORNERS LLC

# Table 2 LOWERY TANK BATTERY SOIL ANALYTICAL RESULTS WILLIAMS FOUR CORNERS LLC

|           |              | ANALYTICA     | ANALYTICAL PARAMETERS |       |            |                    | VO                 | VOLATILES               |                          |                       |                | TPH            | H              |                      |                                   |
|-----------|--------------|---------------|-----------------------|-------|------------|--------------------|--------------------|-------------------------|--------------------------|-----------------------|----------------|----------------|----------------|----------------------|-----------------------------------|
| Sample ID | Latitude     | Longitude     | Sampling Date         | Depth | PID (ppmV) | Benzene<br>(mg/kg) | Toluene<br>(mg/kg) | Ethylbenzene<br>(mg/kg) | Total Xylenes<br>(mg/kg) | Total BTEX<br>(mg/kg) | GRO<br>(mg/kg) | DRO<br>(mg/kg) | MRO<br>(mg/kg) | TPH Total<br>(mg/kg) | Comments                          |
|           |              | Acti          | Action Level          |       |            | 10                 |                    |                         |                          | 50                    |                |                |                | 100                  |                                   |
| PUT/WW    | DOLFERT SE   | -107 4850335  | A147/0048             | 35'   | 1669       | 0.35               | 1.3                | 0.23                    | 2.4                      | 4.3                   | 110            | <9.0           | <45            | 110                  | Saturated Soil / Capillary Fringe |
| 10-4410   | 00.1001100   | -101.100002   | 4/1//2010             | 55'   | 6.1        | <0023              | <0.046             | <0.046                  | <0.092                   | 0.0                   | <4.6           | <9.8           | <49            | <63.4                |                                   |
| AUTINI DE | CIUVEBY SE   | -107 4654050  | 4/10/0010             | 40'   | 50.2       | <0023              | <0.046             | <0.046                  | <0.092                   | 0.0                   | <4.6           | <9.7           | <49            | <63.3                |                                   |
|           | 00,1001014   | - 101,1001000 | 11 10/2010            | 55    | 12.1       | <0023              | <0.046             | <0.046                  | <0.093                   | 0.0                   | <4.6           | <8.9           | <44            | <57.5                |                                   |
| NINI      | 36 4833855   | -107 ARRORSS  | 4/16/2018             | 45    | 149        | <0023              | <0.047             | <0.047                  | <0.093                   | 0.0                   | <4.7           | <9.1           | <45            | <58.8                |                                   |
|           | 00,1000000   | -101,1002000  | HI NALE IN            | 55'   | 2.6        | 0.033              | 0.050              | <0.049                  | <0.097                   | 0.05                  | <4.9           | <9.2           | <46            | <60.1                |                                   |
| MW-07     | 36 4831826   | -107 4659171  | 4/1R/2018             | 45    | 1469       | <0.024             | <0.047             | <0,047                  | < 0.094                  | 0.0                   | <4.7           | <9.9           | <49            | <63.6                |                                   |
|           | and the loss | 11 00011001   | TI IOLEO IO           | 55'   | 3.1        | <0.024             | <0.048             | <0.048                  | < 0.096                  | 0.0                   | <4.8           | < 9.3          | <47            | <61.1                |                                   |
| MW-08     | 36 4830998   | -107 4655286  | 4/05/0018             | 45    | 1.6        | <0.024             | <0.049             | <0.049                  | <0.098                   | 0.0                   | <4.9           | <9.6           | <48            | <62.5                |                                   |
|           |              |               | 11 201 201 201        | 55    | 1,108      | <0.024             | <0.048             | <0.048                  | <0.095                   | 0.0                   | <4.8           | <9.3           | <47            | <61.1                |                                   |
| 60-MW     | 36.4829553   | -107.4662874  | 4/24/2018             | 55    |            | < 0.024            | <0.047             | <0.047                  | <0.095                   | 0.0                   | <4.7           | <9.3           | <47            | <61                  |                                   |
| MW-10     | 36,4838679   | -107.4648573  | 4/26/2018             | 50'   | 0.3        | <0.024             | <0.048             | <0.048                  | <0.096                   | 0.0                   | <4.8           | <8.5           | <43            | <56.3                |                                   |
|           |              |               |                       |       |            |                    |                    |                         |                          |                       |                |                |                |                      |                                   |

85.5 Concentrations in bold and yellow exceed the applicable regulatory limit
2013 data collected by Apex for SSI
2014 data collected by Apex for SSI
2017 data collected by LTE
2018 data collected by LTE

#### Table 3 LOWERY TANK BATTERY GROUNDWATER DATA WILLIAMS FOUR CORNERS, LLC

|           | ANA        | LYTICAL PARAMETE | RS          |               |                   | VOI               | ATILES                 |                         |
|-----------|------------|------------------|-------------|---------------|-------------------|-------------------|------------------------|-------------------------|
| Sample ID | Latitude   | Longitude        | Media       | Sampling Date | Benzene<br>(ug/L) | Toluene<br>(ug/L) | Ethylbenzene<br>(ug/L) | Total Xylenes<br>(ug/L) |
| MW-01     | 36.4841567 | -107.4653257     | Groundwater | 4/26/2018     | 5,300             | 7,100             | 510                    | 4100                    |
| MW-02     | 36.4837333 | -107.4652058     | Groundwater | 4/24/2018     | 600               | 9,000             | 450                    | 4800                    |
| MW-03     | 36.4833673 | -107.4651518     | Groundwater | 4/26/2018     | <1                | <1                | <1                     | <1.5                    |
| MW-04     | 36.483418  | -107.4659332     | Groundwater | 4/18/2018     | 2,800             | 110               | 180                    | 1600                    |
| MW-05     | 36.4834012 | -107.465495      | Groundwater | 4/20/2018     | 1,200             | 3,500             | 150                    | 1700                    |
| MW-06     | 36.4833855 | -107.4662855     | Groundwater | 4/18/2018     | 3.9               | <1                | <1                     | <1.5                    |
| MW-07     | 36.4831826 | -107.4659171     | Groundwater | 4/20/2018     | 5,700             | 3,900             | 250                    | 2,400                   |
| MW-08     | 36.4830998 | -107.4655286     | Groundwater | 4/26/2018     | 600               | 13,000            | 580                    | 5600                    |
| MW-09     | 36.4829553 | -107.4662874     | Groundwater | 4/26/2018     | 1,200             | 7,800             | 520                    | 5400                    |
| MW-10     | 36.4838679 | -107.4648573     | Groundwater | 4/26/2018     | <1                | <1                | <1                     | <1.5                    |
|           |            |                  |             |               |                   |                   |                        |                         |

Appendix A

|                           |                       |             | Ŀ,           |              |                            | u.   |           | BORIN<br>Boring/Wel | IG LOG                    | 848 E<br>Durar<br>MONIT     |                               |  | ION DIAGRAM              |
|---------------------------|-----------------------|-------------|--------------|--------------|----------------------------|--|-----------|---------------------|---------------------------|-----------------------------|-------------------------------|--|--------------------------|
| Alexandre                 | and the second        |             | 1.0          |              | e se avar<br>              |  |           | Date:               | L1                        | BH                          | 0                             | Lowery Ta<br>Project Number:                   | ank Battery              |
| میں<br>جو دور             | ztoją ()<br>Cięroj    |             |              |              |                            | de la compañía de la | 17<br>- 1 | Logged By:          | - <u>D</u> .              | Burng                       | 8                             | Drilled By:                                    | 18010                    |
| Elevation:                | 6440'                 |             | Detector:    |              | PID                        |  |           | Drilling Me         | thod:                     | Garroll<br>ow Stem          |                               | Sampling Method:                               | o-Drill<br>Spoon         |
| Gravel Pack:<br>10-20     |                       | Sand        |              | ;            | TID                        |  | _         | Seal:<br>Ben        | tonite                    | JW Stell                    |                               | Grout:<br>Bentonite                            | 5000                     |
| Casing Type:<br>Schedu    |                       |             |              |              |                            |  |           | Diameter:           | 2"                        | Length:                     | NONE                          | Hole Diameter:                                 | Depth to Liquid:         |
| Screen Type:<br>Schedu    |                       |             |              | Slot:<br>0.0 | 10"                        |  |           | Diameter:           | 2"                        | Length                      | NONE                          | Total Depth: 49                                | Depth to Water:<br>NON E |
| Penetration<br>Resistance | Content               | Vapor (ppm) | HC Staining? | Sample #     | Depth<br>(ft. bgs.)        | Sample<br>Run  | Recovery  | Soil/Rock<br>Type   |                           | Li                          | thology/Rer                   | narks  | Well<br>Completion       |
| 3                         | ivist<br>41.<br>Nuist | 0.3<br>0.2  | No           |              | 0<br>1<br>2<br>3<br>4<br>5 |  | XX        | SW-<br>SM<br>SM     | Bibuin,<br>sound<br>Lt. P | med.<br>w/si<br>brown<br>No | t med. c<br>It. No<br>week. s | carse well or.<br>stain lodox<br>sewel w/silt. | No<br>well<br>set.       |
| 555                       | Dry                   | 3.)         | Ns           |              | 6<br>7<br>8<br>9<br>       |  | X         |                     |                           |                             |                               | l + fn-med                                     |                          |
| 7                         | Sry :                 | 2.\$        | No           |              | 13<br>14<br>15             |  | X         | SW                  | JAA,<br>Savud.            | Tan<br>N                    | r vell gr                     | , med.<br>odor                                 |                          |

| L   | R                  | Adv               | anci     | ng Oj  | oportu        | Boring/Well #<br>Project:<br>Project #<br>Date | # BHO<br>Lowery Tank Battery<br>034018010<br>4-19-18 |   |   |                    |
|---|--------------------|-------------------|----------|--|---------------|--|--|---|---|--------------------|
| Penetration<br>Resistance<br>Moisture<br>Content                | Vapor<br>(ppm)     | Staining          | Sample # | Depth<br>(ft. bgs.)  | Sample<br>Run | Recovery                                       | Soil/Rock<br>Type                                    |   | ology/Remarks   | Well<br>Completion |
| 12.51<br>14.51<br>14.51<br>14.51<br>11.1<br>11.1<br>11.1<br>11. | 3.4                | No                |          | 15<br>16<br>17<br>18<br>19<br>20<br>21<br>22<br>23<br>24<br>25 |               | X  |  | No stam   | med fn, sound w/<br>aded. Some tr.<br>toxidation.<br>">dor<br>y U. fn silty sound<br>Sound. Blocky structure<br>ocal t white/groy/<br>g. No stain/oder, | No<br>Well<br>set. |
| 50/6" Dry<br>14<br>33<br>42 Dry                                 | <b>15.6</b><br>354 | No<br>odor<br>yes |          | 26<br>27<br>28<br>29<br>30<br>31<br>32<br>33<br>34<br>35<br>36 |               | X  | 58 ju  | Lt. gray w/ foi<br>V. fn sand.<br>but moderate, da<br>odor. | int reddish hue.<br>W sitt. No stain<br>mp, trash-like degraded<br>me V.fn. Sand.<br>Five/plastic No stain.   |                    |

Boring/Well # BHOI Advancing Opportunity Lowery Tank Battery Project: 034018010 Project # 4-19-18 Date Penetration Resistance Moisture Content Staining Sample # Soil/Rock Recovery Vapor (ppm) Depth Sample Type Well Lithology/Remarks Run (ft. bgs.) Completion 37 38 No Well Set. Lt gray silt w/ v.fn. securit. Platy, non-cohesiplast, No stain, strong HC/old gassy odor. 39 NO 22 50/6" ML odor yes dry 1,629 40 41 42 43 Lt. gray / tan fr. sand. Roorly graded, some cementation. Smell streaks of dark gray watter exidation. No stain, strong HC oder. 44 SM BHOI No 1,718 Work @ 45' Dry 50/6 45 Yes (11:20) 46 47 Auger + Sampler refusal @49" Lt gray / tan fu. silty kand cemented Oxidized. No stain/slight Backfill with odor. 48 BHOI SM 249' 50/4" Dry 217 49 (11:30) Yes 50 clean material. 51 52 53 54 55 56 57 58 59

| Elevation:<br>$\sim$ $6$ , 440<br>Gravel Pack:<br>10-20 Silica Sa<br>Casing Type:<br>Schedule 40 PV<br>Screen Type:<br>Schedule 40 PV | /C                            | PID<br>Slot:<br>0.010"   |          | Boring/Well<br>Date:<br>Logged By:<br>Drilling Met<br>Seal:<br>Diameter:<br>Diameter: | H02 14403<br>4-23-18/4-24<br>D. Burns  | rado 81301         | k Battery<br>:010<br>Drill |
|---|-------------------------------|--|----------|---|--|--------------------|----------------------------|
| Penetration<br>Resistance<br>Moisture<br>Content  | Vapor (ppm) (<br>HC Staining? | a Depth<br>un system (ft. bgs.   | Recovery | Soil/Rock<br>Type   | Lithology/Ren  |                    | Well<br>Completion         |
| 8<br>5<br>5<br>5<br>5<br>0<br>6<br>7  | 0.0 No<br>).1 No              | 0<br>1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10<br>11<br>12<br>13<br>14<br>15 | XXX      | SW-<br>SM   | Brown med. well ge<br>W/ sitt. No sta<br>Tan med. porty<br>No stam/odos<br>Tan med fn-m<br>graded sand w<br>No stain/odor<br>Tan fn-med fu<br>graded sand m<br>No stain/ | ed well -<br>silt. | No<br>Well<br>set.         |

| Ľ                                     | 2                | Ad       | vanci    | ing Oµ                                       | oportu        | Boring/Well #         MW05/BH02           Project:         Lowery TB           Project #         0'34'018010           Date         4-24-18 |                     |  |   |                    |
|---------------------------------------|------------------|----------|----------|--|---------------|---|---------------------|--|---|--------------------|
| Penetration<br>Resistance<br>Moisture | Content<br>Vapor | Staining | Sample # | Depth<br>(ft. bgs.)                          | Sample<br>Run | Recovery  | Soil/Rock<br>Type   | Litho  | ology/Remarks   | Well<br>Completion |
| 9<br>10<br>14                         | sy 0.            | 3 No     |          | 15<br>16<br>17<br>18<br>19<br>20<br>21<br>22 |               | X   | <del>Ма</del><br>SM | Lt. Brown/<br>fn. med<br>No slo.                       | tan<br>Fn. silty sand-  | No<br>Well<br>set. |
| 12<br>14<br>15<br>0                   | ry 2.3           | No       |          | 23<br>24<br>25<br>26<br>27                   |               | X   | SM                  | Brown, fn-n<br>sand. Dense<br>motiling, some<br>No ste | ned for silly<br>comparet, white<br>e oxidation.<br>ain/color |                    |
| <u>50/3"</u> D <sub>r</sub>           | g 8.0            | No       |          | 28<br>29<br>30<br>31<br>32                   |               | X   | SP                  | Dark Brown for emerthetion.                            | Enmed sand, particl<br>No stain/oder.                         |                    |
| 14<br>20<br>32 Dry                    | 2.5              | No       |          | 33<br>34<br>35<br>36<br>37                   |               | X   | 5P<br>5M            | Light brownish<br>sowel w/sitt.                        | gray fu-wed fn<br>No stainfodor:                              |                    |

|  | 990 G AL 2004 - 23 | NAME OF A DESCRIPTION O |          |                                  |               | e Walanah nga |                   | an an an ann an an an an an an an an an            | ÷ /  |                    |
|--|--------------------|--|----------|----------------------------------|---------------|---------------|-------------------|--|--|--------------------|
|  |                    |  |          |                                  |               |               |                   | Boring/Well #                                      | MW03 BH02  |                    |
|  |                    | Adu  | ianci    | ing Op                           | norti         | ini           | tu                | Project:   | Lowery TB  |                    |
|  | 2                  | AUV  | and      | ng op                            | pont          |               | <i>Ly</i>         | Project #  | 0340 8010  |                    |
| C  |                    |  |          |                                  |               |               |                   | Date   | 4-24-18  |                    |
| Penetration<br>Resistance<br>Moisture<br>Content | Vapor<br>(ppm)     | Staining   | Sample # | Depth<br>(ft. bgs.)              | Sample<br>Run | Recovery      | Soil/Rock<br>Type | Lith   | ology/Remarks  | Well<br>Completion |
|  |                    |  |          | 37                               |               | _             |                   |  | and the second |                    |
| (7<br>35<br>50/3" Dry                            | 1.7                | No   | J        | 38<br>39<br>40<br>41<br>42       |               | X             | ML                | Light gray<br>marcon toll<br>silt. # No            | w/ some multicolos,<br>we silt the samly<br>o stain/octor,   |                    |
| <u></u> Dry                                      | 1.0                | No   |          | 43<br>44<br>45<br>46<br>47       |               | N             | SP-<br>SM         | Marcon/light o<br>W/ SIH. Slig<br>NO Start         | aray frimed saved -<br>abit cement-action.<br>n/odor.  | well<br>Set        |
| solo No  | Rei                | cove   | M        | 48<br>49<br>50<br>51             |               | No            |                   | No stai<br>No recover<br>or shoe. He<br>So hits fo | same as above.<br>in/odor. Dry<br>ry in split spoon<br>and material.<br>or O" recovery.                          | -                  |
| 50/1" Dry  | 56                 | No   | e        | 52<br>53<br>54<br>55<br>56<br>57 |               | ×.            | ΜĽ                | Spoon was a<br>U. gray. In. s.<br>cemented. Jense  | and silt store, slightp<br>No stain/odor.  |                    |
| 50/2" Dry 1                                      | .0                 | No   |          | 58<br>59<br>60                   |               | *             | 51-<br>5M         | Lt-gray fu<br>No starn                             | med fu sand w/silf.  |                    |

|  |                |          |                 |  |       |          |                   | and the she of the party of the second s |  |                    |
|--|----------------|----------|-----------------|--|-------|----------|-------------------|--|--|--------------------|
|  |                |          |                 |  |       |          |                   | Boring/Well #  | BH02   |                    |
|  |                | Ad       | Vann            | ing Op   | nnort | un       | ity               | Project:   | Lowery Tank Batt   | егу                |
|  | 2              | Au       | vanci           | ing Op   | ρυπ   | un       | пу                | Project #  | 034018010  |                    |
| C  |                |          |                 |  |       |          |                   | Date   | 4-24-18  |                    |
| Penetration<br>Resistance<br>Moisture<br>Content | Vapor<br>(ppm) | Staining | Sample #        |  |       | Recovery | Soil/Rock<br>Type | Lith   | ology/Remarks  | Well<br>Completion |
|  |                |          |                 | 2758   |       |          |                   |  |  |                    |
| 2 2 2 0 NY                                       |                | No       | BH02<br>(11:00) | 105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105-<br>105- | hn    | M R      |                   | gray fn. sa<br>fissile/lam<br>No stat<br>- No G-W<br>In born<br>impact (<br>PID >100                           | in-med.fn sand<br>to stain/odor.<br>undy silt stone<br>inated, cemented.<br>n/odof.<br>eneowatered<br>ng. No soil<br>stain/odor<br>ippm) observed.<br>I w/ clean | No<br>Well<br>set  |
|  |                |          |                 | 908<br>937<br>988  |       |          |                   |  | -  | -<br>-<br>-<br>-   |
|  |                |          |                 | 50 S   |       |          |                   |  |  |                    |
|  |                |          |                 |  |       |          |                   |  |  |                    |

| Elevation:<br>Gravel Pack:<br>10-20 Silica Sand<br>Casing Type:<br>Schedule 40 PVC<br>Screen Type:<br>Schedule 40 PVC | PID<br>65-38'                    | Advancing Opportunity         848 E. 2nd Ave         Durango, Colorado 81301         BORING LOG/MONITORING WELL COMPLETION DIAGRAM         Boring/Well Number:       MW 01         Project:       Lowery Tank Battery         Date:       4-19-18         Down/       Bwrvg         Drilled By:       Down/         Eric Carroll       Bwrvg         Drilled By:       Enviro-Drill         Drilling Method:       Sampling Method:         Bentonite       38-36'         Bentonite       Samoling Method:         Diameter:       Length:         2"       Total Depth:         Diameter:       Length:         2"       Total Depth: |
|---|----------------------------------|---|
| Penetration<br>Resistance<br>Moisture<br>Content<br>Vapor (ppm)   | Rccovery<br>Rccovery<br>Rccovery | 2" 20' 65 ~47<br>well set<br>Lithology/Remarks 60' Completion<br>Flw.sh<br>Mount  |
| 2 MUST 0.4  |                                  | Fill Dark brown, loose unconsubidated<br>Silty sand. Likely fill maderial<br>No stain/edor  |
| 2<br>2<br>5<br>5<br>10015t 3,7  | No $4$ $5$ $7$ $7$               | SP Served, tr. sith. No stain/oddr.   |
| 23 Maist 1.2  | No 10 11 12                      | SP SAA, No Sho<br>SM D-Brown silty fu sand. No s/o  |
| 2<br>2 (NOT 2:4<br>2  | No 13<br>14<br>15                | SP Brown med. sand stand  |

|  |  |               |                   | Boring/Well #   | MINDI   |                    |  |
|--|--|---------------|-------------------|---|---|--------------------|--|
|  | vancing Op                                     | nortun        | itu               | Project:  | Project: Lowery Tank Battery  |                    |  |
| LZ AU  | vancing Op                                     | portun        | ily               | Project #   | 034018010   |                    |  |
| Penetration<br>Resistance<br>Moisture<br>Content<br>Vapor<br>(ppm)<br>Staining | (ft. bgs.)                                     | Sample<br>Run | Soil/Rock<br>Type | Date  | 9-19-18   | Well<br>Completion |  |
| 13 Dry 1246 No<br>13 Dry 1246 No<br>obst<br>yes                                | 37<br>38<br>39<br>40<br>41<br>42               | X             | SR.<br>SM         | H. grayish<br>Sound. Toist<br>Soune oxistation<br>degraded HC                                     | brown mied fn.<br>n silt. poorly gr.<br>n. No stain, mod.<br>gas odor.  |                    |  |
| 5 moist 1429 Yes<br>7  | 43<br>44<br>45<br>46                           |               | SM<br>ML          | Dark grow<br>sand. Modera<br>and oder. Fin<br>Dark grow for<br>Motilling toxida<br>strong tik sto | silty med - fin-mod<br>te to strany HC stain -<br>endy silt. W/ little whit<br>Hon. Placty. Mod. to<br>in/ celor. |                    |  |
| 34<br>15 NOFT 1327 Yes   | 47<br>48<br>49<br>50<br>51<br>52               |               | ML                | SAA. Darkgan<br>Mud 3/0<br>Lt. gray fn sou  | GW for.<br>y for. soundly silt.<br>nd. Med. stain/odor.   |                    |  |
| 50/2" prover vertage<br>No<br>20/2" dry 353 we                                 | 53<br>54<br>55<br>56<br>57<br>58<br>59<br>(a)) |               | 58                | cemented. V:<br>ewolyh dil s  | n sand, partiully<br>slight odor. Not<br>ample.<br>Med.fn. sand stn.<br>No stain                                  |                    |  |
|  | Int -  |               |                   |   |   | 3                  |  |

|  |                |          |                        |   |               | Boring/Well # | MWOI              |   |   |                                       |
|--|----------------|----------|------------------------|---|---------------|---------------|-------------------|---|---|---------------------------------------|
|  |                | Adı      | /anci                  | ng Op   | porti         | ıni           | itv               | Project: Lowery Tank Battery                |   | у .                                   |
|  | -              |          |                        |   | 100110        | ~             | -)                | Project #<br>Date                           | 034018010   |                                       |
| Penetration<br>Resistance<br>Moisture<br>Content | Vapor<br>(ppm) | Staining | Sample #               | Depth<br>(ft. bgs.)   | Sample<br>Run | Recovery      | Soil/Rock<br>Type |   | ology/Remarks   | Well<br>Completion                    |
|  | 165            | No       | MW01<br>@65<br>(14:45) | 1860<br>1861<br>1862<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1863<br>1864<br>1863<br>1864<br>1863<br>1864<br>1863<br>1864<br>1863<br>1864<br>1863<br>1864<br>1863<br>1864<br>1863<br>1864<br>1863<br>1864<br>1865<br>1864<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1865<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>18555<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855<br>1855 |               |               | SP                | 24. gray n<br>slight odo<br>TD-65'<br>set @ | fn. sound stn.<br>No stain-<br>ned. fn 'sound stn.<br>r. No stain<br>GO' w/20'<br>screen<br>ouvit well<br>due to<br>of BGT load | Backfill<br>With<br>Sand<br>to<br>60' |

| Elevation:<br>Gravel Pack:<br>10-20 Silica<br>Casing Type:<br>Schedule 40                                       | a Sand | L<br>Detector: | 55-   | рир<br>33°   |               |          | BORIN<br>Boring/Wel<br>Date:<br>Logged By:<br>Drilling Me<br>Seal:<br>Ben<br>Diameter: | I Number:<br>Number:<br>4-2<br>Eric<br>thod:<br>Holl | 848 E.<br>Durang<br>MONITO<br>MWO<br>3-18<br>Serviny Br<br>Carroll<br>ow Stem<br>33-3 | 2<br>Arns | Project:<br>Project:<br>Droject Number:<br>034<br>Drilled By:<br>Envi<br>Sampling Method: | Tank Batter<br>018010<br>ro-Drill<br>t Spoon<br>$3i - O_{1}$ | y                |
|---|--------|----------------|-------|--|---------------|----------|--|--|---|-----------|---|--|------------------|
| Screen Type:  |        |                | Slot: | 0.11   |               |          | Diameter:  |  |   | 10        | Total Depth: 55'  | Depth to   | Water:<br>40-45  |
| Penetration<br>Resistance<br>Moisture<br>Content  |        | HC Staining?   |       | Depth<br>ft. bgs.)   | Sample<br>Run | Recovery | Soil/Rock<br>Type  | 2"   |   | ology/Rem |   | ~3'st  | rek up<br>letter |
| 4<br>5<br>5<br>6<br>9<br>1<br>9<br>1<br>9<br>1<br>9<br>1<br>9<br>1<br>9<br>1<br>9<br>1<br>9<br>1<br>9<br>1<br>9 | 0.0    | No<br>No       |       | 0<br>1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10<br>11<br>12<br>13<br>14<br>15 |               | X        |  | Lt. B<br>sand.<br>No                                 | rown<br>Non-f<br>stain  |           | Fn-med<br>ed.<br>I-Fn silty<br>hest ve.   |  |                  |

Boring/Well # MWOZ Advancing Opportunity Lowery Tank Battery Project: 034018010 Project # 4-23-18 Date Penetration Resistance Sample # Moisture Content Staining Soil/Rock Type Recovery Vapor (ppm) Sample Well Depth Lithology/Remarks (ft. bgs.) Run Completion 15 16 17 ML White Mo Hling. No stain/odor. 18 Dry 0.0 No 11 19 19 20 21 22 ML Dark brewn In sandy silt. Some mettling + oxidation. Dense, compact. No stam/obr 23 13 Dry 0.0 No 24 25 26 27 28 ML Brown Fu - med Fri sandy SIH. White mottling, Oxidetions and trace coal. No stern/oder 13 Dry 0.0 29 No 24 30 31 32 8 33 11 ML SAA. fn-med sandy silt. White mottle, oxid. No stain/oelor. 17 Dry 2.1 No 34 35 36 37

|                                       |                |          |                              |  |               |          |                   | Domino/UVoll 4   | M 100   |                    |
|---------------------------------------|----------------|----------|------------------------------|--|---------------|----------|-------------------|--|---|--------------------|
| The                                   | , ,            |          |                              |  |               |          |                   | Boring/Well #<br>Project:  | Lowery Tank Battery   |                    |
|                                       | 2              | Ad       | vanci                        | ing Of   | oporti        | In       | ity               | Project #  | 034018010   |                    |
|                                       |                |          |                              |  |               |          |                   | Date   | 4-23-18   |                    |
| Penetration<br>Resistance<br>Moisture | Vapor<br>(ppm) | Staining | Sample #                     | Depth<br>(ft. bgs.)                                | Sample<br>Run | Recovery | Soil/Rock<br>Type | Litho  | ology/Remarks   | Well<br>Completion |
|                                       |                |          |                              | 37   |               |          |                   |  |   | 7-9                |
| 8<br>8<br>5<br>Moi                    |                | 51?      |                              | 38<br>39<br>40<br>41                               | -             | X        | sM                | Brown to lt<br>silty seund.<br>No odor.                            | . gray med-fn.<br>Possible stain, slight.                                       | 111111111          |
| 7<br>7<br>9 We                        | t 1,429        | Yes      |                              | 42<br>43<br>44<br>45<br>46                         |               | X        | SW<br>-SM         | Gray med F<br>gradied sand<br>Moderate s                           | n-med. vell<br>With sitt.<br>tarn + HC odor.                                    |                    |
| 5<br>8<br>11<br>11<br>11<br>10015     | + 142          | No       |                              | 47<br>48<br>49<br>50<br>51                         |               | X        | ML                | Dark brown<br>Furmed sound<br>of o, et duation a<br>No stain, sits | and grayish brown<br>dy soft. W/ lots<br>and white motiling<br>ht residual odor |                    |
| 1.2<br>24<br>50/5" (Well              | 1 1 7 1        | Ne       | MW<br>02<br>(555'<br>(13:00) | 52<br>- 53<br>- 53<br>- 54<br>- 55<br>- 56<br>- 57 |               | X        | SW-<br>SM         | Well 3   | et (255'  |                    |
|                                       |                |          |                              | 58<br>59   |               |          |                   | <i>ب</i>   |   |                    |

| Elevation:<br>$\sim 6.440'$<br>Gravel Pack:<br>10-20 Silica Sand<br>Casing Type:<br>Schedule 40 PVC<br>Screen Type: | itector:<br>PID<br>55-36                               | Boring/<br>Date:<br>Logged<br>Drilling<br>Seal: | DENENS<br>Method:<br>Hollow Stem<br>Availte 36-34'<br>r:<br>2" Length: 45' | 9<br>Project:<br>Project:<br>Project Number:<br>034018<br>Drilled By:<br>Enviro<br>Sampling Method:<br>Sampling Method:<br>Grout:<br>Beulowite/cement<br>Hole Diameter: § <sup>4</sup> | k Battery<br>010<br>Drill<br>poon<br>Slury<br>Depth to Liquid: |
|---|--|---|--|--|--|
| Schedule 40 PVC   | 0.010"   |   | 2"Length: 10'  | Total Depth: 50'<br>Well set   | Depth to Water:<br>~46-47<br>~3' Stickup                       |
| Penetration<br>Resistance<br>Moisture<br>Content<br>Vapor (ppm)   |  | Recovery aldu                                   | Lithology/Re   | Well set<br>@48'<br>marks  | Well-<br>Completion  |
|   | $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | X SM<br>X SM                                    | No stain/odor.<br>Bound wred for s   | sand.  |  |

-----

Boring/Well # MW03 Advancing Opportunity Project: Lowery TB 034018010 Project # 4-25-18 Date Penetration Resistance Moisture Content Staining Sample # Soil/Rock Type Recovery Vapor (ppm) Depth Sample Well Lithology/Remarks (ft. bgs.) Run Completion 15 16 17 18 SP Lt Brown fn-medfn SM Silty sand. No stain/oder poorly graduel. 9 19 14 0.0 No Dry 20 21 22 SW- 4. Brown/tan med. uell SM graded savel w/sitt. Some. O.Xidation. No stain/odor 23 14 18 19 0.0 NO 24 Dry 25 26 27 28 Lt. Brown sates med finskindy silt w/ white mottling. Ne stain/odor, 14 ML Dry 0.0 No Lt. Brown wed. fn. silty sand w/ some commented oxidation + motiling. 29 SP-20 SM 30 No stein/oder. 31 32 33 Lt. grayish tan and orangish brown medfor. I med sand w/some sitt. Oxidation. Loose. 912 34 SW Dry 0.0 No 35 Real Property well graded. No stain/odor 36 37

MW03 Boring/Well # Lowery TB Advancing Opportunity Project: Project # 034018010 4-25-18 Date Penetration Resistance Moisture Content # Soil/Rock Staining Sample # Recovery Vapor (ppm) Depth Sample Type Well Lithology/Remarks Run (ft. bgs.) Completion 37 Lt. orangish brown medfin-med 38 sand, Frace sitt. Oxidation. MWD3 -SW 6 40 39 SL. 1.4 77 NO Moist Slight moist. No stain loder. -40 (10:00) 1111 41 -42 --43 Brown/Lt. Brown W/ some -455 44 SW OX. Med. well graded sand. wet. No stain/odor wet 0.2 No 45 46 47 Lt. gray/ton w/ pxid. well graded medfn sand w/ sitt. No stanladir: 48 SWwet 4 SM Grow Formed Fa. soundy silt. Danse. moist. Mottle/Oxid. No stain/oder. Lt. orangish brown med. well gr. Noist 49 0.4 NO ML wet 50 SW sound. Oxid. No s/o. wet. 51 well set@48' w/ 10' screen. 52 53 54 55 56 57 58 59

| Elevation:<br>6440<br>Gravel Pack:<br>10-20 Silica Sand<br>Casing Type:<br>Sabadula 40 PMC  | or:<br>PID<br>SS-31 <sup>1</sup>  | Advancing Oppor<br>848 E. 2nd Ave<br>Durango, Color<br>BORING LOG/MONITORING W<br>Boring/Well Number:<br>MW 04<br>Date:<br>4 - 17-18<br>Logged By:<br>Dawny Bulin S<br>Eric Carroll<br>Drilling Method:<br>Hollow Stem<br>Seai:<br>Bentonite<br>31-291<br>Diameter:<br>2"<br>40' | rado 81301   |
|---|---|--|--|
| Screen Type:<br>Screedule 40 PVC  | Slot:<br>0.010"   | Diameter: Length: 20'  | Total Depth: 55' Depth to Water:<br>55' ~43                                |
| Penetration<br>Resistance<br>Moisture<br>Content<br>Vapor (ppm)   |   | Type Type Type   | se (253; 3'stick up.<br>marks Completion                                   |
| H<br>H<br>H<br>J<br>S<br>Dry 0.0 No<br>12<br>12<br>12<br>12<br>12<br>12<br>12<br>0.0 No<br>8<br>2<br>14<br>0.0 No<br>14<br>14<br>0.0 No | $ \begin{array}{c} 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 12 \\ 13 \\ 14 \\ \end{array} $ | SW Brown fin-med. son<br>J organic motorial<br>graded<br>SW No stain/odor<br>SM No stain/odor<br>SM Prown med. School<br>SM commented toon medium<br>cut gravel w/oxidation<br>or odor.<br>SMA Brown med. sitty sc<br>NO stain/odor.<br>ML Durker brown sith w/ 1900             | W/ silt<br>scone stubilly<br>n sand w/ silt<br>A. No stain<br>and, mothed. |

|                                      |                     |                |          |                 |            |        |                   |                         | 1  |  |                          |
|--------------------------------------|---------------------|----------------|----------|-----------------|------------|--------|-------------------|-------------------------|--|--|--------------------------|
|                                      | 7LT                 |                | )        |                 |            |        |                   |                         | Boring/Well #  | Lowery Tank Ba   | ttom                     |
|                                      |                     | -              | Ad       | vanci           | ing Op     | oporti | In                | ity                     | Project:<br>Project #  | 034018010  |                          |
|                                      |                     |                |          |                 | 5 /        |        |                   | -                       | Date   | 4.17-18  |                          |
| e a                                  | Í.                  | 1              | 1        | -               |            |        |                   |                         | Lat  | 11/7 10  |                          |
| Penetration<br>Resistance            | Moisture<br>Content | Vapor<br>(ppm) | Staining | Sample #        | Depth      | Sample | Recovery          | Soil/Rock<br>Type       | Lithe  | ology/Remarks  | Well                     |
| enet                                 | Moi                 | Va<br>(pr      | Stai     | Sam             | (ft. bgs.) | Run    | tecc              | Ty                      |  | ology/Remarks  | Completion               |
| A M                                  |                     |                |          |                 | 15         |        | H                 | S                       |  |  |                          |
| 1                                    | 1                   | · ·            |          |                 | 15         |        |                   |                         |  |  | AT                       |
|                                      | 1                   |                |          |                 | 16         |        |                   |                         | -  |  |                          |
|                                      | 1                   |                |          |                 |            | 1      |                   |                         |  |  | $\uparrow A \mid A \mid$ |
|                                      | ]                   |                | 1        |                 | 17         |        |                   |                         |  |  | I I I                    |
|                                      |                     |                |          | 1               |            | -      |                   |                         |  |  | TA VI                    |
| 1                                    | -                   |                | 1        |                 | ph8-       |        |                   |                         | N & Brinne   | ilt and some   | 4/1/                     |
| 6                                    |                     |                |          | 1               | 19         | -      | $\Box$            | ML                      | Dark picult S  | ilt w/ saud, some<br>Don-plastic/citiesiue<br>No shain/color |                          |
| 14                                   | Day                 | 0.0            | No       |                 | 19 -       | -      | $\sqrt{ }$        | ML                      | Old ala dura   | No duintados   | +/ I/                    |
| 14                                   | 1217                | 10.00          | 1.00     |                 | 20         | -      | ΧI                |                         | FILTY STUDIUS  | in the short of the state                                    |                          |
|                                      | 1                   |                |          |                 |            |        | +                 |                         |  |  | I/   /                   |
|                                      |                     |                |          |                 | 21         |        |                   |                         |  |  | III/                     |
|                                      |                     |                |          |                 |            | .      |                   |                         |  |  | + /   /                  |
|                                      |                     |                |          |                 | 22 _       | - 1    | (                 |                         |  |  | ¥1 1                     |
|                                      |                     |                |          |                 | 23         | .      |                   |                         |  |  | $\frac{1}{1}$            |
|                                      |                     |                |          |                 |            |        |                   |                         | Same as abo  | ove, some lighter  | ťΛ ΙΛ                    |
| 9                                    |                     |                | A I      |                 | 24         |        | VI                | AA I                    | areas w/ inc   | reased mottles and   |                          |
| 9<br>16<br>17                        | Dry                 | 0.0            | No       |                 | 1          | 1      | XI                | ML                      | some exidation   | No stain/edur  | IA VI                    |
| 17                                   | 1                   |                |          |                 | 25         |        | 1                 |                         | -  | ive storig   | Y I                      |
|                                      |                     |                |          |                 | 26         |        |                   |                         |  |  | +/ /                     |
|                                      |                     |                |          |                 | 20 -       |        | 1                 |                         |  |  | + 1 [1]                  |
|                                      |                     |                | (        |                 | 27         |        |                   |                         |  |  |                          |
|                                      |                     |                |          |                 | 1          | 1 (    |                   |                         |  |  | T/ //                    |
|                                      |                     |                |          |                 | 28         |        |                   | ML                      | same as abou   | 1  | V / / /                  |
|                                      | Dry                 |                | No       |                 |            |        |                   | ML                      |  |  |                          |
| ·7                                   | diath               | 30             | [ ·      |                 | 29         | -      | XI                | SP                      | Med. I fn.   | tan sound, poorly  | 1000 110                 |
|                                      | slightly            | 0.0            | No       |                 | 30         |        | $\langle \rangle$ | ~                       | graded. Slight n   | noist. No stain lodor.                                       |                          |
|                                      |                     |                |          |                 |            |        | 4                 |                         |  |  | 1/12 1/1                 |
|                                      |                     |                |          |                 | 31         |        |                   |                         |  |  | VIII VIII                |
|                                      |                     |                |          |                 |            |        |                   |                         |  |  | 1 5-                     |
|                                      |                     |                |          |                 | 32         | 4      |                   |                         |  |  |                          |
|                                      |                     |                |          |                 | 22         |        |                   |                         |  |  | × 1                      |
| 2                                    |                     |                |          | Mala            | . 33       |        |                   |                         |  | 2  |                          |
| 358                                  | ci.                 |                | Mag      | MW<br>04<br>@35 | 34         |        | $\langle  $       | -                       | Dark Aray FN.S   | sandy silt w/ moderat  | 2                        |
| 8                                    | s1.<br>proist       | 1,669          | Yes      | @35             | - +        | 1 1    | ΛI                |                         | Stal I hr -  | E hideorichon  | + 1= 1                   |
|                                      |                     |                |          | (11:00)         | 35         |        | V                 | ML                      | stain / odor of<br>Slightly moist  | , fignerations.  | 1 = · .                  |
|                                      |                     |                | 1        |                 | 1          |        |                   |                         |  |  | T = :                    |
|                                      |                     |                |          |                 | 36         |        |                   |                         |  |  | 1.1 2.1                  |
|                                      |                     |                |          |                 | 37 +       |        |                   |                         |  |  | - ~ = .                  |
| L                                    |                     |                |          |                 | 37         |        |                   |                         |  |  |                          |
| Contraction in the local division of |                     |                |          |                 |            |        |                   | No. of Concession, Name | An output to the second of the second se |  |                          |

|                           | 7                   |                |          |                  |                    |               |                |                   | Boring/Well #       | MWOH   |            |
|---------------------------|---------------------|----------------|----------|------------------|--------------------|---------------|----------------|-------------------|---------------------|--|------------|
|                           | 171                 |                | Ad       | vanci            | ing O <sub>l</sub> | pporti        | un             | itv               | Project:            | Lowery Tank Bat<br>034018010                           | tery       |
|                           | 51                  |                |          |                  |                    | opor a        |                | -9                | Project #<br>Date   | 4-17-18  |            |
| E O                       | I                   | 1              | 1        | 1                |                    | 1             |                |                   | Date                | 7 17-10  | T          |
| Penetration<br>Resistance | Moisture<br>Content | 10 (i          | Staining | Sample #         | Denth              | Sample<br>Run | ery            | Soil/Rock<br>Type |                     |  | Well       |
| etra                      | oist                | Vapor<br>(ppm) | ain      | du               | (ft. bgs.)         | Run           | COV            | il/Roc<br>Type    | Litho               | ology/Remarks  | Completion |
| Pen                       | N O                 | 1-0            | st       | Sa               | (11. 055.)         |               | Re             | Soi               |                     |  | completion |
|                           |                     | +              |          |                  | 37                 | -             |                |                   |                     |  |            |
|                           |                     |                |          |                  |                    | 11            |                |                   |                     |  | 1.01=1-1   |
|                           | ]                   |                |          |                  | 38                 | t             | _              |                   |                     |  |            |
|                           |                     |                |          |                  |                    |               |                |                   | N                   | 14 Jan Ta and  | T = 1      |
| 7                         | -                   |                |          |                  | 39                 |               | V              | ML                | Dourk gray SI       | IT, Trace The second                                   | 1: = .     |
| 774                       | SI.                 | 784            | Yes      |                  | -                  |               | $\wedge$       | me                | Muderate sta        | in/ ador.  |            |
| 4                         | Moisi               | 101            | 10       |                  | 40                 | /             | -              |                   | Non-cohesive/plas   | 1t, trace In search.<br>in/idor.<br>hr. some motiling. | + = :      |
|                           |                     |                |          |                  | 41                 | -             |                |                   |                     |  | + :        |
|                           |                     |                |          |                  | 41 _               | H I           |                |                   |                     |  | + $=$ $-$  |
|                           |                     |                |          |                  | 42                 |               |                |                   |                     |  | + [=].     |
|                           |                     |                |          |                  | -                  | H I           |                |                   |                     |  | + = ,      |
|                           |                     |                |          |                  | 43                 |               |                |                   | 1                   | gray sill, trace for sur                               |            |
|                           | -1                  | 15.0           |          |                  | -                  |               | $\overline{)}$ |                   | Brown w/ some       | gray sin, none in su                                   | T. Ehi     |
| 3                         | sl                  | 15,3           | slight   |                  | 44                 |               | XI             | ML                | shight stall/od     | C-W  | my-1       |
| 377                       |                     |                |          |                  |                    | -             | $\Lambda$      | SCA               | N                   | al cand ana oth  | T - E -/   |
| 7                         | wet -               | -43.7          | yes      |                  | 45                 |               | -              | SP-SM             | - Dark gray, In-In  | t white  | -11 - W    |
|                           |                     |                | 10       |                  | -                  | -             |                |                   | nearly stain / odor | ned sand, some sill,<br>Wet.                           | 1. E.      |
|                           |                     |                |          |                  | 46                 | 4             |                |                   |                     |  | +: [-].    |
|                           |                     |                |          |                  | 47                 | -             |                |                   |                     |  | 1. 21      |
|                           |                     |                |          |                  |                    | -             |                |                   |                     |  | +          |
|                           |                     |                |          |                  | 48                 |               |                |                   |                     |  | 1. 5 %     |
|                           |                     |                |          |                  | 1                  |               |                |                   |                     |  |            |
|                           |                     |                |          |                  | 49                 |               |                |                   |                     | ted mede scind. slight.                                | I E        |
|                           | ,                   |                | 4.1      |                  |                    | .             |                |                   | POOS                | 1 1 sund Straht.                                       |            |
| 50/5"                     | wet                 | 21,2           | Slight   |                  | 50                 |               | X              | SP                | El gray, se gra     | ted medt Scores.                                       |            |
|                           |                     |                |          |                  |                    | .             |                |                   | stain/educ.         |  | -> - 2     |
|                           |                     |                |          |                  | 51                 | - 1           |                |                   |                     |  | +1 = 1     |
|                           |                     |                |          |                  | 52                 |               |                |                   |                     |  | 1. 2 4     |
|                           |                     |                |          |                  |                    | 1             |                |                   |                     |  | T. [] **   |
|                           |                     |                |          |                  | 53                 |               |                |                   |                     |  | 1 = 1      |
|                           |                     |                | -        | MW               | 1                  |               |                |                   |                     |  | T          |
|                           |                     |                |          | MW<br>04<br>@55' | 54                 |               |                |                   |                     |  | T          |
|                           |                     |                |          | @55              | T                  |               |                |                   |                     |  | T          |
| 50/4"                     | Dry                 | 6.1            | NO       | (12:00)          | 55                 |               | X              | SM.               | Lt. gray V. fn      | sitty send   |            |
|                           | /                   |                | 1-0      |                  | -                  |               |                | ML                | and silt w/         | fn. sand. Some slight                                  | +          |
|                           |                     |                |          |                  | 56                 | 4             |                | ML                | cementation and     | fn. sand. Some slight<br>I laminar bodding.            | +          |
|                           |                     |                |          |                  | 57                 |               |                |                   |                     |  | +          |
|                           |                     |                |          |                  | 5/ +               | 1 1           |                |                   |                     |  | +          |
|                           |                     |                |          |                  | 58                 |               |                |                   |                     |  | † ]        |
|                           |                     |                |          |                  | +                  | 1             |                |                   |                     |  | +          |
|                           |                     |                |          |                  | 59                 |               |                |                   |                     | 10   | t          |
|                           |                     |                |          |                  |                    |               |                |                   |                     |  |            |

|   |                 | A. C. A. D. 10 12 20 1.       | Advancing Op<br>848 E. 2nd A<br>Durango, Co<br>NG LOG/MONITORING<br>BIl Number: MW05          | Ave<br>olorado 81301                                 |                                       |
|---|-----------------|-------------------------------|---|--|---------------------------------------|
|   |                 | Date:                         | 4-18-18<br>Danny Burns  | Project Number:<br>0340 I<br>Drilled By:<br>Enviro   |                                       |
| Elevation: ~6,440   | Detector:       | Drilling M                    | ethod:  | Sampling Method:                                     |                                       |
| Gravel Pack:  | 55 - 33'        | Seal:                         | Hollow Stem<br>ntonite 33-31  | Grout: 31-C  | ment slurry                           |
| 10-20 Silica Sand<br>Casing Type:                               | 0.0 37          | Be<br>Diameter:               | Length:   | Hole Diameter:                                       | Depth to Liquid:                      |
| Schedule 40 PVC<br>Screen Type:<br>Schedule 40 PVC              | Slot:<br>0.010" | Diameter:                     | 2" <u>Length:</u> <u>40'</u><br>2" <u>Length:</u> <u>20</u> "                                 | Total Depth: 55'                                     | Depth to Water:<br>$\sim 4.0-43^{10}$ |
| Penetration<br>Resistance<br>Moisture<br>Content<br>Vapor (ppm) |                 | Recovery<br>Soil/Rock<br>Type | Lithology   | /Remarks   | v3' stickup<br>Well<br>Completion     |
| 3<br>4<br>4<br>2<br>4<br>0.0<br>4<br>4<br>0.0                   | No 10           | - SW-<br>SM<br>SW-<br>SM      | Brown from<br>or odor. W<br>Brown I ton m<br>sand w/ silt.<br>w/ oxidation n<br>SAA. No stain | ed - med roarse<br>some sl. cement<br>lo stain loder |                                       |
| 9<br>13<br>15 Dry 0.0   | No 14<br>15     | A SW                          | -Tan med-med. so<br>well graded. No   | arse salval  |                                       |

| L  | R              | Ad       | anci     | ing Op  | oporti        | IN       | ity               | Boring/Well #<br>Project:<br>Project #<br>Date | MW05<br>Lowery Tank Batter<br>034018010<br>4-18-18  | y                  |
|--|----------------|----------|----------|---|---------------|----------|-------------------|--|---|--------------------|
| Penetration<br>Resistance<br>Moisture                                      | Vapor<br>(nnm) | Staining | Sample # | Depth<br>(ft. bgs.)   | Sample<br>Run | Recovery | Soil/Rock<br>Type |  | ology/Remarks   | Well<br>Completion |
| 11<br>10<br>13<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10 |                | No<br>No |          | 15         16         17         18         19         20         21         22         23         24         25         26 |               | X        | SM<br>ML          |  | sand + sandy -<br>white mething.<br>one. No stain/edor<br>silt w/ sand. some<br>vio stain/oder<br>inswe<br>n. send w/ silt. Poorly<br>stain/oder. |                    |
| 677 Dr   | 0.0            | No       |          | 27<br>28<br>29<br>30<br>31<br>32<br>33<br>34<br>35<br>36<br>37  |               |          |                   |  | M. sand w/silt<br>Jo stain/odor<br>tw/fn.sand. No s/o<br>n sand w/st wo s/o<br>fn - med. sand.<br>Oxidation.<br>/odor.                            |                    |

|                           |                                  |                |          |                         |                                  |               |          |                   | Boring/Well #   | MW05  |                    |
|---------------------------|----------------------------------|----------------|----------|-------------------------|----------------------------------|---------------|----------|-------------------|---|---|--------------------|
|                           | 71                               | -              | Ad       | /anci                   | ίηα Οι                           | oporti        | In       | itv               | Project:  | Lowery Tank Batte<br>034018010  | гу                 |
|                           | 51                               |                | 7 101    | anor                    | ng op                            | -pord         |          | .,                | Project #<br>Date   | 4-18-18   |                    |
| Penetration<br>Resistance | Moisture<br>Content              | Vapor<br>(ppm) | Staining | Sample #                | Depth<br>(ft. bgs.)<br>37        | Sample<br>Run | Recovery | Soil/Rock<br>Type | Lith  | ology/Remarks   | Well<br>Completion |
| \$<br>\$<br>8             | V.<br>muist<br>wet<br>in<br>shoe | 50.2           | yes      | MW05<br>C40'<br>(13:30) | 38                               |               | X        | SM                | Lt. gray & br<br>fn-med same<br>Slight stain/o<br>odor is slight<br>hydro carbon, | unish gray silty<br>1. Non-cohesive.<br>olor. No sheen.<br>1. more organic thom<br>0r degraded He |                    |
| 644                       | wet                              | 1,742          | yes      |                         | 42<br>43<br>44<br>45<br>46       |               | X        | SP                | Dark gray.<br>poorly graded<br>and HC ool   | med. Fu. sard<br>Strong stalling<br>T. No sheen,  |                    |
| 4                         | SL.<br>Moist                     | 17.2           | No       |                         | 47<br>48<br>49<br>50<br>51       |               | X        | ML                | Dark brown<br>platy structure<br>2 oxidation.<br>No sta                           | Fundy silt. w/.some<br>twhite/gray mothle -<br>in/odor.   |                    |
| 4/8                       | wet                              | 12.1           | No       | MW05<br>@SS'<br>(14:00) | 52<br>53<br>54<br>55<br>56<br>57 |               | X        | SM                | Tan fn-mel<br>silty sound.<br>odor. Ne  | d I med-coarse<br>No starn or<br>sheen  |                    |
|                           |                                  |                |          |                         | 58                               | -             |          |                   |   |   |                    |

|  | C-A<br>An<br>An     |             |              |                                    |                                    |               |          |                   | 84<br>D<br>NG LOG/M  | 48 E. 2nd<br>urango, | Colorado 81301<br>NG WELL COMPL                            | ETION DI    | AGRAM                        |
|--|---------------------|-------------|--------------|------------------------------------|------------------------------------|---------------|----------|-------------------|--|----------------------|--|-------------|------------------------------|
|  |                     |             |              |                                    | nin allan                          |               | 2        | Boring/Wel        | M  | N06                  | Project:<br>Lower<br>Project Nunber:                       | y Tank Batt | ery                          |
| میں<br>میں میں میں میں<br>دروالی میں میں |                     |             |              | 511 - 51<br>(51) - 51<br>(51) - 51 |                                    | Surger 1      |          | Logged By:        |  | ns                   | Drilled By:  | 34018010    |                              |
| Elevation:                               | ~644                | 10          | Detector:    |                                    | PID                                | 2500.035      |          | Drilling Me       | Eric-Ca  |                      | Sampling Method:   | olit Spoon  |                              |
| Gravel Pac                               | 1                   |             | L            | 65-                                | 39'                                |               | -        | Seal:<br>Ben      |  | 7:37                 | Grout:   |             | 1-0                          |
| Casing Typ                               |                     |             |              | 95                                 |                                    |               |          | Diameter:         | the second s | ngth: 45             | Hole Diameter: 8   | Depti       | to Liquid:                   |
| Screen Type                              |                     |             |              | Slot:<br>0.0                       | 10"                                |               |          | Diameter:         | . Le<br>2"   | <sup>ngth:</sup> 15' |  | C Depti     | to Water:                    |
| Penetration<br>Resistance                | Moisture<br>Content | Vapor (ppm) | HC Staining? | Sample #                           | Depth<br>(ft. bgs.)                | Sample<br>Run | Recovery | Soil/Rock<br>Type |  | Litholog             | y/Remarks  | ~3          | stickup<br>wellt<br>npletion |
| 1<br>2<br>1<br>2<br>4                    | Đey<br>Dey          | 0.0         | No           |                                    | 0<br>1<br>2<br>3<br>4<br>5         |               | XX       | SW-<br>SM         | Horganti<br>No<br>12-7. Brown  | es. Loo              | Sand w/ silt<br>um. wellgraded<br>odov<br>and, trave silt. |             |                              |
| 65 9                                     | Dry                 | 0.0         | No           |                                    | 6<br>7<br>8<br>9<br>10<br>11<br>12 |               | X        | SM                | 4. Brow<br>sand.   | n silty<br>No i      | fnmed.<br>stain/odor.                                      |             |                              |
| 18                                       | Dry                 | 0.0         | No           |                                    | 13<br>14<br>15                     |               | X        | SM<br>ML          | SAA. N<br>Brown, 60  |                      | w/gravel.  |             |                              |

10.0

|                           | _                   |                |          |              |                                  |               |          |                   | Boring/Well #  | MWOG   |                    |
|---------------------------|---------------------|----------------|----------|--------------|----------------------------------|---------------|----------|-------------------|--|--|--------------------|
|                           | FTT                 |                | Adı      | <i>lanci</i> | ing Oj                           | nonti         | ini      | itv               | Project:   | Lowery Tank Batter   | у                  |
|                           | 51                  |                | 7 101 1  | unor         | ng or                            | pont          |          | <sup>cy</sup>     | Project #<br>Date  | 034018010  |                    |
| Penetration<br>Resistance | Moisture<br>Content | Vapor<br>(ppm) | Staining | Sample #     | Depth<br>(ft. bgs.)              | Sample<br>Run | Recovery | Soil/Rock<br>Type | Litho  | logy/Remarks   | Well<br>Completion |
|                           |                     |                |          |              | 15                               |               |          | MIC               | the second secon | silt w/gravel  |                    |
|                           |                     |                |          | ÷            | 16<br>17<br>18                   | -             |          | 1                 |  |  |                    |
| 11<br>20<br>22            | Dry                 | 0.0            | No       |              | 19<br>20<br>21<br>22             | -             | X        | ML                | 54A<br>Derker brown, sau<br>some compaction.   | ndy silly dense. Dry<br>No stain/odor<br>-   |                    |
| 8                         | SIHY.<br>Damp       | 0,5            | No       |              | 23<br>24<br>25<br>26             |               | X        | SW-<br>SM         | Lt. Brown, M<br>silt. Slightly o<br>Loose  | ned. sand, trace -<br>damp. No stain/odor.   |                    |
| 7912                      | Moist               | 0.1            | No       |              | 27<br>28<br>29<br>30<br>31       |               | X        | 5P-<br>5M         | Brown. FnM<br>Some leases of<br>slightly plastic.  | No stain/odor  |                    |
| 5<br>10<br>17             | Dry                 | 0.0            | No       |              | 32<br>33<br>34<br>35<br>36<br>37 | \$.<br>/81B.  | X        | SM<br>ML          | Multicolored, gray<br>Deuse: Non-ce  | stain/odor<br>, violet, olive, tan silt<br>shesue, non-plastice,<br>ure. No stain/odor |                    |

|            |                     | -              |          |            |                     | A COLOR OF A |                     |                   |                     | AAs In 1  |            |
|------------|---------------------|----------------|----------|------------|---------------------|---|---------------------|-------------------|---------------------|---|------------|
|            |                     |                |          |            |                     |   |                     |                   | Boring/Well #       | MWOG  |            |
|            | 7/                  |                | Ad       | vanci      | ina Oi              | oporti  | In                  | itv               | Project:            | Lowery Tank Batte<br>034018010                                    | ly         |
|            | T                   |                | 7101     |            |                     | point   | AT 11               | - )               | Project #           |   |            |
| 1 0 1      |                     |                |          | 1          | 1                   |   |                     |                   | Date                | 4-16-18   |            |
| Resistance | Moisture<br>Content | i) ir          | ng       | e #        | Donth               | Sample  | ery                 | ock<br>e          |                     |   | Well       |
| ista       | Dist                | Vapor<br>(ppm) | Staining | Sample #   | Depth<br>(ft. bgs.) |   | Recovery            | Soil/Rock<br>Type | Lithe               | ology/Remarks   | Completion |
| Res        | йŬ                  | N J            | Ste      | Sar        | (n. ogs.)           | Rull  | Rec                 | Soi<br>T          |                     |   | Comptetion |
| -+-        |                     |                |          |            | 37                  | 1   |                     |                   |                     |   |            |
|            |                     |                |          |            |                     | 11  |                     |                   |                     |   | 1/1 K      |
|            |                     |                |          |            | 38                  | f I   |                     |                   |                     |   |            |
|            |                     |                |          |            | -                   |   |                     |                   |                     |   |            |
|            |                     |                |          |            | 39                  |   |                     |                   |                     |   |            |
|            | n                   | 0              |          |            |                     |   |                     |                   | Lt. asayish red 1   | Fn-med. sand. Becoming<br>ted. into Lt. gray<br>thered sandstone. |            |
| /4"        | Dry                 | 0.0            | No       |            | 40                  |   | X                   | sW                | compacted / cemen   | ted. into Lt. gray.   |            |
|            |                     |                |          |            | -                   | -   |                     |                   | Fu med. wear        | thered sandstorie.  |            |
|            |                     |                |          |            | 41 -                | 4   |                     |                   | No stain/odor       |   |            |
|            |                     |                |          |            | 10                  | -   |                     |                   | 8                   |   | ·· = ·     |
|            | Í                   |                |          |            | 42                  | 4   |                     |                   |                     |   | + :-= '    |
|            |                     |                |          |            | 43                  | -   |                     |                   |                     | i i i i i i i i i i i i i i i i i i i                             | +, =.      |
|            |                     |                | e        | MW         |                     |   |                     |                   |                     | -   | F. E       |
|            |                     |                | No/      | 06         | 44                  |   |                     |                   | 1 1                 | 0   | TIEL 1     |
| Z I        |                     |                | 5) jodor | @45'       |                     |   |                     | CINI-SAA          | some slough         | med sand, with.<br>Medium.<br>Not<br>staining, minor odor.        |            |
| 4"         | Dry                 | 149            | odoc     | (15:00)    | 45                  | -   | $\overline{\times}$ | 2 M-21            | Lt. gray/red th.    | Medium. Not   | 7          |
| <u> </u>   | ·                   |                | -        |            |                     |   | -                   | ML                | multicoloren sa     | ndy sitt. Dense 101 -   |            |
|            |                     |                |          |            | 46                  |   |                     |                   | cemented. No        | staining, minor odor.   |            |
|            |                     |                |          |            | -                   | -   |                     |                   |                     |   |            |
| _          |                     |                |          |            | 47 _                | -   |                     |                   |                     | -   |            |
|            |                     |                |          |            | 48                  | -   |                     |                   |                     |   | - 2 2 4    |
| -          |                     |                |          |            | 40 -                |   |                     |                   |                     | -   | - 1 - 1    |
| -          |                     |                |          |            | 49                  | ·   |                     |                   |                     |   | 1          |
|            |                     | [              |          |            | -                   | 1   |                     |                   |                     | -   | ·. [-].    |
| 4"         | Dry                 | 3.0            | No       |            | 50                  |   | $\geq$              | SW-SM             | Lt. gray frimed     | . sand stone, tr. silt.<br>lense, cemented.                       | 12:        |
|            | 1.1                 |                |          |            |                     |   |                     |                   | No stain. Med. 0    | lense, sementer.  |            |
| _          |                     |                |          |            | 51                  | 4   |                     |                   |                     | -   | · · ·      |
| _          |                     |                |          |            | 50                  |   |                     |                   |                     |   | (          |
| _          |                     |                |          |            | 52                  | -   |                     |                   |                     | -   | - ( -      |
|            |                     |                |          |            | 53                  | ·   |                     |                   |                     | Gen al  | int-ti     |
|            |                     |                | -        | MW         | when-               |   | -                   |                   |                     |   | T. [-]     |
|            |                     |                |          | 06         | 54                  |   |                     |                   |                     |   | :          |
|            |                     |                | No       | 06<br>@55' | -                   |   |                     |                   | SAA 1" lance        | of med. p.gradedsand,   |            |
| /" c       | Dry                 | Z.6            | 10 0     | (15:30)    | 55                  | 1   | $\times$            | SP                | sitily moist. No st | - of coarse pyradoulsand, -<br>tain/odor.                         | LEI        |
|            | NOISI               |                |          |            | 1                   |   |                     |                   | (                   |   | 1 1        |
|            |                     |                |          |            | 56                  |   |                     |                   |                     | _   |            |
| _          |                     |                |          |            | 57 H                |   |                     |                   |                     |   | F. S.      |
|            |                     |                |          |            | 57                  | - 1   |                     |                   |                     | -   | +; ``      |
|            |                     |                |          |            | 58                  |   |                     |                   | CAA IL F            | -med sound str. tr  | · ( «`     |
| - ,        |                     |                | Na       |            |                     | 1   |                     | X                 | SAM IT. gray th     | n-med. sand stn. tr.  |            |
|            | Dry                 | 1.2            |          |            | 59                  |   |                     |                   | SIII. 108 STA       | NJODOF,   |            |
| 1"         |                     |                |          |            |                     |   | -                   | -38/1             |                     |   |            |
|            | Dry                 | ID             | No       |            | 60                  | T   | ×1                  | SP                | SAA. S.Stn. 1       | to she ha   |            |
| 1"         |                     |                |          |            | 14                  | 1   | FI                  | - 1               |                     |   |            |

|   |          |   |   |    |             |                |                        |   |                 |             |        |         |              |          |           | salu" Din |                |        |       |       | 50/4" Dry      |                   |       |                         |             |     | Penetration<br>Resistance<br>Moisture<br>Content |         |                       |                             |
|---|----------|---|---|----|-------------|----------------|------------------------|---|-----------------|-------------|--------|---------|--------------|----------|-----------|-----------|----------------|--------|-------|-------|----------------|-------------------|-------|-------------------------|-------------|-----|--|---------|-----------------------|-----------------------------|
|   |          |   |   |    |             |                |                        |   |                 |             |        |         |              |          | -         | 1,0       |                |        |       |       | 102            |                   |       |                         |             |     | Vapor<br>(ppm)                                   |         |                       |                             |
|   |          |   |   |    |             |                |                        |   |                 |             |        |         |              |          |           | No        |                |        |       |       | s.             |                   |       |                         |             |     | Staining   |         | Adv                   | V                           |
|   |          |   |   |    |             |                |                        |   |                 |             |        |         |              |          |           |           |                |        |       |       |                |                   |       |                         |             |     | Sample #   |         | anci                  |                             |
| A | <b>2</b> | 8 |   | ×. | 22<br>22    | - st           | <u>an</u>              | } | 液               | 10          | 8      | 84      | 1            |          | -Co.      | 205, ~    | - m.m.         | 20 CB- | 2262- | BIC1- | 2060_          | - 650             | WBS8- | 10-42 B                 | 100<br>- 32 | 55  | Depth<br>(ft. bgs.)                              |         | ng Op                 | ,                           |
|   |          |   | · |    |             |                |                        |   |                 |             |        |         |              | <u>.</u> |           |           |                |        |       |       |                |                   |       |                         |             |     | Sample<br>Run                                    | -       | Advancing Opportunity |                             |
| - |          |   |   |    |             |                |                        |   |                 |             |        |         |              |          | 3         | AS &      |                |        |       |       | <b>JS X</b>    |                   |       |                         |             | S.P | Recovery<br>Soil/Rock                            |         | inity                 | :                           |
|   |          |   |   |    |             | -              |                        |   |                 |             |        |         |              |          |           | -         |                |        |       |       |                |                   |       |                         | _           | -0  | Туре   |         |                       |                             |
|   |          |   |   |    | ing Usiked. | in well.       | 1- +1/4                |   | nuerniaht.      | w/ some sum |        | Well se | 111 -+ @ 56' | T        | INDERS ON | Med. S.St | SAA. Lt. 0     |        |       |       | tr. siH . N    |                   |       |                         |             |     | Litho  | Date    | Project #             | Boring/Well #               |
|   |          |   |   |    |             | ( completion ) | more in xaudity - Eilh |   |                 | 1 Hraite    | Screen |         | -056'        | en en    |           | 1 Mt      | from tive toes |        | . 1 . |       | No stain lodor | for-med. sand str |       |                         | . 1         |     | Lithology/Remarks                                | 4-16-18 | 034018010             | MWD6<br>Lowery Tank Battery |
|   | -1-      | 1 | · | -  | 1 +         | 1              | <u></u> -}-            |   | <del> 1</del> - |             | - -+   | -       |              | + +      |           |           | + +            |        |       |       |                | - -1              |       | <b>└</b> ── <b> </b> ── | •           |     | Well<br>Completion                               |         |                       | v                           |

| Elevation:<br>$\sim 6.440^{\circ}$<br>Gravel Pack:<br>10-20 Silica Sand<br>Casing Type:<br>Schedule 40 PVC<br>Sereen Type:<br>Schedule 40 PVC | Detector:<br>PID<br>555 ° - 2<br>Slot:<br>0.010" | 38' | Boring/Well<br>Date:<br>Logged By:<br>Drilling Met<br>Seal:<br>Bent<br>Diameter:<br>2<br>Diameter: | HW07<br>4-17-18<br>Dawny Burns<br>Eric Carroll  | Project:<br>Project:<br>Project Number:<br>0340<br>Drilled By:<br>Envi<br>Sampling Method:<br>Split | TION DIAGRAM<br>Cank Battery<br>D18010<br>ro-Drill<br>Spoon<br>36' - O'<br>coment starry<br>Depth to Unquid:<br>Depth to Water:<br>$\sim 45'$ |
|---|--|-----|--|---|---|---|
| Penetration<br>Resistance<br>Moisture<br>Content<br>Vapor (ppm)   | HC Staining?<br>Sample #<br>taining?             |     | Soil/Rock<br>Type  | Lithology/Ren   | narks   | ~3' stick wp<br>wen<br>Completion   |
| 4<br>5<br>6<br>7<br>7<br>0.0<br>7<br>0.0<br>9<br>0.0  | 6<br>7<br>8                                      |     | SM   | Brown fn-med sa<br>Loave w/ organi<br>No stain/odo<br>H. Brown fn. sil<br>No stain/odos.<br>LA Brownish ton. v<br>trace sith. No s.<br>Foorly groded. | ty sand.<br>Dry<br>fn. sand.  |   |

|  | -              | 0        |          |  |               | Married Married |                   | Boring/Well #   | MW07  |                    |
|--|----------------|----------|----------|--|---------------|-----------------|-------------------|---|---|--------------------|
|  |                | A.d.     | ionoi    | na Or  | nort          |                 |                   | Project:  | Lowery Tank Batter  | y I                |
|  | 2              | AU       | allCl    | ing Op                                       | ροπι          | 1111            | ly                | Project #   | 034018010   |                    |
|  |                |          |          |  |               |                 |                   | Date  | 4-17-18 / 44  | 18-18              |
| Penetration<br>Resistance<br>Moisture<br>Content | Vapor<br>(ppm) | Staining | Sample # | Depth<br>(ft. bgs.)                          | Sample<br>Run | Recovery        | Soil/Rock<br>Type | Litho   | ology/Remarks   | Well<br>Completion |
| 62<br>13<br>12<br>Dry                            | 0.0            | No       | -        | 15<br>16<br>17<br>18<br>19<br>20<br>21<br>22 |               | X               | SW.               | Brown + tan<br>sand w/gran<br>No stain/od                     | medium to course<br>uel lense, 6"<br>lor. Some Quidation      |                    |
| 8<br>9<br>13<br>Diy                              | 0.0            | No       |          | 23<br>24<br>25<br>26<br>27                   |               | X               | SW                | SAA. Birou<br>Med-coars                                       | e sand. No stain/-  |                    |
| 12<br>12<br>10                                   | 0.0            | No       | e        | 27<br>28<br>29<br>30<br>31                   |               | X               | SW                |   | sound. No stainfodor<br>ghtly cement 5.5tn.<br>End of 4/17/18 |                    |
| 10<br>5 Dey<br>6                                 | 0.0            | No       |          | 32<br>33<br>34<br>35<br>36<br>37             |               | X               | SW                | Begivi 4/18/15<br>S.A.A. Tan. N<br>Some smell cem<br>No stain | ved - med. Fin sand<br>exited oxidation.                      |                    |

|                           |                     |                |          |                             |            |        |          |                                       | Doring/Wall #             | A).(0."7  |            |
|---------------------------|---------------------|----------------|----------|-----------------------------|------------|--------|----------|---------------------------------------|---------------------------|---|------------|
|                           | 75                  | 1              | 7.       |                             |            |        |          |                                       | Boring/Well #<br>Project: | NW07<br>Lowery Tank Batt  | erv        |
|                           |                     | -              | Ad       | vanci                       | ing O      | oporti | uni      | tv                                    | Project #                 | 034018010   |            |
|                           |                     | /              |          |                             |            |        |          | -                                     | Date                      | 4-17-18 / 4-18  | -18        |
| ation                     | ture                | or<br>n)       | ing      | le #                        | Depth      | Sample | /ery     | ock                                   |                           | 1   | Well       |
| Penetration<br>Resistance | Moisture<br>Content | Vapor<br>(ppm) | Staining | Sample #                    | (ft. bgs.) |        | Recovery | Soil/Rock<br>Type                     | Lithe                     | ology/Remarks   | Completion |
|                           |                     |                |          |                             | 37         |        |          | 01                                    |                           |   |            |
|                           |                     |                |          |                             | 57         |        |          |                                       |                           |   | VIII VIII  |
|                           | -                   |                |          |                             | 38         | -      |          |                                       | T                         |   |            |
| 7                         |                     | 0.0            | No       |                             | 39         | -      | VI       | SW                                    | I an, mean                | in sand. Well graded<br>lodor   |            |
| 77                        | Dry                 | 0.0            | NO       |                             | 40         | -      | $\wedge$ |                                       | No stain,                 | / odor  |            |
|                           | -                   |                |          | -4                          | 41         | -      |          |                                       |                           |   |            |
|                           | 1                   |                |          |                             |            | -      |          |                                       |                           |   | THEN       |
|                           |                     |                |          |                             | 42         | -      |          |                                       |                           |   | 1:= = ::   |
|                           | {                   |                |          | Mul                         | 43         |        | -        | a a a a a a a a a a a a a a a a a a a | -Dark gray                | med sand, well graded   | +; = .     |
| 7                         | Wet                 | 1469           | yes      | MW<br>07<br>(045)<br>(0930) | . 44       |        | VI       | SW                                    | Moderate sta              | in, heavy odor.   | 1/1 E 🔍    |
| 7                         |                     |                | ·        | (09:30)                     | 45.        | ·      | A        |                                       | No sheen.                 | M   | C = w      |
|                           |                     |                |          |                             | 46         | .      |          |                                       |                           | G-W   | - 14 - 14  |
|                           |                     |                |          |                             | 47         | .      |          |                                       |                           |   |            |
|                           |                     |                |          |                             | 48         | .      |          |                                       |                           |   |            |
|                           |                     |                |          |                             | 1          |        | 7        |                                       | Dourk brown               | silt, dense, non-plastic  | Ť E V      |
| 7                         | s1.<br>Moist        | 5,4            | NO       |                             | 49         |        | XI       | ML                                    | or echesivo, some         | silt, dense, non-platic<br>Mottle (white tyrig)<br>pots. No stain/odor, |            |
| 10                        | MOIST               | ·              | 1        |                             | 50         | 4      | 1        |                                       | and of the them s         | ports. Ive stain odor,  | 1: E :     |
|                           |                     |                |          |                             | 51         |        |          |                                       |                           |   |            |
|                           |                     |                |          |                             | 52         |        |          |                                       |                           |   | - : E      |
|                           |                     |                |          |                             | 53         |        |          |                                       |                           | imed.   | -: E .;    |
| 9                         |                     |                | 1        | MW                          | T          |        |          |                                       | Tan, orangish             | brown fn. sitty<br>graded. No stain<br>io sheen.                        |            |
| 17                        | wet                 | 3.1            | No       | 07<br>055                   | 54         |        | X        | SM                                    | sound, well               | graded. No stain  |            |
|                           |                     |                |          | (09:45)                     | 55         |        | 1        |                                       | ot odos. N                | io sheen.   |            |
|                           |                     |                |          |                             | 56         |        |          |                                       | Set nel                   | @ 55'   | ‡          |
|                           |                     |                |          |                             | 57         |        |          |                                       | 1                         | s' screen.  | ‡          |
|                           |                     |                |          |                             | 58         |        |          |                                       | 1                         | 5 SCIEEN.   | +          |
|                           |                     |                |          |                             | 59         |        |          |                                       |                           |   | Ŧl         |
|                           |                     |                |          |                             |            |        |          |                                       |                           |   |            |

| Gravel Pac<br>10-2<br>Casing Typ<br>Sche<br>Screen Typ | 0 Silica             | Sand<br>PVC | Belector:    | Slot:    | PID<br>'- 38                    |               |          | Date:<br>Date:<br>Logged By:<br>Drilling Me<br>Seal:<br>Bewf0<br>Diameter:<br>Diameter: | NG LOG/<br>I Number: | 848 E.<br>Durang | oring w<br>08<br>8         | rado 81301<br>ELL COMPLET<br>Project:<br>Project Number:<br>0340<br>Drilled By:<br>Envin<br>Sampling Method: | Depth to Liquid:                |
|--|----------------------|-------------|--------------|----------|---------------------------------|---------------|----------|---|----------------------|------------------|----------------------------|--|---------------------------------|
| Penetration<br>Resistance                              | Moisture"<br>Content | Vapor (ppm) | HC Staining? | Sample # | Depth<br>(ft. bgs.)<br>0        | Sample<br>Run | Recovery | Soil/Rock<br>Type   |                      | Litl             | nology/Ren                 | narks  | n3'stickup<br>wen<br>Completion |
| 7  | Dey                  | 0.0         | No           |          | 1<br>2<br>3<br>4<br>5<br>6<br>7 |               | X        | SP-<br>SM   | Brown<br>w/si<br>No  | H. O<br>Stain    | -fn to<br>rganics<br>/oclo | fn. sand   |                                 |
| 7 6 5  | Pry                  | 0.0         | No           |          | 8<br>9<br>10<br>11<br>12<br>13  |               | X        | SW  | Tan<br>Sand          | med<br>N         | , wel                      | l graded<br>2 Joelor.  |                                 |
| 4778   | Dry                  | 0.0         | No           |          | 13<br>14<br>15                  |               | X        | sw<br>SP  | SAA.<br>Tayan        | No<br>med-f      | stain/<br>m. 100<br>silt.  | edor<br>Ny graded<br>Ny stoinfode  |                                 |

|                             | 5                     |                | Adu      | vanci    | ing Op  | oportu        | INI      | ity               | Boring/Well #<br>Project:<br>Project #<br>Date        | MW<br>Lowery<br>034018010<br>4-25-18  | TB                 |
|-----------------------------|-----------------------|----------------|----------|----------|---|---------------|----------|-------------------|---|---|--------------------|
| Penetration<br>Resistance   | Moisture<br>Content   | Vapor<br>(ppm) | Staining | Sample # | Depth<br>(ft. bgs.)   | Sample<br>Run | Recovery | Soil/Rock<br>Type | Litho   | ology/Remarks   | Well<br>Completion |
| 7<br>7<br>8<br>8<br>8<br>11 | Dry                   |                | No       |          | 15         16         17         18         19         20         21         22         23         24         25         26 |               | X        |                   |   | n medium/med-<br>tr. silt. well<br>> stain/odor<br>Brown med.<br>praded.<br>praded. |                    |
| 9                           | Dry                   | 0.0            | Nə       |          | 27<br>28<br>29<br>30<br>31  |               | X        | SW                | SAA. Brown<br>graded sand.<br>No stam/o               | med. well<br>Trace sitt.<br>dor.  |                    |
| 8<br>7<br>10                | V,<br>Slight<br>Woist | 0.0            | No       |          | 32<br>33<br>34<br>35<br>36<br>37  |               | (        | SW-<br>SM         | Brown meet-<br>well graded<br>some oxidat<br>or odor, | fn Lond<br>sand w/silt.<br>tou. No stuin  |                    |

|                           |                     |                |           |                    |                                  | Station in a state |          |                   |  |   |                    |
|---------------------------|---------------------|----------------|-----------|--------------------|----------------------------------|--------------------|----------|-------------------|--|---|--------------------|
|                           |                     |                | 2         |                    |                                  |                    |          |                   | Boring/Well #  | MWOS  |                    |
|                           | M                   |                | Ad        | lana               | ing O                            | nort               |          | it.               | Project:   | Lowery TB   |                    |
|                           |                     | -              | AU        | vanci              | ing Op                           | oporti             | un       | ny                | Project #  | 034018010   |                    |
|                           |                     |                |           |                    |                                  |                    |          |                   | Date   | 4-25-18   |                    |
| Penetration<br>Resistance | Moisture<br>Content | Vapor<br>(ppm) | Staining  | Sample #           | Depth<br>(ft. bgs.)              | -                  | Recovery | Soil/Rock<br>Type | Lithe  | ology/Remarks   | Well<br>Completion |
|                           |                     |                |           |                    | 37                               |                    | -        |                   |  |   | VIII YA            |
| 4<br>5<br>8               | SL.<br>Moist        | 1.9            | No        |                    | 38<br>39<br>40<br>41             |                    | X        | SW                | Lt. orangist<br>oxvidation.<br>sand. Tra<br>or odor, s                           | med - med. In<br>ce sill. No stadu<br>slight moist.   |                    |
| 3<br>6<br>7               | moist               | 1.6            | ND        | NW 093<br>(12:45)  | 42<br>43<br>44<br>45<br>46       |                    | X        | SW                | Brown me<br>Trace silt.<br>Moist.  | d. well graded sand<br>with exidetion<br>Vo stain/oder.   | 1111               |
| 3                         | wet                 | 1,108          | 8"<br>Yes | -                  | 47<br>48<br>49<br>50<br>51       |                    | X        | SW -              | Moderate s   | medicoarse well<br>w/ oxidation. No slo<br>coarse w.gr. sand<br>tain/odor. 8"thick<br>roon. No sheen.   |                    |
| 4 7                       | wet<br>sl.<br>moist | 10.8           | No        | NW<br>08<br>(3.00) | 52<br>53<br>54<br>55<br>56<br>57 |                    | X        | SW                | Dark growish<br>some coal +<br>Low plasticity, slig<br>NO octor, seem<br>Set web | med. well graded<br>n, slight odor. Wet.<br>brown sitt w/ fn. so<br>exidations earns/pockets.<br>hty moist. No stain<br>rs highly impermeable.<br>@ 55' |                    |
|                           |                     |                |           |                    | 58                               |                    |          |                   | 15'  | screen,   | +                  |

|  |                             |             |                       |                   | 55  | $\sum_{i=1}^{n}$      | $\left< \int_{\mathcal{T}} \int_{\mathcal{T}$ | BORIN             | NG LOO    | 848<br>Dui  | 8 E. 2nd<br>rango, | Colora        | inity<br>ado 81301<br>LL COMPI                         |  | N DIA | AGRA                    |
|--|-----------------------------|-------------|-----------------------|-------------------|---|-----------------------|--|-------------------|-----------|-------------|--------------------|---------------|--|--|-------|-------------------------|
|  |                             |             | f- s                  |                   |   | n Arafia<br>In Arafia |  | Boring/Wel        | l Number: | M           | W09                | F             | Project:<br>Lowe                                       | ry Tank                                      | Batte | ery                     |
| 2014<br>2014   |                             |             | and the second second | N                 |   |                       |  | Date:             | 4-        | -24-        | <i>c</i> 1         | F             | roject Number:   | 340180                                       | 10    |                         |
| an a   | <u>1</u>                    | T,          | r I                   | Sec.              |   |                       |  | Logged By:        | D. 1      | Burn        | 5                  | I             | Drilled By:<br>E                                       | enviro D                                     | rill  |                         |
| Elevation:   | 2644                        | 10'         | Detector:             | 08049780-130 - Ye | PID   |                       | NG ALCO  | Drilling Me       | thod:     | llow St     |                    | S             | ampling Method:  | plit Spo                                     |       |                         |
| Gravel Pas   | <sup>ck:</sup><br>20 Silica | Sand        |                       | 55                | -33'  |                       |  | Seal:<br>Berre    |           | Adda Brazow | -31'               | C             | Front:   | ment   | clu   | 31-0                    |
| Casing Ty  |                             |             |                       |                   |   | 1.000                 |  | Diameter:         | 2"        | Lengt       |                    | ( F           | Iole Diameter:   | u  | Depth | to Liquid               |
| Screen Ty  |                             |             |                       | Slot:             | 10"   |                       |  | Diameter:         | 2"        | Lengt       | 1 -                |               |  |  |       | to Water                |
| Penetration<br>Resistance  | Moisture<br>Content         | Vapor (ppm) | HC Staining?          | Sample #          | Depth<br>(ft. bgs.)                                   | Sample<br>Run         | Recovery   | Soil/Rock<br>Type |           |             |                    | gy/Rema       |  |  | ~3' : | stick<br>well<br>pletic |
| 13 13 13<br>13 13<br>13<br>13<br>13<br>13<br>13<br>13<br>13<br>13<br>13<br>13<br>13<br>13<br>1 | Dry<br>Dry<br>Dry           | 0.0         | No                    |                   | $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ |                       | XX   | SP                | Brow      |             | med.<br>No         | fn.<br>stain, | net fn-<br>d.<br>poorly gr<br>lodor<br>med<br>stain/or | racles + + + + + + + + + + + + + + + + + + + |       |                         |

| <b></b>                   |          |                |          |          |            |        |                |                   |                  |   |              |
|---------------------------|----------|----------------|----------|----------|------------|--------|----------------|-------------------|------------------|---|--------------|
|                           |          | 1              |          |          |            |        |                |                   | Boring/Well #    | MW09  |              |
|                           | 171      |                | Adi      | ianci    | ing Op     | porti  | Ini            | itv               | Project:         | Lowery TB   |              |
|                           |          |                | 1 101    |          |            |        |                | -y                | Project #        | 03401840  |              |
| En                        | T        |                |          | · · · ·  | 1          | 1      |                |                   | Date             | 4-24-18   |              |
| Penetration<br>Resistance | Moisture | 5 3            | Staining | Sample # | Depth      | Sample | Recovery       | Soil/Rock<br>Type |                  |   | Well         |
| etra                      | Moisture | Vapor<br>(ppm) | aini     | ldu      | (ft. bgs.) | -      | COV            | l/R<br>lyp        | Litho            | ology/Remarks   | Completion   |
| Pen                       | Ž Ŭ      |                | St       | Sa       | (11. 053.) | Itun   | Re             | Soi               |                  |   | Completion   |
|                           |          |                |          |          | 15         | 11     |                |                   |                  |   | 194 F 2,     |
|                           |          |                |          |          |            |        |                | 58                |                  |   |              |
|                           |          |                |          |          | 16         |        |                |                   |                  | • •   |              |
|                           |          | 5              | 3        |          |            |        |                |                   |                  |   |              |
|                           |          |                |          |          | 17         |        |                |                   |                  | · .   | $\mathbf{F}$ |
|                           | -        |                |          |          |            |        |                |                   | ¥.               |   |              |
|                           | -        |                |          |          | 18 _       |        |                |                   |                  | · · · · · · · · · · · · · · · · · · ·   |              |
| 9                         |          |                |          |          | 19         | -      |                |                   | Tan well ared    | ed medrum sand.   |              |
| 8                         | Dry      | 00             | No.      |          |            | H      | $\vee$         | 51.1              | T THE CARD       | avidation -   | f            |
| 10                        | 12.7     | 1.0            | 140      |          | 20         |        | $\Lambda$      | 0.00              | IF SIF. DOMUC    | ed medrum sound:<br>oxidation.<br>ain/odor.   |              |
|                           | ]        |                |          |          |            |        | - 1            |                   | No 3             |   |              |
|                           | ŀ.       |                |          |          | 21         |        |                |                   | 2                |   |              |
|                           | 4        |                |          |          | 1          | -      |                |                   | 8 <b>x</b>       |   |              |
|                           | -        |                |          |          | 22         | -      |                |                   |                  |   |              |
|                           | -        |                |          |          | 22         | - 1    |                |                   |                  | -   |              |
| 7                         |          |                |          |          | 23         |        |                | C. 1              | SAA              | 1.11 -  |              |
| 8                         | n.       | 0.0            | No       |          | 24         | -      | $\backslash I$ | SW                | No               | stain/odor,   |              |
| 77-00 00                  | ned      | 10.0           |          |          |            | 1      | ΧI             |                   |                  | stain/odor,<br>ly graded medium.fn.<br>No stain/odor.   |              |
|                           | 1        |                |          |          | 25         |        |                | SP-SM             | LA Brown POOT    | ly graded medium th.  |              |
|                           |          |                |          | Î        |            |        | _              |                   | sand w/ silt.    | No stain odor.  |              |
|                           |          |                | . 53     |          | 26         | 4      |                |                   |                  | -   |              |
| · · · ·                   |          |                |          |          |            | .      |                |                   |                  | -   |              |
|                           |          |                |          | 1        | 27         | -      |                |                   |                  |   |              |
|                           |          |                |          |          | 28         | ·      |                |                   |                  |   |              |
|                           |          |                |          |          | 20 +       |        | port           |                   |                  |   |              |
| 14                        | 0        |                |          |          | 29         | 1      | $\nabla$       | SM                | Brown silty      | med. sana / .   |              |
| 14<br>15<br>22            | Dry      | 0.0            | No       |          | 1          | ]      | XI             |                   | wolle toxid      | med. sand w.  |              |
| 22                        |          |                |          |          | 30         |        |                | ML                | Dark Brown       | med scindy silt.<br>mottle + oxioletory   |              |
|                           | -        |                |          |          | 21 +       |        |                |                   | white+ Black, v  | nottlet oxidetary   |              |
|                           |          |                |          | {        | 31         | 4      |                |                   | Nostanle         | a dest,   |              |
|                           |          |                |          |          | 20 H       |        |                |                   | •                |   |              |
|                           |          |                |          |          | 32         |        |                |                   |                  | -   |              |
|                           |          |                |          |          | 33         |        |                |                   |                  | 1   |              |
| 9                         |          |                |          |          | -          |        |                |                   | CAA NO           | and for condusilt   | ····         |
| 9<br>18<br>17             | •        |                |          |          | 34         | I K    | 7              | ML                | S.4A - DK Brwi   | n med fn sondy silt<br>Vo s/o. + oxid.  |              |
| 17                        | Dry      | 0.0            | No       |          | Ī          | ]      | XL             | OD CAA            | w/ morring .!    | Ve Sto. V OMOC.   |              |
|                           | 1        |                |          |          | 35         | /      | 1              | SY-SM             | Lt gray ish brow | on toxidized sand w/sitt.   |              |
|                           |          |                |          |          |            | 9      |                |                   | fu-medta :       | sand w/ sitt.   | (-= /·       |
|                           |          |                |          |          | 36         |        |                |                   | No stain         | Voder, -  |              |
|                           |          |                |          |          | 37         |        |                |                   | 1                | , ,   | · · E :      |
| · · · ·                   |          |                |          |          | 51         |        |                |                   |                  |   |              |
|                           |          |                |          |          |            |        |                |                   |                  | And a second statement of the |              |

|   | $\mathbf{D}$ |                  |            |        |                |                   | Boring/Well #     | MWO9   |   |
|---|--------------|------------------|------------|--------|----------------|-------------------|-------------------|--|---|
|   | Ad           | vanci            | ina Ol     | porti  | uni            | tv                | Project:          | Lowery TB<br>034018010                           |   |
|   |              |                  | 5-1        | - 1    |                | .,                | Project #<br>Date | 4-24-18  |   |
| E el a  | 1            | -                | I          |        |                | ~                 | Date              | 9-21-10  |   |
| Penetration<br>Resistance<br>Moisture<br>Content<br>Vapor | (ppm)        | Sample #         | Depth      | Sample | Recovery       | Soil/Rock<br>Type | ]                 |  | Well                                    |
| netrati<br>esistan<br>Aoistur<br>Conten<br>Vapor          | tain         | dun              | (ft. bgs.) |        | CO             | Typ               | Litho             | ology/Remarks                                    | Completion                              |
| Per Re  | S            | Š                |            |        | R              | So                |                   |  |   |
|   |              |                  | 37         |        |                |                   |                   |  | 4                                       |
| ·   |              |                  | -          | ļ      |                |                   |                   | n med. wellgrad.<br>e silt. Sl. moist.<br>lodor. | = :                                     |
|   |              |                  | . 38 _     |        | -              |                   | Paddish brow      | n med. well grad-                                |   |
| - SI. 1   | 5 NO         |                  | 39         | +1     | $\mathcal{M}$  | SW-               | eand w/ son       | e sitt. St. moist                                |   |
| 6 SI.<br>77 Moist 0.1                                     |              |                  | -          | H      | X              | SW-<br>SM         | Schoe co, an      | / /  |   |
|   |              |                  | 40         |        | $\square$      | 2.1               | No stan           | / odor.  |   |
|   |              |                  | -          | -      |                |                   |                   |  |   |
|   |              |                  | 41 _       | H      |                |                   |                   | -  |   |
|   |              |                  | 42         | -      |                |                   |                   | -  | · = ;                                   |
|   |              |                  |            | H sal  |                |                   |                   | 4  |   |
|   |              |                  | 43         |        |                |                   |                   | 1  |   |
|   |              |                  |            |        |                |                   | Brownish gray     | to derk gray                                     | = |
| 5<br>6 Wet 1,47   | 5 00         |                  | 44         | H î    | $\backslash I$ | SW!               | vellgraded        | to derk gray<br>med. scind.<br>tain/ador.        |   |
| 6 wet 1,47  | 3 yes        |                  | 45         | -      | ΧL             |                   | Moderate 5        | tein lodor.                                      | 1 = in                                  |
|   | 1            |                  |            |        | - 1            |                   |                   | GW   | -                                       |
|   |              |                  | 46 ]       |        |                |                   |                   | 6 m 1  |   |
|   |              |                  |            | -      |                |                   |                   | _  | : = *                                   |
|   |              |                  | 47         | -      |                |                   |                   | -  |   |
|   |              |                  | 48         | -)     |                |                   |                   | +  |   |
|   |              |                  | 1          |        |                |                   | . /.              | uk brown silt.<br>No stain/oclor.                |   |
| the st. d.  | No           |                  | 49         | -      | AD             | 1                 | Harayish / do     | ark brown silt                                   | "                                       |
| 6/6" st. 8.2  |              |                  | 50         |        |                | ML                | w/tr. sand.       | No stain oclor.                                  | 1 - L                                   |
|   |              | · -              | - 50       |        | 2              |                   | V. dense          | . +  |   |
|   |              |                  | 51         | .      |                |                   |                   | Ť  | 1 - 1                                   |
|   |              |                  | 1          | ] [    |                |                   |                   | 1  |   |
|   |              |                  | 52         | 4      |                |                   |                   | -  |   |
|   |              |                  | 53         | ·      |                |                   |                   | +  | ※ 는 것                                   |
|   |              | AAW?             |            | ┥───┤  |                |                   |                   | +  | 1 = 1                                   |
| 5 meist   |              | MW<br>09<br>@55' | 54         |        |                |                   | 11 Bown/ta        | n fri-medfin                                     | · = -                                   |
| S Wet   | No           |                  | 1          | 1 F    | X1             | SM                | sitte sind        | mell asaded.                                     |   |
| -8 wel  | 1            | (14:00)          | 55         |        | 4              |                   | Same avidet       | well graded.                                     |   |
|   | 1            |                  | 50         |        |                |                   | MARE OPPOSIT      |  | r                                       |
|   |              |                  | 56         |        |                |                   | ) 1)              | set @ 55'  |   |
|   |              |                  | 57         |        |                |                   | wen               | sel Cos  |   |
|   |              |                  | 1          | 1      |                |                   | 0                 | screen   |   |
|   |              |                  | 58 I       | 4      |                |                   | 10                | screen   |   |
|   |              |                  | 59         |        |                |                   |                   | +  |   |
|   |              |                  |            |        |                |                   |                   |  |   |

| Elevation:<br>$\sim_{\mathcal{G}} \mathcal{G} \mathcal{G} \mathcal{G} \mathcal{G} \mathcal{G}$<br>Gravel Pack:<br><u>10-20 Silica Sand</u><br>Casing Type:<br><u>Schedule 40 PVC</u><br>Screen Type:<br>Schedule 40 PVC | Detector:<br>PID<br>50<br>Slot:<br>0.010"   |               | Boring/Well<br>Date:<br>Logged By:<br>Drilling Met<br>Seal:<br>Ben<br>Diameter:<br>Diameter: | MW10<br>4-25-18<br>Being Burns<br>Bric Cartoll   | rado 81301                 | k Battery<br>3010<br>Drill<br>2000 |
|---|---|---------------|--|--|----------------------------|------------------------------------|
| Penetration<br>Resistance<br>Moisture<br>Content<br>Vapor (ppm)   | Depth<br>Band Die<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Contraction<br>Con | Sample<br>Run | Soil/Rock<br>Type  | Lithology/Ren  | vell setle<br>48'<br>harks | Styckw<br>Well<br>Completion       |
| 3<br>4<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0  | NO 4<br>1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10<br>11<br>12<br>13<br>14<br>15   |               | SM   | Lt. Brown / tan my<br>Poorly graded w/<br>No stain/odor.<br>Brown fn. silty s<br>Non-plastic/cohesin<br>stain/odor.<br>Tan fn-med.fn<br>sand. No stain/n | e. No                      |                                    |

1.

|  |                | 2        |          |  |               |          |                       | Boring/Well #   | MWID   |                    |
|--|----------------|----------|----------|--|---------------|----------|-----------------------|---|--|--------------------|
|  |                | Ad       | ianci    | ina Ni   | oportu        | ini      | itv                   | Project:  | Lowery Tank Batter   | y                  |
|  | 4              | nui      | anoi     | ng op  | ροπι          | 41 11    | <i>ly</i>             | Project #   | 034018010  |                    |
| E el o   | L              | 1        | -        | 1  |               |          |                       | Date  | 4-25-18  |                    |
| Penetration<br>Resistance<br>Moisture<br>Content | Vapor<br>(ppm) | Staining | Sample # | (ft. bgs.)   | Sample<br>Run | Recovery | Soil/Rock<br>Type     | Litho   | ology/Remarks  | Well<br>Completion |
| 14<br>17<br>17<br>17<br>17                       | 0.0            | 20       |          | 15         16         17         18         19         20         21         22         23         24         25         26         27         28         29         30         31         32         33         34         35         36         37 |               | X        | ML<br>SW<br>SW<br>-SM | Brown An-son<br>Structure, dens<br>Orangish brow<br>groded sound.<br>Brown torangis<br>med. FN. sill<br>w/ lense of<br>No stain,<br>Dark grayish br<br>white/gray to<br>Oxidation veit<br>Lt. orcongish b | dy sitt. Mottle, platy<br>ie. No stain/ador.<br>in med. well<br>No stain/ador.<br>sh brown med to<br>ty sand. well pladet<br>exidized sitt.<br>lodor.<br>black mottling.<br>ns. No stain/odor.<br>rown med. fn.<br>oxidation. well |                    |

· · · · •

|  | Boring/Well #     |   |              |  |  |
|--|-------------------|---|--------------|--|--|
| Advancing Opportunity  | Project:          | Lowery Tank Batter<br>034018010   | у            |  |  |
|  | Project #         | 1-25-18   |              |  |  |
|  | Date              | 1-60-18   |              |  |  |
| Penetration<br>Resistance<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content<br>Content |                   |   | Well         |  |  |
| The second secon   | Litt              | nology/Remarks  | Completion   |  |  |
|  |                   |   |              |  |  |
| 37   |                   |   |              |  |  |
|  |                   |   |              |  |  |
| 38   | Dark aroust       | h brown silt, w/ -<br>Naroon & black mottling                           |              |  |  |
| 5 SL. 0.0 No 39 X MI   | In sand N         | broom & black mettling  | · · = ·      |  |  |
| g Moist. U.O NO 39 H ML  | These posts       | w/ oxidation sand.  |              |  |  |
| 40   |                   |   |              |  |  |
|  | tenses. No        | o stain/odor.   | E. E.        |  |  |
| 41   |                   |   | <u>-</u>     |  |  |
| +  |                   |   | =            |  |  |
| 42   |                   | 1 1 0 1 -   |              |  |  |
| 43   | It Brown met      | 1. well gooded sand.  |              |  |  |
| 1  |                   | No Stand Court  |              |  |  |
|  | - All Same of N   | Lack aray bh brown, sitt  |              |  |  |
| 3 MOUT 2.2 NO 245 44 1 X M   | = 6 lens of 5     | oal. No stoin lodor   |              |  |  |
| (10:30) 45 ( $(10:30)$   | -Bomain med       | Dark grayish brown, silt<br>oal. No stoin lodor,<br>, well graded sand, |              |  |  |
|  | No stain)         | odor.   |              |  |  |
| stude 46   | 100 01 1          | -   | - = :        |  |  |
|  |                   |   |              |  |  |
|  |                   | -   |              |  |  |
|  | a not             | for silly sand. well  | , <u>=</u> . |  |  |
| 3 moist  | Brown men.        | for sitty sand. well -<br>uni/cdor.                                     | 1. 1. 1.     |  |  |
| 49 + X2-5M   | graded 100 ST     | much brown silt w/ -  | 11-          |  |  |
|  | And Dark 3        | andation. Dense.  | -            |  |  |
| moist. 50  | Sana, recontro    | any orbition silt w/ -<br>g, ordation. Dense<br>. Low plasticity -      | -            |  |  |
| 51 +   | ive staining sale |   | -            |  |  |
|  |                   | -   | -            |  |  |
| 52   | 7                 | 11 (2) 11 (2)   | I            |  |  |
|  | Set we            | U @ 48'   | [            |  |  |
| 53   |                   |   | _            |  |  |
|  | 10                | screen.   |              |  |  |
| 54   |                   |   | -            |  |  |
| 55 _   |                   |   | -            |  |  |
|  |                   | -   | -            |  |  |
| 56 +   |                   |   |              |  |  |
|  |                   | -   |              |  |  |
| 57   |                   |   |              |  |  |
|  |                   |   | -            |  |  |
| 58   |                   | -   | -            |  |  |
|  |                   |   | -            |  |  |
| 59   |                   |   |              |  |  |

Appendix B



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: <u>www.hallenvironmental.com</u>

April 26, 2018

Danny Burns Williams Four Corners 188 CR 4900 Bloomfield, NM 87413 TEL: (505) 632-4442 FAX

OrderNo.: 1804B43

RE: Lowery TB

Dear Danny Burns:

Hall Environmental Analysis Laboratory received 12 sample(s) on 4/21/2018 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <u>www.hallenvironmental.com</u> or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report Lab Order 1804B43 Date Reported: 4/26/2018

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Williams Four Corners

Project: Lowery TB

Client Sample ID: MW01 @ 25' Collection Date: 4/19/2018 1:00:00 PM Received Date: 4/21/2018 9:40:00 AM

| Lab ID: 1804B43-001              | Matrix:  | SOIL   | Received I | <b>Received Date:</b> 4/21/2018 9:40:00 AM |                    |  |  |
|----------------------------------|----------|--------|------------|--|--------------------|--|--|
| Analyses                         | Result   | PQL Qu | al Units   | DF Date Analyzed                           | Batch              |  |  |
| EPA METHOD 8015M/D: DIESEL RANGE | ORGANICS | 6      |            | A  | nalyst: <b>TOM</b> |  |  |
| Diesel Range Organics (DRO)      | 650      | 9.6    | mg/Kg      | 1 4/25/2018 11:19                          | :05 AM 37772       |  |  |
| Motor Oil Range Organics (MRO)   | 58       | 48     | mg/Kg      | 1 4/25/2018 11:19                          | :05 AM 37772       |  |  |
| Surr: DNOP                       | 97.1     | 70-130 | %Rec       | 1 4/25/2018 11:19                          | :05 AM 37772       |  |  |
| EPA METHOD 8015D: GASOLINE RANGE | Ξ        |        |            | A  | nalyst: NSB        |  |  |
| Gasoline Range Organics (GRO)    | 530      | 46     | mg/Kg      | 10 4/24/2018 11:43                         | :04 PM 37754       |  |  |
| Surr: BFB                        | 473      | 15-316 | S %Rec     | 10 4/24/2018 11:43                         | :04 PM 37754       |  |  |
| EPA METHOD 8021B: VOLATILES      |          |        |            | A  | nalyst: <b>NSB</b> |  |  |
| Benzene                          | ND       | 0.23   | mg/Kg      | 10 4/24/2018 11:43                         | :04 PM 37754       |  |  |
| Toluene                          | 2.2      | 0.46   | mg/Kg      | 10 4/24/2018 11:43                         | :04 PM 37754       |  |  |
| Ethylbenzene                     | 1.9      | 0.46   | mg/Kg      | 10 4/24/2018 11:43                         | :04 PM 37754       |  |  |
| Xylenes, Total                   | 25       | 0.92   | mg/Kg      | 10 4/24/2018 11:43                         | :04 PM 37754       |  |  |
| Surr: 4-Bromofluorobenzene       | 115      | 80-120 | %Rec       | 10 4/24/2018 11:43                         | :04 PM 37754       |  |  |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

| Quanners: |  | Qualifiers: | * |
|-----------|--|-------------|---|
|-----------|--|-------------|---|

- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded

Value exceeds Maximum Contaminant Level.

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 16
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analytical Report Lab Order 1804B43

Date Reported: 4/26/2018

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Williams Four Corners

Client Sample ID: MW01 @ 65'

| Project: Lowery TB               |              |         | Collection | Date: 4/1                           | 9/2018 3:00:00 PM     |       |
|----------------------------------|--------------|---------|------------|-------------------------------------|-----------------------|-------|
| Lab ID: 1804B43-002              | Matrix: SOIL |         | Received   | Received Date: 4/21/2018 9:40:00 AM |                       |       |
| Analyses                         | Result       | PQL Qua | al Units   | DF                                  | Date Analyzed         | Batch |
| EPA METHOD 8015M/D: DIESEL RANGE | ORGANIC      | S       |            |                                     | Analyst:              | том   |
| Diesel Range Organics (DRO)      | ND           | 9.2     | mg/Kg      | 1                                   | 4/25/2018 11:42:48 AM | 37772 |
| Motor Oil Range Organics (MRO)   | ND           | 46      | mg/Kg      | 1                                   | 4/25/2018 11:42:48 AM | 37772 |
| Surr: DNOP                       | 84.8         | 70-130  | %Rec       | 1                                   | 4/25/2018 11:42:48 AM | 37772 |
| EPA METHOD 8015D: GASOLINE RANG  | E            |         |            |                                     | Analyst:              | NSB   |
| Gasoline Range Organics (GRO)    | ND           | 4.8     | mg/Kg      | 1                                   | 4/25/2018 12:06:28 AM | 37754 |
| Surr: BFB                        | 92.6         | 15-316  | %Rec       | 1                                   | 4/25/2018 12:06:28 AM | 37754 |
| EPA METHOD 8021B: VOLATILES      |              |         |            |                                     | Analyst:              | NSB   |
| Benzene                          | ND           | 0.024   | mg/Kg      | 1                                   | 4/25/2018 12:06:28 AM | 37754 |
| Toluene                          | ND           | 0.048   | mg/Kg      | 1                                   | 4/25/2018 12:06:28 AM | 37754 |
| Ethylbenzene                     | ND           | 0.048   | mg/Kg      | 1                                   | 4/25/2018 12:06:28 AM | 37754 |
| Xylenes, Total                   | ND           | 0.096   | mg/Kg      | 1                                   | 4/25/2018 12:06:28 AM | 37754 |
| Surr: 4-Bromofluorobenzene       | 96.6         | 80-120  | %Rec       | 1                                   | 4/25/2018 12:06:28 AM | 37754 |

| Qualifiers: | * | Value exceeds Maximum Contaminant Level. |
|-------------|---|--|
|             |   |  |

- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 16
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analytical Report Lab Order 1804B43 Date Reported: 4/26/2018

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Williams Four Corners

Project: Lowery TB

Client Sample ID: BH01 @ 45' Collection Date: 4/19/2018 11:20:00 AM Paceived Date: 4/21/2018 9:40:00 AM

| Lab ID: 1804B43-003            | Matrix:      | SOIL   | Received | Received Date: 4/21/2018 9:40:00 AM |                       |       |  |
|--------------------------------|--------------|--------|----------|-------------------------------------|-----------------------|-------|--|
| Analyses                       | Result       | PQL Qu | al Units | DF                                  | Date Analyzed         | Batch |  |
| EPA METHOD 8015M/D: DIESEL RAM | IGE ORGANICS | ;      |          |                                     | Analyst               | том   |  |
| Diesel Range Organics (DRO)    | 87           | 9.2    | mg/Kg    | 1                                   | 4/25/2018 12:06:23 PM | 37772 |  |
| Motor Oil Range Organics (MRO) | ND           | 46     | mg/Kg    | 1                                   | 4/25/2018 12:06:23 PM | 37772 |  |
| Surr: DNOP                     | 87.6         | 70-130 | %Rec     | 1                                   | 4/25/2018 12:06:23 PM | 37772 |  |
| EPA METHOD 8015D: GASOLINE RA  | NGE          |        |          |                                     | Analyst               | NSB   |  |
| Gasoline Range Organics (GRO)  | 360          | 47     | mg/Kg    | 10                                  | 4/25/2018 12:29:56 AM | 37754 |  |
| Surr: BFB                      | 158          | 15-316 | %Rec     | 10                                  | 4/25/2018 12:29:56 AM | 37754 |  |
| EPA METHOD 8021B: VOLATILES    |              |        |          |                                     | Analyst               | NSB   |  |
| Benzene                        | 0.29         | 0.24   | mg/Kg    | 10                                  | 4/25/2018 12:29:56 AM | 37754 |  |
| Toluene                        | 8.1          | 0.47   | mg/Kg    | 10                                  | 4/25/2018 12:29:56 AM | 37754 |  |
| Ethylbenzene                   | 1.8          | 0.47   | mg/Kg    | 10                                  | 4/25/2018 12:29:56 AM | 37754 |  |
| Xylenes, Total                 | 23           | 0.95   | mg/Kg    | 10                                  | 4/25/2018 12:29:56 AM | 37754 |  |
| Surr: 4-Bromofluorobenzene     | 107          | 80-120 | %Rec     | 10                                  | 4/25/2018 12:29:56 AM | 37754 |  |

| Qualifiers: | * | Value exceeds Maximum Contaminant Level.           |  |
|-------------|---|--|--|
|             | D | Sample Diluted Due to Matrix                       |  |
|             | Н | Holding times for preparation or analysis exceeded |  |

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 16
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analytical Report Lab Order 1804B43

Date Reported: 4/26/2018

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Williams Four Corners

Project: Lowery TB

Client Sample ID: BH01 @ 49' Collection Date: 4/19/2018 11:30:00 AM Received Date: 4/21/2018 9:40:00 AM

|                                |              |              | Contection |                                     |          |  |  |
|--------------------------------|--------------|--------------|------------|-------------------------------------|----------|--|--|
| Lab ID: 1804B43-004            | Matrix:      | Matrix: SOIL |            | Received Date: 4/21/2018 9:40:00 AM |          |  |  |
| Analyses                       | Result       | PQL Qu       | al Units   | DF Date Analyzed                    | Batch    |  |  |
| EPA METHOD 8015M/D: DIESEL RAN | IGE ORGANICS | ;            |            | Anal                                | yst: TOM |  |  |
| Diesel Range Organics (DRO)    | ND           | 9.0          | mg/Kg      | 1 4/25/2018 12:30:03                | PM 37772 |  |  |
| Motor Oil Range Organics (MRO) | ND           | 45           | mg/Kg      | 1 4/25/2018 12:30:03                | PM 37772 |  |  |
| Surr: DNOP                     | 81.7         | 70-130       | %Rec       | 1 4/25/2018 12:30:03                | PM 37772 |  |  |
| EPA METHOD 8015D: GASOLINE RA  | NGE          |              |            | Anal                                | yst: NSB |  |  |
| Gasoline Range Organics (GRO)  | ND           | 4.6          | mg/Kg      | 1 4/25/2018 12:53:22                | AM 37754 |  |  |
| Surr: BFB                      | 87.0         | 15-316       | %Rec       | 1 4/25/2018 12:53:22                | AM 37754 |  |  |
| EPA METHOD 8021B: VOLATILES    |              |              |            | Anal                                | yst: NSB |  |  |
| Benzene                        | ND           | 0.023        | mg/Kg      | 1 4/25/2018 12:53:22                | AM 37754 |  |  |
| Toluene                        | ND           | 0.046        | mg/Kg      | 1 4/25/2018 12:53:22                | AM 37754 |  |  |
| Ethylbenzene                   | ND           | 0.046        | mg/Kg      | 1 4/25/2018 12:53:22                | AM 37754 |  |  |
| Xylenes, Total                 | ND           | 0.093        | mg/Kg      | 1 4/25/2018 12:53:22                | AM 37754 |  |  |
| Surr: 4-Bromofluorobenzene     | 98.8         | 80-120       | %Rec       | 1 4/25/2018 12:53:22                | AM 37754 |  |  |
|                                |              |              |            |                                     |          |  |  |

| Qualifiers: | *   | Value exceeds Maximum Contaminant Level.              | В  | Analyte detected in the associated Method Blank           |
|-------------|-----|---|----|---|
|             | D   | Sample Diluted Due to Matrix                          | Е  | Value above quantitation range                            |
|             | Н   | Holding times for preparation or analysis exceeded    | J  | Analyte detected below quantitation limits Page 4 of 16   |
|             | ND  | Not Detected at the Reporting Limit                   | Р  | Sample pH Not In Range                                    |
|             | PQL | Practical Quanitative Limit                           | RL | Reporting Detection Limit                                 |
|             | S   | % Recovery outside of range due to dilution or matrix | W  | Sample container temperature is out of limit as specified |
|             |     |   |    |   |

Analytical Report Lab Order 1804B43 Date Reported: 4/26/2018

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Williams Four Corners

Project: Lowery TB

Client Sample ID: MW04 @ 35' Collection Date: 4/17/2018 11:00:00 AM Received Date: 4/21/2018 9:40:00 AM

| J                              |              |              |          |                                     |                      |       |  |
|--------------------------------|--------------|--------------|----------|-------------------------------------|----------------------|-------|--|
| Lab ID: 1804B43-005            | Matrix:      | Matrix: SOIL |          | Received Date: 4/21/2018 9:40:00 AM |                      |       |  |
| Analyses                       | Result       | PQL Qu       | al Units | DF D                                | ate Analyzed         | Batch |  |
| EPA METHOD 8015M/D: DIESEL RAN | IGE ORGANICS | 5            |          |                                     | Analyst              | том   |  |
| Diesel Range Organics (DRO)    | ND           | 9.0          | mg/Kg    | 1 4                                 | /25/2018 12:53:47 PM | 37772 |  |
| Motor Oil Range Organics (MRO) | ND           | 45           | mg/Kg    | 1 4                                 | /25/2018 12:53:47 PM | 37772 |  |
| Surr: DNOP                     | 91.1         | 70-130       | %Rec     | 1 4                                 | /25/2018 12:53:47 PM | 37772 |  |
| EPA METHOD 8015D: GASOLINE RA  | NGE          |              |          |                                     | Analyst              | NSB   |  |
| Gasoline Range Organics (GRO)  | 110          | 4.8          | mg/Kg    | 1 4                                 | /25/2018 1:16:46 AM  | 37754 |  |
| Surr: BFB                      | 224          | 15-316       | %Rec     | 1 4                                 | /25/2018 1:16:46 AM  | 37754 |  |
| EPA METHOD 8021B: VOLATILES    |              |              |          |                                     | Analyst              | NSB   |  |
| Benzene                        | 0.35         | 0.024        | mg/Kg    | 1 4                                 | /25/2018 1:16:46 AM  | 37754 |  |
| Toluene                        | 1.3          | 0.048        | mg/Kg    | 1 4                                 | /25/2018 1:16:46 AM  | 37754 |  |
| Ethylbenzene                   | 0.23         | 0.048        | mg/Kg    | 1 4                                 | /25/2018 1:16:46 AM  | 37754 |  |
| Xylenes, Total                 | 2.4          | 0.096        | mg/Kg    | 1 4                                 | /25/2018 1:16:46 AM  | 37754 |  |
| Surr: 4-Bromofluorobenzene     | 110          | 80-120       | %Rec     | 1 4                                 | /25/2018 1:16:46 AM  | 37754 |  |
|                                |              |              |          |                                     |                      |       |  |

| Qualifiers:*Value exceeds Maximum Contaminant Level.BAnalyte detected in the associated Method BlankDSample Diluted Due to MatrixEValue above quantitation rangeHHolding times for preparation or analysis exceededJAnalyte detected below quantitation limits Page 5 of 1NDNot Detected at the Reporting LimitPSample pH Not In RangePQLPractical Quanitative LimitRLReporting Detection LimitS% Recovery outside of range due to dilution or matrixWSample container temperature is out of limit as specified |             |     |   |    |   |
|---|-------------|-----|---|----|---|
| HHolding times for preparation or analysis exceededJAnalyte detected below quantitation limitsPage 5 of 1NDNot Detected at the Reporting LimitPSample pH Not In RangePQLPractical Quanitative LimitRLReporting Detection Limit  | Qualifiers: | *   | Value exceeds Maximum Contaminant Level.              | В  | Analyte detected in the associated Method Blank           |
| NDNot Detected at the Reporting LimitPSample pH Not In RangePQLPractical Quanitative LimitRLReporting Detection Limit   |             | D   | Sample Diluted Due to Matrix                          |    |   |
| NDNot Detected at the Reporting LimitPSample pH Not In RangePQLPractical Quanitative LimitRLReporting Detection Limit   |             | Η   | Holding times for preparation or analysis exceeded    | J  | Analyte detected below quantitation limits Page 5 of 16   |
|   |             | ND  | Not Detected at the Reporting Limit                   | Р  | Sample pH Not In Range                                    |
| S % Recovery outside of range due to dilution or matrix W Sample container temperature is out of limit as specified   |             | PQL | Practical Quanitative Limit                           | RL | Reporting Detection Limit                                 |
|   |             | S   | % Recovery outside of range due to dilution or matrix | W  | Sample container temperature is out of limit as specified |
|   |             |     |   |    |   |

Analytical Report Lab Order 1804B43

Date Reported: 4/26/2018

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Williams Four Corners

Project: Lowery TB

Client Sample ID: MW04 @ 55' Collection Date: 4/17/2018 12:00:00 PM Received Date: 4/21/2018 9:40:00 AM

| Lab ID: 1804B43-006              | Matrix:  | SOIL   | Received | Received Date: 4/21/2018 9:40:00 AM |                      |       |  |
|----------------------------------|----------|--------|----------|-------------------------------------|----------------------|-------|--|
| Analyses                         | Result   | PQL Qu | al Units | DF                                  | Date Analyzed        | Batch |  |
| EPA METHOD 8015M/D: DIESEL RANGE | ORGANICS | 3      |          |                                     | Analyst              | том   |  |
| Diesel Range Organics (DRO)      | ND       | 9.8    | mg/Kg    | 1                                   | 4/25/2018 1:17:39 PM | 37772 |  |
| Motor Oil Range Organics (MRO)   | ND       | 49     | mg/Kg    | 1                                   | 4/25/2018 1:17:39 PM | 37772 |  |
| Surr: DNOP                       | 85.7     | 70-130 | %Rec     | 1                                   | 4/25/2018 1:17:39 PM | 37772 |  |
| EPA METHOD 8015D: GASOLINE RANGE |          |        |          |                                     | Analyst              | NSB   |  |
| Gasoline Range Organics (GRO)    | ND       | 4.6    | mg/Kg    | 1                                   | 4/25/2018 1:40:07 AM | 37754 |  |
| Surr: BFB                        | 86.9     | 15-316 | %Rec     | 1                                   | 4/25/2018 1:40:07 AM | 37754 |  |
| EPA METHOD 8021B: VOLATILES      |          |        |          |                                     | Analyst              | NSB   |  |
| Benzene                          | ND       | 0.023  | mg/Kg    | 1                                   | 4/25/2018 1:40:07 AM | 37754 |  |
| Toluene                          | ND       | 0.046  | mg/Kg    | 1                                   | 4/25/2018 1:40:07 AM | 37754 |  |
| Ethylbenzene                     | ND       | 0.046  | mg/Kg    | 1                                   | 4/25/2018 1:40:07 AM | 37754 |  |
| Xylenes, Total                   | ND       | 0.092  | mg/Kg    | 1                                   | 4/25/2018 1:40:07 AM | 37754 |  |
| Surr: 4-Bromofluorobenzene       | 101      | 80-120 | %Rec     | 1                                   | 4/25/2018 1:40:07 AM | 37754 |  |

| Qualifiers: | * | Value exceeds Maximum Contaminant Le | vel. |
|-------------|---|--------------------------------------|------|
|-------------|---|--------------------------------------|------|

- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 6 of 16
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analytical Report Lab Order 1804B43 Date Reported: 4/26/2018

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Williams Four Corners

Project: Lowery TB

Client Sample ID: MW05 @ 40' Collection Date: 4/18/2018 1:30:00 PM Received Date: 4/21/2018 9:40:00 AM

| Lab ID: 1804B43-007            | Matrix:      | SOIL   | Received | Received Date: 4/21/2018 9:40:00 AM |                      |       |
|--------------------------------|--------------|--------|----------|-------------------------------------|----------------------|-------|
| Analyses                       | Result       | PQL Qu | al Units | DF                                  | Date Analyzed        | Batch |
| EPA METHOD 8015M/D: DIESEL RA  | NGE ORGANICS |        |          |                                     | Analyst              | том   |
| Diesel Range Organics (DRO)    | ND           | 9.7    | mg/Kg    | 1                                   | 4/25/2018 1:41:13 PM | 37772 |
| Motor Oil Range Organics (MRO) | ND           | 49     | mg/Kg    | 1                                   | 4/25/2018 1:41:13 PM | 37772 |
| Surr: DNOP                     | 102          | 70-130 | %Rec     | 1                                   | 4/25/2018 1:41:13 PM | 37772 |
| EPA METHOD 8015D: GASOLINE RA  | NGE          |        |          |                                     | Analyst              | NSB   |
| Gasoline Range Organics (GRO)  | ND           | 4.6    | mg/Kg    | 1                                   | 4/25/2018 2:03:33 AM | 37754 |
| Surr: BFB                      | 88.7         | 15-316 | %Rec     | 1                                   | 4/25/2018 2:03:33 AM | 37754 |
| EPA METHOD 8021B: VOLATILES    |              |        |          |                                     | Analyst              | NSB   |
| Benzene                        | ND           | 0.023  | mg/Kg    | 1                                   | 4/25/2018 2:03:33 AM | 37754 |
| Toluene                        | ND           | 0.046  | mg/Kg    | 1                                   | 4/25/2018 2:03:33 AM | 37754 |
| Ethylbenzene                   | ND           | 0.046  | mg/Kg    | 1                                   | 4/25/2018 2:03:33 AM | 37754 |
| Xylenes, Total                 | ND           | 0.092  | mg/Kg    | 1                                   | 4/25/2018 2:03:33 AM | 37754 |
| Surr: 4-Bromofluorobenzene     | 98.9         | 80-120 | %Rec     | 1                                   | 4/25/2018 2:03:33 AM | 37754 |
|                                |              |        |          |                                     |                      |       |

| Qualifiers: | *   | Value exceeds Maximum Contaminant Level.              | В  | Analyte detected in the associated Method Blank           |
|-------------|-----|---|----|---|
|             | D   | Sample Diluted Due to Matrix                          | E  | Value above quantitation range                            |
|             | Н   | Holding times for preparation or analysis exceeded    | J  | Analyte detected below quantitation limits Page 7 of 16   |
|             | ND  | Not Detected at the Reporting Limit                   | Р  | Sample pH Not In Range                                    |
|             | PQL | Practical Quanitative Limit                           | RL | Reporting Detection Limit                                 |
|             | S   | % Recovery outside of range due to dilution or matrix | W  | Sample container temperature is out of limit as specified |
|             |     |   |    |   |

Analytical Report Lab Order 1804B43 Date Reported: 4/26/2018

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Williams Four Corners

Project: Lowery TB

Client Sample ID: MW05 @ 55' Collection Date: 4/18/2018 2:00:00 PM Received Date: 4/21/2018 9:40:00 AM

| Lab ID: 1804B43-008              | Matrix:  | SOIL   | <b>Received Date:</b> 4/21/2018 9:40:00 A |    |                      | M     |  |
|----------------------------------|----------|--------|---|----|----------------------|-------|--|
| Analyses                         | Result   | PQL Qu | al Units                                  | DF | Date Analyzed        | Batch |  |
| EPA METHOD 8015M/D: DIESEL RANGE | ORGANICS | 5      |   |    | Analyst              | TOM   |  |
| Diesel Range Organics (DRO)      | ND       | 8.9    | mg/Kg                                     | 1  | 4/25/2018 2:04:54 PM | 37772 |  |
| Motor Oil Range Organics (MRO)   | ND       | 44     | mg/Kg                                     | 1  | 4/25/2018 2:04:54 PM | 37772 |  |
| Surr: DNOP                       | 91.2     | 70-130 | %Rec                                      | 1  | 4/25/2018 2:04:54 PM | 37772 |  |
| EPA METHOD 8015D: GASOLINE RANG  | E        |        |   |    | Analyst              | NSB   |  |
| Gasoline Range Organics (GRO)    | ND       | 4.6    | mg/Kg                                     | 1  | 4/25/2018 2:26:56 AM | 37754 |  |
| Surr: BFB                        | 87.1     | 15-316 | %Rec                                      | 1  | 4/25/2018 2:26:56 AM | 37754 |  |
| EPA METHOD 8021B: VOLATILES      |          |        |   |    | Analyst              | NSB   |  |
| Benzene                          | ND       | 0.023  | mg/Kg                                     | 1  | 4/25/2018 2:26:56 AM | 37754 |  |
| Toluene                          | ND       | 0.046  | mg/Kg                                     | 1  | 4/25/2018 2:26:56 AM | 37754 |  |
| Ethylbenzene                     | ND       | 0.046  | mg/Kg                                     | 1  | 4/25/2018 2:26:56 AM | 37754 |  |
| Xylenes, Total                   | ND       | 0.093  | mg/Kg                                     | 1  | 4/25/2018 2:26:56 AM | 37754 |  |
| Surr: 4-Bromofluorobenzene       | 99.3     | 80-120 | %Rec                                      | 1  | 4/25/2018 2:26:56 AM | 37754 |  |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

| Qualifiers: | * |
|-------------|---|
|-------------|---|

- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded

Value exceeds Maximum Contaminant Level.

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 8 of 16
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 4/26/2018

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Williams Four Corners

Project: Lowery TB

Client Sample ID: MW06 @ 45' Collection Date: 4/16/2018 3:00:00 PM

| Lab ID: 1804B43-009             | Matrix: | SOIL   | <b>Received Date:</b> 4/21/2018 9:40:0 |    |                      | 00 AM |  |
|---------------------------------|---------|--------|--|----|----------------------|-------|--|
| Analyses                        | Result  | PQL Qu | al Units                               | DF | Date Analyzed        | Batch |  |
| EPA METHOD 8015M/D: DIESEL RANG |         |        |  |    | Analyst              | TOM   |  |
| Diesel Range Organics (DRO)     | ND      | 9.1    | mg/Kg                                  | 1  | 4/25/2018 2:28:36 PM | 37772 |  |
| Motor Oil Range Organics (MRO)  | ND      | 45     | mg/Kg                                  | 1  | 4/25/2018 2:28:36 PM | 37772 |  |
| Surr: DNOP                      | 84.0    | 70-130 | %Rec                                   | 1  | 4/25/2018 2:28:36 PM | 37772 |  |
| EPA METHOD 8015D: GASOLINE RAN  | GE      |        |  |    | Analyst              | NSB   |  |
| Gasoline Range Organics (GRO)   | ND      | 4.7    | mg/Kg                                  | 1  | 4/25/2018 2:50:16 AM | 37754 |  |
| Surr: BFB                       | 87.5    | 15-316 | %Rec                                   | 1  | 4/25/2018 2:50:16 AM | 37754 |  |
| EPA METHOD 8021B: VOLATILES     |         |        |  |    | Analyst              | NSB   |  |
| Benzene                         | ND      | 0.023  | mg/Kg                                  | 1  | 4/25/2018 2:50:16 AM | 37754 |  |
| Toluene                         | ND      | 0.047  | mg/Kg                                  | 1  | 4/25/2018 2:50:16 AM | 37754 |  |
| Ethylbenzene                    | ND      | 0.047  | mg/Kg                                  | 1  | 4/25/2018 2:50:16 AM | 37754 |  |
| Xylenes, Total                  | ND      | 0.093  | mg/Kg                                  | 1  | 4/25/2018 2:50:16 AM | 37754 |  |
| Surr: 4-Bromofluorobenzene      | 96.2    | 80-120 | %Rec                                   | 1  | 4/25/2018 2:50:16 AM | 37754 |  |

| Qualifiers: | *   | Value exceeds Maximum Contaminant Level.           | В  | Analyte detected in the associated Method Blank     |
|-------------|-----|--|----|---|
|             | D   | Sample Diluted Due to Matrix                       | E  | Value above quantitation range                      |
|             | Н   | Holding times for preparation or analysis exceeded | J  | Analyte detected below quantitation limits Page 9 c |
|             | ND  | Not Detected at the Reporting Limit                | Р  | Sample pH Not In Range                              |
|             | PQL | Practical Quanitative Limit                        | RL | Reporting Detection Limit                           |

- S % Recovery outside of range due to dilution or matrix
- of 16
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

**Analytical Report** Lab Order 1804B43 Date Reported: 4/26/2018

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Williams Four Corners

Project: Lowery TB

Client Sample ID: MW06 @ 55' Collection Date: 4/16/2018 3:30:00 PM 1/21/2018 0 40 00 434

| Lab ID: 1804B43-010              | Matrix: | SOIL     | Receive | Received Date: 4/21/2018 9:40:00 AM |     |  |  |
|----------------------------------|---------|----------|---------|-------------------------------------|-----|--|--|
| Analyses                         | Result  | PQL Qual | Units   | DF Date Analyzed Bat                | tch |  |  |
| EPA METHOD 8015M/D: DIESEL RANGE | ORGANIC | S        |         | Analyst: TO                         | M   |  |  |
| Diesel Range Organics (DRO)      | ND      | 9.2      | mg/Kg   | 1 4/25/2018 2:52:22 PM 377          | 772 |  |  |
| Motor Oil Range Organics (MRO)   | ND      | 46       | mg/Kg   | 1 4/25/2018 2:52:22 PM 377          | 772 |  |  |
| Surr: DNOP                       | 77.3    | 70-130   | %Rec    | 1 4/25/2018 2:52:22 PM 377          | 772 |  |  |
| EPA METHOD 8015D: GASOLINE RANGE |         |          |         | Analyst: NS                         | B   |  |  |
| Gasoline Range Organics (GRO)    | ND      | 4.9      | mg/Kg   | 1 4/25/2018 11:14:05 AM 377         | 754 |  |  |
| Surr: BFB                        | 86.4    | 15-316   | %Rec    | 1 4/25/2018 11:14:05 AM 377         | 754 |  |  |
| EPA METHOD 8021B: VOLATILES      |         |          |         | Analyst: NS                         | B   |  |  |
| Benzene                          | 0.033   | 0.024    | mg/Kg   | 1 4/25/2018 11:14:05 AM 377         | 754 |  |  |
| Toluene                          | 0.050   | 0.049    | mg/Kg   | 1 4/25/2018 11:14:05 AM 377         | 754 |  |  |
| Ethylbenzene                     | ND      | 0.049    | mg/Kg   | 1 4/25/2018 11:14:05 AM 377         | 754 |  |  |
| Xylenes, Total                   | ND      | 0.097    | mg/Kg   | 1 4/25/2018 11:14:05 AM 377         | 754 |  |  |
| Surr: 4-Bromofluorobenzene       | 98.8    | 80-120   | %Rec    | 1 4/25/2018 11:14:05 AM 377         | 754 |  |  |

| *   | Value exceeds Maximum Contaminant Level.           | В                              | Analyte detected in the associated Method Blank  |
|-----|--|--------------------------------|--|
| D   | Sample Diluted Due to Matrix                       | E                              | Value above quantitation range   |
| Η   | Holding times for preparation or analysis exceeded | J                              | Analyte detected below quantitation limitPage 10 of 16   |
| ND  | Not Detected at the Reporting Limit                | Р                              | Sample pH Not In Range   |
| PQL | Practical Quanitative Limit                        | RL                             | Reporting Detection Limit  |
|     | ND   | D Sample Diluted Due to Matrix | DSample Diluted Due to MatrixEHHolding times for preparation or analysis exceededJNDNot Detected at the Reporting LimitP |

- S % Recovery outside of range due to dilution or matrix
- W Sample container temperature is out of limit as specified

Date Reported: 4/26/2018

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Williams Four Corners

Project: Lowery TB

Client Sample ID: MW07 @ 40' Collection Date: 4/18/2018 9:15:00 AM Received Date: 4/21/2018 9:40:00 AM

| Lab ID: 1804B43-011            | Matrix: S    | SOIL   | Received Date: 4/21/2018 9:40:0 |    |                       | 0 AM  |  |
|--------------------------------|--------------|--------|---------------------------------|----|-----------------------|-------|--|
| Analyses                       | Result       | PQL Qu | al Units                        | DF | Date Analyzed         | Batch |  |
| EPA METHOD 8015M/D: DIESEL RAM | NGE ORGANICS |        |                                 |    | Analyst               | том   |  |
| Diesel Range Organics (DRO)    | ND           | 9.9    | mg/Kg                           | 1  | 4/25/2018 3:16:02 PM  | 37772 |  |
| Motor Oil Range Organics (MRO) | ND           | 49     | mg/Kg                           | 1  | 4/25/2018 3:16:02 PM  | 37772 |  |
| Surr: DNOP                     | 85.6         | 70-130 | %Rec                            | 1  | 4/25/2018 3:16:02 PM  | 37772 |  |
| EPA METHOD 8015D: GASOLINE RA  | NGE          |        |                                 |    | Analyst               | NSB   |  |
| Gasoline Range Organics (GRO)  | ND           | 4.7    | mg/Kg                           | 1  | 4/25/2018 11:37:23 AM | 37754 |  |
| Surr: BFB                      | 89.5         | 15-316 | %Rec                            | 1  | 4/25/2018 11:37:23 AM | 37754 |  |
| EPA METHOD 8021B: VOLATILES    |              |        |                                 |    | Analyst               | NSB   |  |
| Benzene                        | ND           | 0.024  | mg/Kg                           | 1  | 4/25/2018 11:37:23 AM | 37754 |  |
| Toluene                        | ND           | 0.047  | mg/Kg                           | 1  | 4/25/2018 11:37:23 AM | 37754 |  |
| Ethylbenzene                   | ND           | 0.047  | mg/Kg                           | 1  | 4/25/2018 11:37:23 AM | 37754 |  |
| Xylenes, Total                 | ND           | 0.094  | mg/Kg                           | 1  | 4/25/2018 11:37:23 AM | 37754 |  |
| Surr: 4-Bromofluorobenzene     | 101          | 80-120 | %Rec                            | 1  | 4/25/2018 11:37:23 AM | 37754 |  |

| Qualifiers: | *   | Value exceeds Maximum Contaminant Level.              | В  | Analyte detected in the associated Method Blank           |
|-------------|-----|---|----|---|
|             | D   | Sample Diluted Due to Matrix                          | Е  | Value above quantitation range                            |
|             | Н   | Holding times for preparation or analysis exceeded    | J  | Analyte detected below quantitation limitsPage 11 of 16   |
|             | ND  | Not Detected at the Reporting Limit                   | Р  | Sample pH Not In Range                                    |
|             | PQL | Practical Quanitative Limit                           | RL | Reporting Detection Limit                                 |
|             | S   | % Recovery outside of range due to dilution or matrix | W  | Sample container temperature is out of limit as specified |
|             |     |   |    |   |

Analytical Report Lab Order 1804B43 Date Reported: 4/26/2018

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Williams Four Corners

Project: Lowery TB

Client Sample ID: MW07 @ 55' Collection Date: 4/18/2018 9:45:00 AM Received Date: 4/21/2018 9:40:00 AM

| Lab ID: 1804B43-012              | Matrix: | SOIL   | <b>Received Date:</b> 4/21/2018 9:40:00 |    |                       | AM    |  |
|----------------------------------|---------|--------|---|----|-----------------------|-------|--|
| Analyses                         | Result  | PQL Qu | al Units                                | DF | Date Analyzed         | Batch |  |
| EPA METHOD 8015M/D: DIESEL RANGE |         | 6      |   |    | Analyst               | том   |  |
| Diesel Range Organics (DRO)      | ND      | 9.3    | mg/Kg                                   | 1  | 4/25/2018 3:39:51 PM  | 37772 |  |
| Motor Oil Range Organics (MRO)   | ND      | 47     | mg/Kg                                   | 1  | 4/25/2018 3:39:51 PM  | 37772 |  |
| Surr: DNOP                       | 84.5    | 70-130 | %Rec                                    | 1  | 4/25/2018 3:39:51 PM  | 37772 |  |
| EPA METHOD 8015D: GASOLINE RANG  | E       |        |   |    | Analyst               | NSB   |  |
| Gasoline Range Organics (GRO)    | ND      | 4.8    | mg/Kg                                   | 1  | 4/25/2018 12:00:47 PM | 37754 |  |
| Surr: BFB                        | 91.5    | 15-316 | %Rec                                    | 1  | 4/25/2018 12:00:47 PM | 37754 |  |
| EPA METHOD 8021B: VOLATILES      |         |        |   |    | Analyst               | NSB   |  |
| Benzene                          | ND      | 0.024  | mg/Kg                                   | 1  | 4/25/2018 12:00:47 PM | 37754 |  |
| Toluene                          | ND      | 0.048  | mg/Kg                                   | 1  | 4/25/2018 12:00:47 PM | 37754 |  |
| Ethylbenzene                     | ND      | 0.048  | mg/Kg                                   | 1  | 4/25/2018 12:00:47 PM | 37754 |  |
| Xylenes, Total                   | ND      | 0.096  | mg/Kg                                   | 1  | 4/25/2018 12:00:47 PM | 37754 |  |
| Surr: 4-Bromofluorobenzene       | 102     | 80-120 | %Rec                                    | 1  | 4/25/2018 12:00:47 PM | 37754 |  |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

\*

- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded

Value exceeds Maximum Contaminant Level.

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 12 of 16
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

| WO#: | 1804B43   |
|------|-----------|
|      | 26-Apr-18 |

| Client:<br>Project:   | Williams<br>Lowery 7   | Four Corners  | S   |   |  |   |  |   |                          |            |   |
|---|--|---|---|---|--|---|--|---|--------------------------|------------|---|
| Sample ID   | LCS-37745  | SampType  | e: LC   | s   | Tes  | tCode: E  | PA Method  | 8015M/D: Di   | esel Rang                | e Organics |   |
| Client ID:  | LCSS   | Batch ID  | ): <b>37</b>  | 745   | F  | RunNo:  | 50794  |   |                          |            |   |
| Prep Date:  | 4/23/2018  | Analysis Date   | e: 4/   | 24/2018   | S  | SeqNo:  | 1648086  | Units: %Re  | с                        |            |   |
| Analyte   |  | Result F  | PQL   | SPK value   | SPK Ref Val  | %REC  | LowLimit   | HighLimit   | %RPD                     | RPDLimit   | Qual  |
| Surr: DNOP  |  | 4.1   |   | 5.000   |  | 82.3  | 70   | 130   |                          |            |   |
| Sample ID   | MB-37745   | SampType  | e: ME   | BLK   | Tes  | tCode: E  | PA Method  | 8015M/D: Di   | esel Rang                | e Organics |   |
| Client ID:  | PBS  | Batch ID  | ): <b>37</b>  | 745   | F  | RunNo:  | 50794  |   |                          |            |   |
| Prep Date:  | 4/23/2018  | Analysis Date   | e: 4/   | 24/2018   | S  | SeqNo:  | 1648087  | Units: %Re  | С                        |            |   |
| Analyte   |  | Result F  | PQL   | SPK value   | SPK Ref Val  | %REC  | LowLimit   | HighLimit   | %RPD                     | RPDLimit   | Qual  |
| Surr: DNOP  |  | 9.0   |   | 10.00   |  | 89.6  | 70   | 130   |                          |            |   |
|   | and the second |   |   | and the second se | and the second state of th |   | the second s | and the second se |                          |            | and the second se |
| Sample ID   | LCS-37772  | SampType  | e: LC   | s   | Tes  | tCode: E  | PA Method  | 8015M/D: Di   | esel Range               | e Organics |   |
| Sample ID<br>Client ID:   |  | SampType<br>Batch ID  |   |   |  | tCode: E  |  | 8015M/D: Di   | esel Range               | e Organics |   |
|   | LCSS   |   | D: <b>37</b>  | 772   | F  | RunNo:  |  | 8015M/D: Die<br>Units: mg/k   | Ū                        | e Organics |   |
| Client ID:  | LCSS   | Batch ID<br>Analysis Date   | D: <b>37</b>  | 772<br>25/2018  | F  | RunNo:<br>SeqNo:  | 50794<br>1649793   |   | Ū                        | e Organics | Qual  |
| Client ID:<br>Prep Date:  | LCSS<br>4/24/2018  | Batch ID<br>Analysis Date   | ): <b>37</b><br>e: <b>4</b> /   | 772<br>25/2018  | F  | RunNo:<br>SeqNo:  | 50794<br>1649793   | Units: mg/k   | (g                       | Ū          | Qual  |
| Client ID:<br>Prep Date:<br>Analyte   | LCSS<br>4/24/2018  | Batch ID<br>Analysis Date<br>Result F   | D: <b>37</b><br>e: <b>4/</b><br>PQL   | 772<br>25/2018<br>SPK value   | F<br>S<br>SPK Ref Val  | RunNo:<br>SeqNo:<br>%REC  | 50794<br>1649793<br>LowLimit   | Units: <b>mg/⊮</b><br>HighLimit   | (g                       | Ū          | Qual  |
| Client ID:<br>Prep Date:<br>Analyte<br>Diesel Range C   | LCSS<br>4/24/2018<br>Drganics (DRO)  | Batch ID<br>Analysis Date<br>Result F<br>46   | D: <b>37</b><br>e: <b>4</b> /<br>PQL<br>10  | 772<br>25/2018<br>SPK value<br>50.00<br>5.000   | F<br>S<br>SPK Ref Val<br>0   | RunNo:<br>SeqNo:<br>%REC<br>93.0<br>82.1                                | 50794<br>1649793<br>LowLimit<br>70<br>70   | Units: <b>mg/k</b><br>HighLimit<br>130  | (g<br>%RPD               | RPDLimit   | Qual  |
| Client ID:<br>Prep Date:<br>Analyte<br>Diesel Range C<br>Surr: DNOP   | LCSS<br>4/24/2018<br>Drganics (DRO)<br>MB-37772  | Batch ID<br>Analysis Date<br>Result F<br>46<br>4.1  | D: <b>37</b><br>e: <b>4</b> /<br>PQL<br>10<br>e: <b>ME</b>  | 772<br>25/2018<br>SPK value<br>50.00<br>5.000<br>BLK  | F<br>S<br>SPK Ref Val<br>0<br>Tes  | RunNo:<br>SeqNo:<br>%REC<br>93.0<br>82.1                                | 50794<br>1649793<br>LowLimit<br>70<br>70<br>70   | Units: <b>mg/F</b><br>HighLimit<br>130<br>130   | (g<br>%RPD               | RPDLimit   | Qual  |
| Client ID:<br>Prep Date:<br>Analyte<br>Diesel Range C<br>Surr: DNOP<br>Sample ID  | LCSS<br>4/24/2018<br>Drganics (DRO)<br>MB-37772<br>PBS   | Batch ID<br>Analysis Date<br>Result F<br>46<br>4.1<br>SampType  | D: <b>37</b><br>PQL<br>10<br>e: <b>ME</b><br>D: <b>37</b>   | 772<br>25/2018<br>SPK value<br>50.00<br>5.000<br>BLK<br>772   | F<br>SPK Ref Val<br>0<br>Tes<br>F  | RunNo:<br>SeqNo:<br>93.0<br>82.1<br>tCode: E<br>RunNo:                  | 50794<br>1649793<br>LowLimit<br>70<br>70<br>70   | Units: <b>mg/F</b><br>HighLimit<br>130<br>130   | Kg<br>%RPD<br>esel Range | RPDLimit   | Qual  |
| Client ID:<br>Prep Date:<br>Analyte<br>Diesel Range C<br>Surr: DNOP<br>Sample ID<br>Client ID:  | LCSS<br>4/24/2018<br>Drganics (DRO)<br>MB-37772<br>PBS   | Batch ID<br>Analysis Date<br>Result F<br>46<br>4.1<br>SampType<br>Batch ID<br>Analysis Date                   | D: <b>37</b><br>PQL<br>10<br>e: <b>ME</b><br>D: <b>37</b>   | 772<br>25/2018<br>SPK value<br>50.00<br>5.000<br>3LK<br>772<br>25/2018  | F<br>SPK Ref Val<br>0<br>Tes<br>F  | RunNo:<br>SeqNo:<br>93.0<br>82.1<br>tCode: <b>E</b><br>RunNo:<br>SeqNo: | 50794<br>1649793<br>LowLimit<br>70<br>70<br>70<br>3PA Method<br>50794<br>1649794                               | Units: <b>mg//</b><br>HighLimit<br>130<br>130<br><b>8015M/D: Di</b>   | Kg<br>%RPD<br>esel Range | RPDLimit   | Qual  |
| Client ID:<br>Prep Date:<br>Analyte<br>Diesel Range C<br>Surr: DNOP<br>Sample ID<br>Client ID:<br>Prep Date:<br>Analyte<br>Diesel Range C | LCSS<br>4/24/2018<br>Drganics (DRO)<br>MB-37772<br>PBS<br>4/24/2018<br>Drganics (DRO)                            | Batch ID<br>Analysis Date<br>Result F<br>46<br>4.1<br>SampType<br>Batch ID<br>Analysis Date<br>Result F<br>ND | D: 37<br>D: 4/<br>DQL<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10                         | 772<br>25/2018<br>SPK value<br>50.00<br>5.000<br>3LK<br>772<br>25/2018  | F<br>SPK Ref Val<br>0<br>Tes<br>F<br>S   | RunNo:<br>SeqNo:<br>93.0<br>82.1<br>tCode: <b>E</b><br>RunNo:<br>SeqNo: | 50794<br>1649793<br>LowLimit<br>70<br>70<br>70<br>3PA Method<br>50794<br>1649794                               | Units: mg/k<br>HighLimit<br>130<br>130<br>8015M/D: Dia<br>Units: mg/k   | Kg<br>%RPD<br>esel Range | RPDLimit   |   |
| Client ID:<br>Prep Date:<br>Analyte<br>Diesel Range C<br>Surr: DNOP<br>Sample ID<br>Client ID:<br>Prep Date:<br>Analyte<br>Diesel Range C | LCSS<br>4/24/2018<br>Drganics (DRO)<br>MB-37772<br>PBS<br>4/24/2018  | Batch ID<br>Analysis Date<br>Result F<br>46<br>4.1<br>SampType<br>Batch ID<br>Analysis Date<br>Result F       | D: 37<br>22: 4/<br>20<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10 | 772<br>25/2018<br>SPK value<br>50.00<br>5.000<br>3LK<br>772<br>25/2018  | F<br>SPK Ref Val<br>0<br>Tes<br>F<br>S   | RunNo:<br>SeqNo:<br>93.0<br>82.1<br>tCode: <b>E</b><br>RunNo:<br>SeqNo: | 50794<br>1649793<br>LowLimit<br>70<br>70<br>70<br>3PA Method<br>50794<br>1649794                               | Units: mg/k<br>HighLimit<br>130<br>130<br>8015M/D: Dia<br>Units: mg/k   | Kg<br>%RPD<br>esel Range | RPDLimit   |   |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Page 13 of 16

| WO#: | 1804B43   |
|------|-----------|
|      | 26-Apr-18 |

| Client:<br>Project:         | Williams<br>Lowery 7 | Four Corne     | rs      |                   |             |             |           |                  |          |          |      |
|-----------------------------|----------------------|----------------|---------|-------------------|-------------|-------------|-----------|------------------|----------|----------|------|
| Sample ID                   | MB-37754             | SampTy         | pe: ME  | BLK               | Tes         | Code: El    | PA Method | 8015D: Gasol     | ine Rang | e        |      |
| Client ID:                  | PBS                  | Batch I        | ID: 37  | 754               | F           | unNo: 5     | 0797      |                  |          |          |      |
| Prep Date:                  | 4/23/2018            | Analysis Dat   | te: 4/  | 24/2018           | S           | eqNo: 1     | 648246    | Units: mg/Kg     | 9        |          |      |
| Analyte                     |                      | Result         | PQL     | SPK value         | SPK Ref Val | %REC        | LowLimit  | HighLimit        | %RPD     | RPDLimit | Qual |
| Gasoline Range<br>Surr: BFB | e Organics (GRO)     | ND<br>900      | 5.0     | 1000              |             | 90.0        | 15        | 316              |          |          |      |
| Sample ID                   | LCS-37754            | SampTy         | pe: LC  | S                 | Tes         | Code: El    | PA Method | 8015D: Gasol     | ine Rang | e        |      |
| Client ID:                  | LCSS                 | Batch I        | D: 37   | 754               | F           | unNo: 5     | 0797      |                  |          |          |      |
| Prep Date:                  | 4/23/2018            | Analysis Dat   | te: 4/  | 24/2018           | S           | eqNo: 1     | 648247    | Units: mg/Kg     | 9        |          |      |
| Analyte                     |                      | Result         | PQL     | SPK value         | SPK Ref Val | %REC        | LowLimit  | HighLimit        | %RPD     | RPDLimit | Qual |
| 0                           | e Organics (GRO)     | 27             | 5.0     | 25.00             | 0           | 109         | 75.9      | 131              |          |          |      |
| Surr: BFB                   |                      | 950            |         | 1000              |             | 95.1        | 15        | 316              |          |          |      |
| Sample ID                   | MB-37764             | SampTy         | pe: ME  | BLK               | Tes         | Code: El    | PA Method | 8015D: Gasol     | ine Rang | e        |      |
| Client ID:                  | PBS                  | Batch I        | D: 37   | 764               | F           | unNo: 5     | 0836      |                  |          |          |      |
| Prep Date:                  | 4/24/2018            | Analysis Dat   | te: 4/  | 25/2018           | S           | eqNo: 1     | 649696    | Units: %Rec      |          |          |      |
| Analyte                     |                      | Result         | PQL     | SPK value         | SPK Ref Val | %REC        | LowLimit  | HighLimit        | %RPD     | RPDLimit | Qual |
| Surr: BFB                   |                      | 880            |         | 1000              |             | 88.2        | 15        | 316              |          |          |      |
| Sample ID                   | LCS-37764            | SampTy         | pe: LC  | S                 | Tes         | Code: El    | PA Method | 8015D: Gasol     | ine Rang | e        |      |
| Client ID:                  | LCSS                 | Batch I        | D: 377  | 764               | F           | unNo: 5     | 0836      |                  |          |          |      |
| Prep Date:                  | 4/24/2018            | Analysis Dat   | te: 4/2 | 25/2018           | S           | eqNo: 1     | 649697    | Units: %Rec      |          |          |      |
| Analyte<br>Surr: BFB        |                      | Result<br>1000 | PQL     | SPK value<br>1000 | SPK Ref Val | %REC<br>100 | LowLimit  | HighLimit<br>316 | %RPD     | RPDLimit | Qual |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded Η
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank В
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL
- Sample container temperature is out of limit as specified W
- Page 14 of 16
- Reporting Detection Limit

| WO#: | 1804B43 |   |  |  |  |  |
|------|---------|---|--|--|--|--|
|      |         | - |  |  |  |  |

|                | IVII OIIIIIenta | ar ranar   | yong a   | Juborat   |             |           |           |              |       | The state of the state of the state | 26-Apr |
|----------------|-----------------|------------|----------|-----------|-------------|-----------|-----------|--------------|-------|-------------------------------------|--------|
| Client:        | Williams        | Four Corr  | ners     |           |             |           |           |              |       |                                     |        |
| Project:       | Lowery 7        | ГВ         |          |           |             |           |           |              |       |                                     |        |
| Sample ID      | MB-37754        | SampT      | уре: МІ  | BLK       | Tes         | tCode: E  | PA Method | 8021B: Vola  | tiles |                                     |        |
| Client ID:     | PBS             | Batch      | n ID: 37 | 754       | F           | RunNo: 5  | 0797      |              |       |                                     |        |
| Prep Date:     | 4/23/2018       | Analysis D | ate: 4   | /24/2018  | \$          | SeqNo: 1  | 648281    | Units: mg/k  | ٢g    |                                     |        |
| Analyte        |                 | Result     | PQL      | SPK value | SPK Ref Val | %REC      | LowLimit  | HighLimit    | %RPD  | RPDLimit                            | Qual   |
| Benzene        |                 | ND         | 0.025    |           |             |           |           |              |       |                                     |        |
| Toluene        |                 | ND         | 0.050    |           |             |           |           |              |       |                                     |        |
| Ethylbenzene   |                 | ND         | 0.050    |           |             |           |           |              |       |                                     |        |
| Xylenes, Total |                 | ND         | 0.10     |           |             |           |           |              |       |                                     |        |
| Surr: 4-Brom   | ofluorobenzene  | 1.0        |          | 1.000     |             | 99.8      | 80        | 120          |       |                                     |        |
| Sample ID      | LCS-37754       | SampT      | ype: LC  | s         | Tes         | tCode: E  | PA Method | 8021B: Vola  | tiles |                                     |        |
| Client ID:     | LCSS            | Batch      | n ID: 37 | 754       | F           | RunNo: 5  | 0797      |              |       |                                     |        |
| Prep Date:     | 4/23/2018       | Analysis D | ate: 4/  | /24/2018  | 5           | SeqNo: 1  | 648282    | Units: mg/k  | g     |                                     |        |
| Analyte        |                 | Result     | PQL      | SPK value | SPK Ref Val | %REC      | LowLimit  | HighLimit    | %RPD  | RPDLimit                            | Qual   |
| Benzene        |                 | 0.91       | 0.025    | 1.000     | 0           | 90.9      | 77.3      | 128          |       |                                     |        |
| Toluene        |                 | 0.94       | 0.050    | 1.000     | 0           | 94.0      | 79.2      | 125          |       |                                     |        |
| Ethylbenzene   |                 | 0.94       | 0.050    | 1.000     | 0           | 94.4      | 80.7      | 127          |       |                                     |        |
| Xylenes, Total |                 | 2.9        | 0.10     | 3.000     | 0           | 96.8      | 81.6      | 129          |       |                                     |        |
| Surr: 4-Brom   | ofluorobenzene  | 1.0        |          | 1.000     |             | 100       | 80        | 120          |       |                                     |        |
| Sample ID      | 1804B43-002AMS  | SampT      | ype: MS  | S         | Tes         | tCode: El | PA Method | 8021B: Volat | tiles |                                     |        |
| Client ID:     | MW01 @ 65'      | Batch      | n ID: 37 | 754       | F           | RunNo: 5  | 0797      |              |       |                                     |        |
| Prep Date:     | 4/23/2018       | Analysis D | ate: 4/  | /24/2018  | S           | SeqNo: 1  | 648286    | Units: mg/K  | g     |                                     |        |
| Analyte        |                 | Result     | PQL      | SPK value | SPK Ref Val | %REC      | LowLimit  | HighLimit    | %RPD  | RPDLimit                            | Qual   |
| Benzene        |                 | 0.97       | 0.025    | 0.9891    | 0.008662    | 97.6      | 68.5      | 133          |       |                                     |        |
| Toluene        |                 | 1.0        | 0.049    | 0.9891    | 0.01039     | 103       | 75        | 130          |       |                                     |        |
| Ethylbenzene   |                 | 1.0        | 0.049    | 0.9891    | 0.01020     | 104       | 79.4      | 128          |       |                                     |        |
| Xylenes, Total |                 | 3.2        | 0.099    | 2.967     | 0.02868     | 107       | 77.3      | 131          |       |                                     |        |
| Surr: 4-Brom   | ofluorobenzene  | 1.0        |          | 0.9891    |             | 102       | 80        | 120          |       |                                     |        |
| Sample ID      | 1804B43-002AMS  | D SampT    | ype: MS  | SD        | Tes         | tCode: El | PA Method | 8021B: Volat | tiles |                                     |        |
| Client ID:     | MW01 @ 65'      | Batch      | n ID: 37 | 754       | F           | RunNo: 5  | 0797      |              |       |                                     |        |
| Prep Date:     | 4/23/2018       | Analysis D | ate: 4/  | 24/2018   | 5           | SeqNo: 1  | 648287    | Units: mg/K  | g     |                                     |        |
| Analyte        |                 | Result     | PQL      | SPK value | SPK Ref Val | %REC      | LowLimit  | HighLimit    | %RPD  | RPDLimit                            | Qual   |
| Benzene        |                 | 1.0        | 0.024    | 0.9443    | 0.008662    | 105       | 68.5      | 133          | 2.20  | 20                                  |        |
| Toluene        |                 | 1.1        | 0.047    | 0.9443    | 0.01039     | 111       | 75        | 130          | 3.45  | 20                                  |        |
| Ethylbenzene   |                 | 1.1        | 0.047    | 0.9443    | 0.01020     | 113       | 79.4      | 128          | 3.39  | 20                                  |        |
| Xylenes, Total |                 | 3.3        | 0.094    | 2.833     | 0.02868     | 115       | 77.3      | 131          | 2.99  | 20                                  |        |
| 0 10           | ofluorobenzene  | 0.96       |          | 0.9443    |             | 102       | 80        | 120          | 0     | 0                                   |        |

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Page 15 of 16

P Sample pH Not In RangeRL Reporting Detection Limit

W Sample container temperature is out of limit as specified

| WO#: | 1804B43 |
|------|---------|
|      | 26 4 10 |

| Client: William<br>Project: Lowery | ns Four Corners<br>y TB  |                           |                  |               |
|------------------------------------|--------------------------|---------------------------|------------------|---------------|
| Sample ID MB-37764                 | SampType: MBLK           | TestCode: EPA Method      | 8021B: Volatiles |               |
| Client ID: PBS                     | Batch ID: 37764          | RunNo: 50836              |                  |               |
| Prep Date: 4/24/2018               | Analysis Date: 4/25/2018 | SeqNo: 1649726            | Units: %Rec      |               |
| Analyte                            | Result PQL SPK value     | SPK Ref Val %REC LowLimit | HighLimit %RPD   | RPDLimit Qual |
| Surr: 4-Bromofluorobenzene         | 0.98 1.000               | 98.2 80                   | 120              |               |
| Sample ID LCS-37764                | SampType: LCS            | TestCode: EPA Method      | 8021B: Volatiles |               |
| Client ID: LCSS                    | Batch ID: 37764          | RunNo: 50836              |                  |               |
| Prep Date: 4/24/2018               | Analysis Date: 4/25/2018 | SeqNo: 1649727            | Units: %Rec      |               |
| Analyte                            | Result PQL SPK value     | SPK Ref Val %REC LowLimit | HighLimit %RPD   | RPDLimit Qual |
| Surr: 4-Bromofluorobenzene         | 1.0 1.000                | 103 80                    | 120              |               |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S
- В Analyte detected in the associated Method Blank
- Value above quantitation range Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified
- Page 16 of 16

| HALL<br>ENVIRONMENTAL<br>ANALYSIS<br>LABORATORY   | TEL: 505-345-3                            | ntal Analysis Laborator<br>4901 Hawkins N.<br>Albuquerque, NM 8710<br>975 FAX: 505-345-410<br>v. hallenvironmental.com | <sup>E</sup><br>99 Sam | mple Log-In Check List     |                   |  |  |  |  |
|---|---|--|------------------------|----------------------------|-------------------|--|--|--|--|
| Client Name: WILLIAMS FOUR CORN   | Work Order Num                            | ber: 1804B43   |                        | RcptNo:                    | 1                 |  |  |  |  |
| Received By: Isaiah Ortiz<br>Completed By: Ashley Gallegos  | 4/21/2018 9:40:00 /<br>4/23/2018 10:02:49 |  | IG                     | -                          |                   |  |  |  |  |
| Reviewed By:  | 4 03/15                                   | Labelec  | 1 64                   | -C.NE                      |                   |  |  |  |  |
| <ul><li><u>Chain of Custody</u></li><li>1. Is Chain of Custody complete?</li><li>2. How was the sample delivered?</li></ul> |   | Yes 🗹<br>Courier   | No 🗌                   | Not Present                |                   |  |  |  |  |
| Log In<br>3. Was an attempt made to cool the sample   | es?                                       | Yes 🗹  | No                     | NA 🗆                       |                   |  |  |  |  |
| 4. Were all samples received at a temperate   | ure of >0° C to 6.0°C                     | Yes 🖌  | No 🗆                   | NA 🗌                       |                   |  |  |  |  |
| 5. Sample(s) in proper container(s)?  |   | Yes 🗹  | No 🗌                   |                            |                   |  |  |  |  |
| <ol> <li>Sufficient sample volume for indicated tes</li> <li>Are samples (except VOA and ONG) proj</li> </ol>               |   | Yes 🗹<br>Yes 🗹   | No 🗌                   |                            |                   |  |  |  |  |
| 8. Was preservative added to bottles?   |   | Yes  | No 🗹                   | NA 🗌                       |                   |  |  |  |  |
| 9. VOA vials have zero headspace?<br>10. Were any sample containers received br   | oken?                                     | Yes ☑<br>Yes □   | No □<br>No ☑           | No VOA Vials               | <b>b</b>          |  |  |  |  |
| 11. Does paperwork match bottle labels?<br>(Note discrepancies on chain of custody)   |   | Yes 🗹  | No 🗌                   | bottles checked<br>for pH: | >12 unless noted) |  |  |  |  |
| <ol> <li>Are matrices correctly Identified on Chain</li> <li>Is it clear what analyses were requested?</li> </ol>           |   | Yes ✔<br>Yes ✔   | No                     |                            |                   |  |  |  |  |
| 14. Were all holding times able to be met?<br>(If no, notify customer for authorization.)                                   |   | Yes 🗹  | No 🗆                   | Checked by:                |                   |  |  |  |  |
| Special Handling (if applicable)  |   | ×  | _                      |                            |                   |  |  |  |  |
| 15. Was client notified of all discrepancies w  | CAT-WINSOMMERSED BROCKETSREET             | Yes 🗌  | No 🗌                   | NA 🗹                       |                   |  |  |  |  |
| Person Notified:<br>By Whom:<br>Regarding:<br>Client Instructions:  | Date<br>Via:                              |  | ne 🗌 Fax               |                            |                   |  |  |  |  |
| 16. Additional remarks:   |   |  |                        |                            |                   |  |  |  |  |
| 17. <u>Cooler Information</u><br>Cooler No Temp °C Condition<br>1 0.5 Good  | Seal Intact Seal No<br>Yes                | Seal Date Si   | gned By                |                            |                   |  |  |  |  |

| С                     | hain     | of-Cu       | stody Record                | Turn-Around Time:       |                      |                            |  |             |                           |                    |                    |                     |               |   |                        |             |                 |    | _   |     |                      |
|-----------------------|----------|-------------|-----------------------------|-------------------------|----------------------|----------------------------|--|-------------|---------------------------|--------------------|--------------------|---------------------|---------------|---|------------------------|-------------|-----------------|----|-----|-----|----------------------|
| Client:               | Willi    | ams         | four (orners                | Standard                | Standard   Rush      |                            |  |             |                           |                    |                    |                     |               |   |                        |             |                 |    | NT  |     | -                    |
|                       |          |             |                             | Project Name            | Project Name:        |                            |  |             | 1.1                       |                    |                    |                     |               |   |                        |             |                 | RA | IIC | JK. | T                    |
| Mailing               | Address  | 117.5       | S Arroyo Dr                 | Lowe                    | NY TB                | n                          | www.hallenvironmental.com<br>4901 Hawkins NE - Albuquerque, NM 87109 |             |                           |                    |                    |                     |               |   |                        |             |                 |    |     |     |                      |
|                       | P        | loomfi      | eld NM                      | Project #:              | /                    |                            |  |             |                           |                    |                    |                     |               |   |                        |             |                 |    |     |     |                      |
| Phone #               |          | 100WIT I    | ela min                     |                         |                      |                            | 7.0  | le          | 1. 50                     | 5-34               | 5-39               |                     |               |   | -                      | 345<br>uesi | 410             | 7  |     |     |                      |
| email or              | r Fav# / | 10 00       | gakr@williams.com           | Project Mana            | aler:                |                            |  | 5           | Â                         |                    |                    |                     |               |   | ney                    | ues         |                 |    | -   |     |                      |
| OA/OC F               | Package: | and crist   |                             | ITE-                    | Janny B              | urns                       | 1)   | (Gas only)  | RE/                       |                    |                    |                     |               | SO  | 3's                    |             |                 |    |     |     |                      |
| □ Stan                | -        |             | □ Level 4 (Full Validation) |                         |                      |                            | + TMB's (8021)   | Gas         | 0                         |                    |                    | SIMS)               |               | 04,   | PCB's                  |             |                 |    |     |     |                      |
| Accredi               |          |             |                             | Sampler:                | ), Burns             |                            | MB'S   | TPH (       | R                         |                    |                    | S O                 |               | 02,4  | 082                    |             |                 |    |     |     |                      |
|                       | AP       | □ Othe      | r                           |                         | TYes                 | No.                        | ÷ [-<br>+  | F +         | 02                        | 18.1               | 04.1               | 827                 |               | 03,N  | \$ / 8(                | •           | A)              |    |     |     | Dr N                 |
| EDD                   | (Type)   | PDF         |                             | Sample Tem              | perature: C          | )5                         |  | BE          | Ø                         | pd 4               | pd 5               | 0 or                | etals         | N,NO  | ides                   | A)          | 07-             |    |     |     | Z                    |
| Date                  | Time     | Matrix      | Sample Request ID           | Container<br>Type and # | Preservative<br>Type | HEAL NO4                   | BTEXA MARE   | BTEX + MTBE | TPH 8015B/GRO / DRO / MRO | TPH (Method 418.1) | EDB (Method 504.1) | PAH's (8310 or 8270 | RCRA 8 Metals | Anions (F,Cl,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> ) | 8081 Pesticides / 8082 | 8260B (VOA) | 8270 (Semi-VOA) |    |     |     | Air Bubbles (Y or N) |
| 4/19                  | 1300     | S           | MWOI@25'                    | 1-402                   | 000                  | -001                       | X  |             | Ź                         |                    |                    | -                   | -             | 4   |                        | - 00        | 0               |    |     | +   | 4                    |
| 4/19                  | 1500     | 1           | MW01 865'                   | )                       | 1                    | -002                       | 1  |             | 1                         |                    |                    |                     |               |   |                        |             |                 |    |     | -   | +                    |
| 4/19                  | 1120     |             | BHOI@45'                    |                         |                      | -003                       |  |             |                           | $\neg$             |                    |                     |               |   |                        |             |                 |    | +   | +   | +-                   |
| 4/19                  | 1130     |             | BHOIC49'                    |                         |                      | -004                       |  |             |                           |                    |                    |                     |               |   |                        |             |                 |    | 1   |     |                      |
| 4/17                  | 100      |             | MW04@35'                    |                         |                      | -005                       |  |             | 11                        |                    |                    |                     |               |   |                        |             |                 |    |     | -   |                      |
| 4/17                  | 1200     |             | MW04@55'                    |                         |                      | DOLE                       | T  |             |                           |                    |                    |                     |               |   |                        |             |                 |    |     | -   | 1                    |
| 4/18                  | 1330     |             | MW05@40'                    |                         |                      | -007                       |  |             | Π                         |                    |                    |                     |               |   |                        |             |                 |    |     |     |                      |
| 4/18                  | 1400     |             | MW05@55'                    |                         |                      | -008                       |  |             |                           |                    |                    |                     |               |   |                        |             |                 |    |     |     |                      |
| 4/16                  | 1500     |             | MW06@451                    |                         |                      | -7009                      |  |             |                           |                    |                    |                     |               |   |                        |             |                 |    |     |     |                      |
| 4/16                  | 1530     |             | MW06 855'                   |                         |                      | TOID                       |  |             |                           |                    |                    |                     |               |   |                        |             |                 |    |     |     |                      |
| 4/18<br>4/18<br>Date: | 0915     |             | MW07@.40'                   |                         |                      | -011                       |  |             | Π                         |                    |                    |                     |               |   |                        |             |                 |    |     |     |                      |
| 4118                  | 0945     | X           | MW07@55'                    | A                       | V                    | 7012                       | V  |             | Y                         |                    |                    |                     |               |   |                        |             |                 |    |     |     |                      |
| , , ,                 |          | Relinquishe | d by                        | Received by:            | 11                   | Date Time                  | Rem  | arks        | :                         |                    |                    |                     |               |   |                        |             |                 |    |     |     |                      |
| 4/10/8<br>Date:       | 16:50    | Delinguist  | M)                          | /ML                     | Jar                  | VILLAILE 1050<br>Date Time |  |             |                           |                    |                    |                     |               |   |                        |             |                 |    |     |     |                      |
| · · ·                 | Time:    |             | ST NOV                      | Fleceived by:           | < 4                  | 121/18 940                 |  |             |                           |                    |                    |                     |               |   |                        |             |                 |    |     |     |                      |

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: <u>www.hallenvironmental.com</u>

May 03, 2018

Aaron Galer Williams Four Corners 188 CR 4900 Bloomfield, NM 87413 TEL: (505) 632-4442 FAX

OrderNo.: 1804E31

RE: Lowery TB

Dear Aaron Galer:

Hall Environmental Analysis Laboratory received 7 sample(s) on 4/28/2018 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <u>www.hallenvironmental.com</u> or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

#### Hall Environmental Analysis Laboratory, Inc.

Lab Order **1804E31** Date Reported: **5/3/2018** 

| CLIENT: Williams Four Corners  |              | (        | Client Samp                          | e ID: M   | W02 @ 55'           |                      |  |  |  |  |  |
|--------------------------------|--------------|----------|--------------------------------------|-----------|---------------------|----------------------|--|--|--|--|--|
| Project: Lowery TB             |              |          | Collection                           | Date: 4/2 | 23/2018 1:00:00 PM  |                      |  |  |  |  |  |
| Lab ID: 1804E31-001            | Matrix: S    | SOIL     | Received Date: 4/28/2018 10:40:00 AM |           |                     |                      |  |  |  |  |  |
| Analyses                       | Result       | PQL Qual | Units                                | DF        | Date Analyzed       | Batch                |  |  |  |  |  |
| EPA METHOD 8015D MOD: GASOLII  | NE RANGE     |          |                                      |           | Analyst             | AG                   |  |  |  |  |  |
| Gasoline Range Organics (GRO)  | ND           | 4.8      | mg/Kg                                | 1         | 5/1/2018 4:38:10 PM | 37844                |  |  |  |  |  |
| Surr: BFB                      | 116          | 70-130   | %Rec                                 | 1         | 5/1/2018 4:38:10 PM | 37844                |  |  |  |  |  |
| EPA METHOD 8015M/D: DIESEL RAI | NGE ORGANICS |          |                                      |           | Analyst             | TOM                  |  |  |  |  |  |
| Diesel Range Organics (DRO)    | ND           | 7.8      | mg/Kg                                | 1         | 5/2/2018 7:20:30 PM | 37891                |  |  |  |  |  |
| Motor Oil Range Organics (MRO) | ND           | 39       | mg/Kg                                | 1         | 5/2/2018 7:20:30 PM | 378 <mark>9</mark> 1 |  |  |  |  |  |
| Surr: DNOP                     | 121          | 70-130   | %Rec                                 | 1         | 5/2/2018 7:20:30 PM | 37891                |  |  |  |  |  |
| EPA METHOD 8260B: VOLATILES S  | HORT LIST    |          |                                      |           | Analyst             | AG                   |  |  |  |  |  |
| Benzene                        | ND           | 0.024    | mg/Kg                                | 1         | 5/1/2018 4:38:10 PM | 37844                |  |  |  |  |  |
| Toluene                        | ND           | 0.048    | mg/Kg                                | 1         | 5/1/2018 4:38:10 PM | 37844                |  |  |  |  |  |
| Ethylbenzene                   | ND           | 0.048    | mg/Kg                                | 1         | 5/1/2018 4:38:10 PM | 37844                |  |  |  |  |  |
| Xylenes, Total                 | ND           | 0.097    | mg/Kg                                | 1         | 5/1/2018 4:38:10 PM | 37844                |  |  |  |  |  |
| Surr: 4-Bromofluorobenzene     | 126          | 70-130   | %Rec                                 | 1         | 5/1/2018 4:38:10 PM | 37844                |  |  |  |  |  |
| Surr: Toluene-d8               | 89.1         | 70-130   | %Rec                                 | 1         | 5/1/2018 4:38:10 PM | 37844                |  |  |  |  |  |

| Qualifiers: | * | Value exceeds Maximum Contaminant Level. |
|-------------|---|--|
|             | D | Sample Diluted Due to Matrix             |

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analytical Report Lab Order 1804E31 Date Reported: 5/3/2018

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Williams Four Corners

Project: Lowery TB

Client Sample ID: BH02 @ 65' Collection Date: 4/24/2018 11:00:00 AM Received Date: 4/28/2018 10:40:00 AM

| Lab ID: 1804E31-002            | Matrix:     | SOIL   | Received I | Received Date: 4/28/2018 10:40:00 AM |                     |        |  |  |
|--------------------------------|-------------|--------|------------|--------------------------------------|---------------------|--------|--|--|
| Analyses                       | Result      | PQL Qu | al Units   | DF                                   | Date Analyzed       | Batch  |  |  |
| EPA METHOD 8015D MOD: GASOLIN  | E RANGE     |        |            |                                      | Analys              | t: AG  |  |  |
| Gasoline Range Organics (GRO)  | ND          | 4.8    | mg/Kg      | 1                                    | 5/1/2018 5:01:10 PM | 37844  |  |  |
| Surr: BFB                      | 117         | 70-130 | %Rec       | 1                                    | 5/1/2018 5:01:10 PM | 37844  |  |  |
| EPA METHOD 8015M/D: DIESEL RAN | GE ORGANICS | 5      |            |                                      | Analys              | t: TOM |  |  |
| Diesel Range Organics (DRO)    | ND          | 9.5    | mg/Kg      | 1                                    | 5/2/2018 7:42:41 PM | 37891  |  |  |
| Motor Oil Range Organics (MRO) | ND          | 47     | mg/Kg      | 1                                    | 5/2/2018 7:42:41 PM | 37891  |  |  |
| Surr: DNOP                     | 101         | 70-130 | %Rec       | 1                                    | 5/2/2018 7:42:41 PM | 37891  |  |  |
| EPA METHOD 8260B: VOLATILES SH | ORT LIST    |        |            |                                      | Analys              | t: AG  |  |  |
| Benzene                        | ND          | 0.024  | mg/Kg      | 1                                    | 5/1/2018 5:01:10 PM | 37844  |  |  |
| Toluene                        | ND          | 0.048  | mg/Kg      | 1                                    | 5/1/2018 5:01:10 PM | 37844  |  |  |
| Ethylbenzene                   | ND          | 0.048  | mg/Kg      | 1                                    | 5/1/2018 5:01:10 PM | 37844  |  |  |
| Xylenes, Total                 | ND          | 0.096  | mg/Kg      | 1                                    | 5/1/2018 5:01:10 PM | 37844  |  |  |
| Surr: 4-Bromofluorobenzene     | 128         | 70-130 | %Rec       | 1                                    | 5/1/2018 5:01:10 PM | 37844  |  |  |
| Surr: Toluene-d8               | 91.0        | 70-130 | %Rec       | 1                                    | 5/1/2018 5:01:10 PM | 37844  |  |  |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

| Qualifiers: | * |
|-------------|---|
|-------------|---|

- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded

Value exceeds Maximum Contaminant Level.

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/3/2018

| CLIENT: Williams Four Corners  |                                       |         | Client Sampl | e ID: M   | W09 @ 55'           |       |  |  |
|--------------------------------|---------------------------------------|---------|--------------|-----------|---------------------|-------|--|--|
| Project: Lowery TB             | Collection Date: 4/24/2018 2:00:00 PM |         |              |           |                     |       |  |  |
| Lab ID: 1804E31-003            | Matrix:                               | SOIL    | Received 1   | Date: 4/2 | 28/2018 10:40:00 AM |       |  |  |
| Analyses                       | Result                                | PQL Qua | l Units      | DF        | Date Analyzed       | Batch |  |  |
| EPA METHOD 8015D MOD: GASOLIN  | E RANGE                               |         |              |           | Analyst             | AG    |  |  |
| Gasoline Range Organics (GRO)  | ND                                    | 4.7     | mg/Kg        | 1         | 5/1/2018 5:24:09 PM | 37844 |  |  |
| Surr: BFB                      | 117                                   | 70-130  | %Rec         | 1         | 5/1/2018 5:24:09 PM | 37844 |  |  |
| EPA METHOD 8015M/D: DIESEL RAN | GE ORGANICS                           |         |              |           | Analyst             | TOM   |  |  |
| Diesel Range Organics (DRO)    | ND                                    | 9.3     | mg/Kg        | 1         | 5/2/2018 8:04:39 PM | 37891 |  |  |
| Motor Oil Range Organics (MRO) | ND                                    | 47      | mg/Kg        | 1         | 5/2/2018 8:04:39 PM | 37891 |  |  |
| Surr: DNOP                     | 111                                   | 70-130  | %Rec         | 1         | 5/2/2018 8:04:39 PM | 37891 |  |  |
| EPA METHOD 8260B: VOLATILES SH | IORT LIST                             |         |              |           | Analyst             | AG    |  |  |
| Benzene                        | ND                                    | 0.024   | mg/Kg        | 1         | 5/1/2018 5:24:09 PM | 37844 |  |  |
| Toluene                        | ND                                    | 0.047   | mg/Kg        | 1         | 5/1/2018 5:24:09 PM | 37844 |  |  |
| Ethylbenzene                   | ND                                    | 0.047   | mg/Kg        | 1         | 5/1/2018 5:24:09 PM | 37844 |  |  |
| Xylenes, Total                 | ND                                    | 0.095   | mg/Kg        | 1         | 5/1/2018 5:24:09 PM | 37844 |  |  |
| Surr: 4-Bromofluorobenzene     | 127                                   | 70-130  | %Rec         | 1         | 5/1/2018 5:24:09 PM | 37844 |  |  |
| Surr: Toluene-d8               | 87.8                                  | 70-130  | %Rec         | 1         | 5/1/2018 5:24:09 PM | 37844 |  |  |

| Qualifiers: | *  | Value exceeds Maximum Contaminant Level.           | В | Analyte detected in the associated Method I |
|-------------|----|--|---|---|
|             | D  | Sample Diluted Due to Matrix                       | Е | Value above quantitation range              |
|             | Н  | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits  |
|             | ND | Not Detected at the Reporting Limit                | Р | Sample pH Not In Range                      |

- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- Blank
- Page 3 of 10
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1804E31

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/3/2018

| CLIENT: Williams Four Corners  |  |         | Client Sampl | e ID: M   | W03 @ 40'           |       |  |  |
|--------------------------------|--|---------|--------------|-----------|---------------------|-------|--|--|
| Project: Lowery TB             | Collection Date: 4/25/2018 10:00:00 AM |         |              |           |                     |       |  |  |
| Lab ID: 1804E31-004            | Matrix:                                | SOIL    | Received     | Date: 4/2 | 28/2018 10:40:00 AM |       |  |  |
| Analyses                       | Result                                 | PQL Qua | Units        | DF        | Date Analyzed       | Batch |  |  |
| EPA METHOD 8015D MOD: GASOLI   | NE RANGE                               |         |              |           | Analyst:            | AG    |  |  |
| Gasoline Range Organics (GRO)  | ND                                     | 4.9     | mg/Kg        | 1         | 5/1/2018 5:47:15 PM | 37844 |  |  |
| Surr: BFB                      | 114                                    | 70-130  | %Rec         | 1         | 5/1/2018 5:47:15 PM | 37844 |  |  |
| EPA METHOD 8015M/D: DIESEL RAI | NGE ORGANICS                           |         |              |           | Analyst:            | том   |  |  |
| Diesel Range Organics (DRO)    | ND                                     | 9.5     | mg/Kg        | 1         | 5/2/2018 8:26:45 PM | 37891 |  |  |
| Motor Oil Range Organics (MRO) | ND                                     | 47      | mg/Kg        | 1         | 5/2/2018 8:26:45 PM | 37891 |  |  |
| Surr: DNOP                     | 103                                    | 70-130  | %Rec         | 1         | 5/2/2018 8:26:45 PM | 37891 |  |  |
| EPA METHOD 8260B: VOLATILES S  | HORT LIST                              |         |              |           | Analyst:            | AG    |  |  |
| Benzene                        | ND                                     | 0.025   | mg/Kg        | 1         | 5/1/2018 5:47:15 PM | 37844 |  |  |
| Toluene                        | ND                                     | 0.049   | mg/Kg        | 1         | 5/1/2018 5:47:15 PM | 37844 |  |  |
| Ethylbenzene                   | ND                                     | 0.049   | mg/Kg        | 1         | 5/1/2018 5:47:15 PM | 37844 |  |  |
| Xylenes, Total                 | ND                                     | 0.098   | mg/Kg        | 1         | 5/1/2018 5:47:15 PM | 37844 |  |  |
| Surr: 4-Bromofluorobenzene     | 125                                    | 70-130  | %Rec         | 1         | 5/1/2018 5:47:15 PM | 37844 |  |  |
| Surr: Toluene-d8               | 87.5                                   | 70-130  | %Rec         | 1         | 5/1/2018 5:47:15 PM | 37844 |  |  |
|                                |  |         |              |           |                     |       |  |  |

| *  | Value exceeds Maximum Contaminant Level.              | в  | Analyte detected in the associated Method Blank   |
|----|---|----|---|
| D  | Sample Diluted Due to Matrix                          | E  | Value above quantitation range  |
| Н  | Holding times for preparation or analysis exceeded    | J  | Analyte detected below quantitation limits Page 4 of 10   |
| D  | Not Detected at the Reporting Limit                   | Р  | Sample pH Not In Range  |
| QL | Practical Quanitative Limit                           | RL | Reporting Detection Limit   |
| S  | % Recovery outside of range due to dilution or matrix | W  | Sample container temperature is out of limit as specified   |
|    |   |    |   |
| 0  | )<br>I<br>D<br>ĮL                                     |    | Sample Diluted Due to Matrix     E       Holding times for preparation or analysis exceeded     J       Not Detected at the Reporting Limit     P       PL     Practical Quanitative Limit     RL |

Date Reported: 5/3/2018

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Williams Four Corners

Project: Lowery TB

Client Sample ID: MW08 @ 45' Collection Date: 4/25/2018 12:45:00 PM

| Lab ID: 1804E31-005            | Matrix:      | Matrix: SOIL |          |    | Received Date: 4/28/2018 10:40:00 AM |        |  |  |  |
|--------------------------------|--------------|--------------|----------|----|--------------------------------------|--------|--|--|--|
| Analyses                       | Result       | PQL Qu       | al Units | DF | Date Analyzed                        | Batch  |  |  |  |
| EPA METHOD 8015D MOD: GASOL    | INE RANGE    |              |          |    | Analys                               | t: AG  |  |  |  |
| Gasoline Range Organics (GRO)  | ND           | 4.9          | mg/Kg    | 1  | 5/1/2018 6:10:15 PM                  | 37844  |  |  |  |
| Surr: BFB                      | 117          | 70-130       | %Rec     | 1  | 5/1/2018 6:10:15 PM                  | 37844  |  |  |  |
| EPA METHOD 8015M/D: DIESEL RA  | NGE ORGANICS | 5            |          |    | Analys                               | t: TOM |  |  |  |
| Diesel Range Organics (DRO)    | ND           | 9.6          | mg/Kg    | 1  | 5/2/2018 8:48:42 PM                  | 37891  |  |  |  |
| Motor Oil Range Organics (MRO) | ND           | 48           | mg/Kg    | 1  | 5/2/2018 8:48:42 PM                  | 37891  |  |  |  |
| Surr: DNOP                     | 106          | 70-130       | %Rec     | 1  | 5/2/2018 8:48:42 PM                  | 37891  |  |  |  |
| EPA METHOD 8260B: VOLATILES S  | HORT LIST    |              |          |    | Analys                               | t: AG  |  |  |  |
| Benzene                        | ND           | 0.024        | mg/Kg    | 1  | 5/1/2018 6:10:15 PM                  | 37844  |  |  |  |
| Toluene                        | ND           | 0.049        | mg/Kg    | 1  | 5/1/2018 6:10:15 PM                  | 37844  |  |  |  |
| Ethylbenzene                   | ND           | 0.049        | mg/Kg    | 1  | 5/1/2018 6:10:15 PM                  | 37844  |  |  |  |
| Xylenes, Total                 | ND           | 0.098        | mg/Kg    | 1  | 5/1/2018 6:10:15 PM                  | 37844  |  |  |  |
| Surr: 4-Bromofluorobenzene     | 127          | 70-130       | %Rec     | 1  | 5/1/2018 6:10:15 PM                  | 37844  |  |  |  |
| Surr: Toluene-d8               | 88.0         | 70-130       | %Rec     | 1  | 5/1/2018 6:10:15 PM                  | 37844  |  |  |  |

| Qualifiers: | *   | Value exceeds Maximum Contaminant Level.              | В  | Analyte detected in the associated Method Blank           |
|-------------|-----|---|----|---|
|             | D   | Sample Diluted Due to Matrix                          | E  | Value above quantitation range                            |
|             | Η   | Holding times for preparation or analysis exceeded    | J  | Analyte detected below quantitation limits Page 5 of 10   |
|             | ND  | Not Detected at the Reporting Limit                   | Р  | Sample pH Not In Range                                    |
|             | PQL | Practical Quanitative Limit                           | RL | Reporting Detection Limit                                 |
|             | S   | % Recovery outside of range due to dilution or matrix | W  | Sample container temperature is out of limit as specified |
|             |     |   |    |   |

**Analytical Report** Lab Order 1804E31 Date Reported: 5/3/2018

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Williams Four Corners

Project: Lowery TB

Client Sample ID: MW08 @ 55' Collection Date: 4/25/2018 1:00:00 PM

| Lab ID: 1804E31-006            | Matrix:      | Matrix: SOIL |          |    | Received Date: 4/28/2018 10:40:00 AM |       |  |  |  |
|--------------------------------|--------------|--------------|----------|----|--------------------------------------|-------|--|--|--|
| Analyses                       | Result       | PQL Qu       | al Units | DF | Date Analyzed                        | Batch |  |  |  |
| EPA METHOD 8015D MOD: GASOL    | INE RANGE    |              |          |    | Analyst                              | AG    |  |  |  |
| Gasoline Range Organics (GRO)  | ND           | 4.8          | mg/Kg    | 1  | 5/1/2018 6:33:24 PM                  | 37844 |  |  |  |
| Surr: BFB                      | 117          | 70-130       | %Rec     | 1  | 5/1/2018 6:33:24 PM                  | 37844 |  |  |  |
| EPA METHOD 8015M/D: DIESEL RA  | NGE ORGANICS | ;            |          |    | Analyst                              | том   |  |  |  |
| Diesel Range Organics (DRO)    | ND           | 9.3          | mg/Kg    | 1  | 5/2/2018 9:10:48 PM                  | 37891 |  |  |  |
| Motor Oil Range Organics (MRO) | ND           | 47           | mg/Kg    | 1  | 5/2/2018 9:10:48 PM                  | 37891 |  |  |  |
| Surr: DNOP                     | 102          | 70-130       | %Rec     | 1  | 5/2/2018 9:10:48 PM                  | 37891 |  |  |  |
| EPA METHOD 8260B: VOLATILES    | SHORT LIST   |              |          |    | Analyst                              | AG    |  |  |  |
| Benzene                        | ND           | 0.024        | mg/Kg    | 1  | 5/1/2018 6:33:24 PM                  | 37844 |  |  |  |
| Toluene                        | ND           | 0.048        | mg/Kg    | 1  | 5/1/2018 6:33:24 PM                  | 37844 |  |  |  |
| Ethylbenzene                   | ND           | 0.048        | mg/Kg    | 1  | 5/1/2018 6:33:24 PM                  | 37844 |  |  |  |
| Xylenes, Total                 | ND           | 0.095        | mg/Kg    | 1  | 5/1/2018 6:33:24 PM                  | 37844 |  |  |  |
| Surr: 4-Bromofluorobenzene     | 128          | 70-130       | %Rec     | 1  | 5/1/2018 6:33:24 PM                  | 37844 |  |  |  |
| Surr: Toluene-d8               | 88.4         | 70-130       | %Rec     | 1  | 5/1/2018 6:33:24 PM                  | 37844 |  |  |  |

| Qualifiers: | *  | Value exceeds Maximum Contaminant Level.           | В | Analyte detect |
|-------------|----|--|---|----------------|
|             | D  | Sample Diluted Due to Matrix                       | E | Value above q  |
|             | Η  | Holding times for preparation or analysis exceeded | J | Analyte detect |
|             | ND | Not Detected at the Reporting Limit                | Р | Sample pH No   |

- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- cted in the associated Method Blank
- quantitation range
- ected below quantitation limits Page 6 of 10
- Sample pH Not In Range P
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analytical Report Lab Order 1804E31 Date Reported: 5/3/2018

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Williams Four Corners

Project: Lowery TB

Client Sample ID: MW10 @ 50' Collection Date: 4/26/2018 10:45:00 AM Received Date: 4/28/2018 10:40:00 AM

| 3                              |               |            |                                      |    |                     |        |  |  |
|--------------------------------|---------------|------------|--------------------------------------|----|---------------------|--------|--|--|
| Lab ID: 1804E31-007            | Matrix:       | Received I | Received Date: 4/28/2018 10:40:00 AM |    |                     |        |  |  |
| Analyses                       | Result        | PQL Qu     | al Units                             | DF | Date Analyzed       | Batch  |  |  |
| EPA METHOD 8015D MOD: GASOL    | INE RANGE     |            |                                      |    | Analys              | t: AG  |  |  |
| Gasoline Range Organics (GRO)  | ND            | 4.8        | mg/Kg                                | 1  | 5/1/2018 9:38:02 PM | 37844  |  |  |
| Surr: BFB                      | 116           | 70-130     | %Rec                                 | 1  | 5/1/2018 9:38:02 PM | 37844  |  |  |
| EPA METHOD 8015M/D: DIESEL R/  | ANGE ORGANICS | 5          |                                      |    | Analys              | t: TOM |  |  |
| Diesel Range Organics (DRO)    | ND            | 8.5        | mg/Kg                                | 1  | 5/2/2018 9:32:47 PM | 37891  |  |  |
| Motor Oil Range Organics (MRO) | ND            | 43         | mg/Kg                                | 1  | 5/2/2018 9:32:47 PM | 37891  |  |  |
| Surr: DNOP                     | 102           | 70-130     | %Rec                                 | 1  | 5/2/2018 9:32:47 PM | 37891  |  |  |
| EPA METHOD 8260B: VOLATILES    | SHORT LIST    |            |                                      |    | Analys              | : AG   |  |  |
| Benzene                        | ND            | 0.024      | mg/Kg                                | 1  | 5/1/2018 9:38:02 PM | 37844  |  |  |
| Toluene                        | ND            | 0.048      | mg/Kg                                | 1  | 5/1/2018 9:38:02 PM | 37844  |  |  |
| Ethylbenzene                   | ND            | 0.048      | mg/Kg                                | 1  | 5/1/2018 9:38:02 PM | 37844  |  |  |
| Xylenes, Total                 | ND            | 0.096      | mg/Kg                                | 1  | 5/1/2018 9:38:02 PM | 37844  |  |  |
| Surr: 4-Bromofluorobenzene     | 126           | 70-130     | %Rec                                 | 1  | 5/1/2018 9:38:02 PM | 37844  |  |  |
| Surr: Toluene-d8               | 89.0          | 70-130     | %Rec                                 | 1  | 5/1/2018 9:38:02 PM | 37844  |  |  |

| Qualifiers: | *   | Value exceeds Maximum Contaminant Level.              | В  | Analyte detected in the associated Method Blank           |
|-------------|-----|---|----|---|
|             | D   | Sample Diluted Due to Matrix                          | E  | Value above quantitation range                            |
|             | Н   | Holding times for preparation or analysis exceeded    | J  | Analyte detected below quantitation limits Page 7 of 10   |
|             | ND  | Not Detected at the Reporting Limit                   | Р  | Sample pH Not In Range                                    |
|             | PQL | Practical Quanitative Limit                           | RL | Reporting Detection Limit                                 |
|             | S   | % Recovery outside of range due to dilution or matrix | W  | Sample container temperature is out of limit as specified |

| the second s | And in case of the local data where the local data | A             | the same of the local data in the local data ini | Statement of the local division in which the local division in the | and the second se |              |            | State of the local division in the | the state of the state of the |
|--|---|---------------|--|--|---|--------------|------------|------------------------------------|-------------------------------|
| Willian<br>Lower   | ms Four Corner<br>y TB  | 'S            |  |  |   |              |            |                                    |                               |
| 7898   | SampTyp   | e: LCS        | Tes  | tCode: EF  | PA Method   | 8015M/D: Die | esel Range | e Organics                         |                               |
|  | Batch II  | D: 37898      | F  | RunNo: 50  | 0978  |              |            |                                    |                               |
| 018  | Analysis Date   | e: 5/2/2018   | SeqNo: 1655172 Units: %Rec   |  |   |              |            |                                    |                               |
|  | Result  | PQL SPK value | SPK Ref Val  | %REC   | LowLimit  | HighLimit    | %RPD       | RPDLimit                           | Qual                          |
|  | 4.7   | 5.000         |  | 94.8   | 70  | 130          |            |                                    |                               |
| 898  | SampTyp   | e: MBLK       | Tes  | tCode: EF  | PA Method   | 8015M/D: Die | esel Range | e Organics                         |                               |
|  | Batch II  | D: 37898      | RunNo: 50978   |  |   |              |            |                                    |                               |
| 018  | Analysis Date   | e: 5/2/2018   | S  | SeqNo: 16  | 655173  | Units: %Red  | 2          |                                    |                               |
|  | Popult  | POL SPK value | SPK Pof Val  | W DEC  | Low imit  | Highl imit   | %.ppp      | <b>PPDI</b> imit                   | Qual                          |

| Prep Date: 5/2/2018            | Analysis Date: 5 | /2/2018   | 5            | SeqNo: 1  | 655173    | Units: %Red  | ;          |            |      |
|--------------------------------|------------------|-----------|--------------|-----------|-----------|--------------|------------|------------|------|
| Analyte                        | Result PQL       | SPK value | SPK Ref Val  | %REC      | LowLimit  | HighLimit    | %RPD       | RPDLimit   | Qual |
| Surr: DNOP                     | 9.8              | 10.00     |              | 98.0      | 70        | 130          |            |            |      |
| Sample ID LCS-37891            | SampType: LO     | CS        | Tes          | tCode: El | PA Method | 8015M/D: Die | esel Range | e Organics |      |
| Client ID: LCSS                | Batch ID: 37     | 891       | RunNo: 50978 |           |           |              |            |            |      |
| Prep Date: 5/1/2018            | Analysis Date: 5 | /2/2018   | S            | SeqNo: 1  | 655745    | Units: mg/K  | g          |            |      |
| Analyte                        | Result PQL       | SPK value | SPK Ref Val  | %REC      | LowLimit  | HighLimit    | %RPD       | RPDLimit   | Qual |
| Diesel Range Organics (DRO)    | 46 10            | 50.00     | 0            | 92.9      | 70        | 130          |            |            |      |
| Surr: DNOP                     | 4.8              | 5.000     |              | 96.1      | 70        | 130          |            |            |      |
| Sample ID MB-37891             | SampType: M      | BLK       | Tes          | tCode: El | PA Method | 8015M/D: Die | esel Range | e Organics |      |
| Client ID: PBS                 | Batch ID: 37     | 891       | F            | RunNo: 5  | 0978      |              |            |            |      |
| Prep Date: 5/1/2018            | Analysis Date: 5 | /2/2018   | S            | SeqNo: 1  | 655746    | Units: mg/K  | g          |            |      |
| Analyte                        | Result PQL       | SPK value | SPK Ref Val  | %REC      | LowLimit  | HighLimit    | %RPD       | RPDLimit   | Qual |
| Diesel Range Organics (DRO)    | ND 10            |           |              |           |           |              |            |            |      |
| Motor Oil Range Organics (MRO) | ND 50            |           |              |           |           |              |            |            |      |
| Surr: DNOP                     | 10               | 10.00     |              | 105       | 70        | 130          |            |            |      |
|                                |                  |           |              |           |           |              |            |            |      |

Qualifiers:

Client:

**Project:** 

Client ID:

Prep Date:

Surr: DNOP

Client ID:

Analyte

Sample ID LCS-37898

Sample ID MB-37898

PBS

LCSS

5/2/2018

- \* Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- Holding times for preparation or analysis exceeded Н
- Not Detected at the Reporting Limit ND
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Page 8 of 10

WO#: 1804E31 03-May-18

WO#: **1804E31** *03-May-18* 

Client: Project: Williams Four Corners Lowery TB

| 5                          |            |          |           |              |           |           |              |             |          |      |  |  |
|----------------------------|------------|----------|-----------|--------------|-----------|-----------|--------------|-------------|----------|------|--|--|
| Sample ID Ics-37844        | SampT      | ype: LC  | S4        | Tes          | tCode: El | PA Method | 8260B: Volat | tiles Short | List     |      |  |  |
| Client ID: BatchQC         | Batch      | n ID: 37 | 844       | RunNo: 50973 |           |           |              |             |          |      |  |  |
| Prep Date: 4/30/2018       | Analysis D | Date: 5/ | 1/2018    | S            | SeqNo: 1  | 654841    | Units: mg/M  | g           |          |      |  |  |
| Analyte                    | Result     | PQL      | SPK value | SPK Ref Val  | %REC      | LowLimit  | HighLimit    | %RPD        | RPDLimit | Qual |  |  |
| Benzene                    | 0.85       | 0.025    | 1.000     | 0            | 84.7      | 80        | 120          |             |          |      |  |  |
| Toluene                    | 0.95       | 0.050    | 1.000     | 0            | 95.0      | 80        | 120          |             |          |      |  |  |
| Ethylbenzene               | 1.0        | 0.050    | 1.000     | 0            | 103       | 80        | 120          |             |          |      |  |  |
| Kylenes, Total             | 3.0        | 0.10     | 3.000     | 0            | 101       | 80        | 120          |             |          |      |  |  |
| Surr: 4-Bromofluorobenzene | 0.52       |          | 0.5000    |              | 103       | 70        | 130          |             |          |      |  |  |
| Surr: Toluene-d8           | 0.46       |          | 0.5000    |              | 92.2      | 70        | 130          |             |          |      |  |  |
| Sample ID mb-37844         | SampT      | ype: ME  | BLK       | Tes          | tCode: El | PA Method | 8260B: Volat | iles Short  | List     |      |  |  |
| Client ID: PBS             | Batch      | n ID: 37 | 844       | F            | RunNo: 5  | 0973      |              |             |          |      |  |  |
| Prep Date: 4/30/2018       | Analysis D | ate: 5/  | 1/2018    | S            | SeqNo: 1  | 654842    | Units: mg/K  | g           |          |      |  |  |
| Analyte                    | Result     | PQL      | SPK value | SPK Ref Val  | %REC      | LowLimit  | HighLimit    | %RPD        | RPDLimit | Qual |  |  |
| Benzene                    | ND         | 0.025    |           |              |           |           |              |             |          |      |  |  |
| Toluene                    | ND         | 0.050    |           |              |           |           |              |             |          |      |  |  |
| Ethylbenzene               | ND         | 0.050    |           |              |           |           |              |             |          |      |  |  |
| Kylenes, Total             | ND         | 0.10     |           |              |           |           |              |             |          |      |  |  |
| Surr: 4-Bromofluorobenzene | 0.61       |          | 0.5000    |              | 122       | 70        | 130          |             |          |      |  |  |
| Surr: Toluene-d8           | 0.46       |          | 0.5000    |              | 92.2      | 70        | 130          |             |          |      |  |  |
|                            |            |          |           |              |           |           |              |             |          |      |  |  |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Page 9 of 10

| WO#: | 1804E31   |
|------|-----------|
|      | 03-Mav-18 |

| Client: William<br>Project: Lowery | s Four Corr<br>TB | ners         |           |              |             |           |             |          |          |      |
|------------------------------------|-------------------|--------------|-----------|--------------|-------------|-----------|-------------|----------|----------|------|
| Sample ID Ics-37844                | SampT             | ype: LC      | s         | Tes          | tCode: El   | PA Method | 8015D Mod:  | Gasoline | Range    |      |
| Client ID: LCSS                    | 844               | RunNo: 50973 |           |              |             |           |             |          |          |      |
| Prep Date: 4/30/2018               | 1/2018            | S            | SeqNo: 1  | 654638       | Units: mg/k | (g        |             |          |          |      |
| Analyte                            | Result            | PQL          | SPK value | SPK Ref Val  | %REC        | LowLimit  | HighLimit   | %RPD     | RPDLimit | Qual |
| Gasoline Range Organics (GRO)      | 25                | 5.0          | 25.00     | 0            | 98.2        | 70        | 130         |          |          |      |
| Surr: BFB                          | 500               |              | 500.0     |              | 99.6        | 70        | 130         |          |          |      |
| Sample ID mb-37844                 | SampT             | уре: М       | BLK       | Tes          | tCode: El   | PA Method | 8015D Mod:  | Gasoline | Range    |      |
| Client ID: PBS                     | Batch             | D: 37        | 844       | RunNo: 50973 |             |           |             |          |          |      |
| Prep Date: 4/30/2018               | Analysis D        | ate: 5/      | 1/2018    | S            | SeqNo: 1    | 654639    | Units: mg/k | (g       |          |      |
| Analyte                            | Result            | PQL          | SPK value | SPK Ref Val  | %REC        | LowLimit  | HighLimit   | %RPD     | RPDLimit | Qual |
| Gasoline Range Organics (GRO)      | ND                | 5.0          |           |              |             |           |             |          |          |      |
| Surr: BFB                          | 560               |              | 500.0     |              | 112         | 70        | 130         |          |          |      |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- W Sample container temperature is out of limit as specified

Page 10 of 10

- rage rot
- RL Reporting Detection Limit

| HALL<br>ENVIRONMENTAL<br>ANALYSIS<br>LABORATORY   |                | tal Analysis Labor<br>4901 Hawkin<br>Albuquerque, NM 8<br>3975 FAX: 505-345-<br>ww.hallenvironmenta | ns NE<br>87109 Sar<br>-4107 | nple Log-In C                                | heck List         |
|---|----------------|---|-----------------------------|--|-------------------|
| Client Name: WILLIAMS FOUR CORN V   | Vork Order Nu  | mber: 1804E31   |                             | RcptNo:                                      | 1                 |
|   |                |   |                             |  |                   |
| Received By: Andy Freeman 4/2   | 8/2018 10:40:0 | MA OC   | and                         | · · ·  | N 5 <sup>1</sup>  |
| Completed By: Anne Thome 4/3<br>Reviewed By: Anne Thome 4/3   | 0/2018 11:39:1 | 13 AM   | am H.                       |  |                   |
| ENM 4/30/15   |                |   | 6 Å .                       |  |                   |
| Chain of Custody  |                |   |                             |  |                   |
| 1. Is Chain of Custody complete?  | · ***          | Yes 🗹   | No 🗌                        | Not Present                                  |                   |
| 2. How was the sample delivered?  |                | Courier   | •                           |  |                   |
| 2   |                | 000.00  | 1. A 1. 1                   |  |                   |
| Log In  | **             |   | · · , · _ ·                 | _  |                   |
| 3. Was an attempt made to cool the samples?   |                | Yes 🗹   | No                          | NA 🗌   |                   |
|   |                | :   |                             | *  | <i>i</i>          |
| 4. Were all samples received at a temperature of >0   | ° C to 6.0°C   | Yes 🗹   | No 🗌                        | NA 🗌   |                   |
| 5. Sample(s) in proper container(s)?  | · · ·          | Yes 🗹   | No 🗌                        |  |                   |
| 6. Sufficient sample volume for indicated test(s)?  | •              | Yes 🔽   | No 🗌                        |  |                   |
| 7. Are samples (except VOA and ONG) properly pres   | served?        | Yes 🔽   | No 🗌                        |  |                   |
| 8. Was preservative added to bottles?   |                | Yes   | No 🗹                        | NA   |                   |
| 9. VOA vials have zero headspace?   |                | Yes   | No 🗌                        | No VOA Vials 🗹                               |                   |
| 10. Were any sample containers received broken?   |                | Yes   | No 🖌                        |  |                   |
| 11. Does paperwork match bottle labels?   |                | Yes 🖌   |                             | # of preserved<br>bottles checked<br>for pH: |                   |
| (Note discrepancies on chain of custody)  |                |   |                             |  | >12 unless noted) |
| 12. Are matrices correctly identified on Chain of Custo   | dy?            | Yes 🗹   | No 🗌                        | Adjusted?                                    |                   |
| 13. Is it clear what analyses were requested?   |                | Yes 🔽   | No 🗋                        |  |                   |
| 14. Were all holding times able to be met?<br>(If no, notify customer for authorization.)                     |                | Yes 🗹   | No 🗌                        | Checked by:                                  |                   |
|   |                |   | a <sup>16</sup> =           |  |                   |
| Special Handling (if applicable)  |                |   |                             |  |                   |
| 15. Was client notified of all discrepancies with this or   | der?           | Yes   | No                          | NA 🗹   | 1. <sup>10</sup>  |
| Person Notified:  | Dat            | e   |                             |  |                   |
| By Whom:  | Via            | eMail F   | Phone 🗌 Fax                 | In Person                                    |                   |
| Regarding:  |                |   |                             |  |                   |
| Client Instructions:  |                |   |                             | 1  |                   |
| 16. Additional remarks:   |                |   |                             |  |                   |
| 17. <u>Cooler Information</u><br>Cooler No   Temp °C   Condition   Seal Int                                   | act Seal No    | Seel Date   | Signed Du                   |  |                   |
| Cooler No         Temp °C         Condition         Seal Int           1         3.1         Good         Yes | aut Seal NO    | Seal Date   | Signed By                   | -  |                   |
|   |                | i   |                             | -1   |                   |

| С                                    | hain                           | of-Cu       | stody Record              | Turn-Around                  | Time:                |                  |  |                     |                              |                            |                    |                    |                | _             |   |                        |             |                 |          |    |   |                      |
|--------------------------------------|--------------------------------|-------------|---------------------------|------------------------------|----------------------|------------------|--|---------------------|------------------------------|----------------------------|--------------------|--------------------|----------------|---------------|---|------------------------|-------------|-----------------|----------|----|---|----------------------|
| Client:                              | Willie                         | ums F       | our Corners               | X Standard                   | □ Rush               |                  |  |                     | laukisi                      |                            |                    |                    |                |               |   |                        |             |                 |          | NT |   |                      |
|                                      |                                |             |                           | Project Name                 | <del>)</del> :       |                  |  | ANALYSIS LABORATORY |                              |                            |                    |                    |                |               |   |                        |             |                 |          |    |   |                      |
| Mailing                              | Address                        | 1770        | 55 Arroyo Dr              | Lowe                         | ry TB                |                  |  |                     | 490                          | 11 H                       | awkir              |                    |                |               |   |                        |             |                 | 109      |    |   |                      |
|                                      |                                | Ringin      | Field, NM                 | Project #:                   |                      |                  |  |                     |                              |                            | 5-34               |                    |                |               |   |                        | 345-        |                 |          |    |   |                      |
| Phone                                | #:                             |             |                           |                              |                      |                  |  |                     | 101                          |                            | 001                | 0 00               |                |               |   |                        | uest        |                 |          |    |   |                      |
| email or                             | Fax#:                          | Aaron.      | Galer@Williams.com        | Project Mana                 | ger;                 |                  |  |                     | ( <u>)</u>                   | đ                          |                    |                    |                |               | (4)   |                        |             |                 |          |    |   | T                    |
| QA/QC                                | Package:                       |             |                           | Williams                     | A. Gal               | er               |  | s (8021)            | s on                         | M                          |                    |                    | 6              |               | 4,SC  | PCB's                  |             |                 |          |    |   |                      |
| □ Stan                               | dard                           |             | Level 4 (Full Validation) | LTE-                         | - D. Bur             | 0                |  | s (8                | (Ga                          | 2                          |                    |                    | SIMS)          |               | P S   |                        |             |                 |          |    |   |                      |
| Accredi                              |                                | □ Othe      | ſ                         | Sampler:<br>On Ice:          | Danny K              | Surns            |  | TMB                 | HdT                          | 0/0                        | 8.1)               |                    | 8270           |               | 3,NO2   | / 808                  |             | 1               |          |    |   | L N                  |
|                                      |                                | PDF         |                           | Sample Tem                   |                      |                  | an a |                     | н<br>Н<br>Н                  | 创                          | d 41               | d 50               | or             | tals          | N.  | des                    |             | VOA             |          |    |   | o کر<br>ا            |
| Date                                 | Time                           | Matrix      | Sample Request ID         |                              | Preservative<br>Type | a starting a     | Ne <sup>ro</sup>                         | BTEX MIBE           | BTEX + MTBE + TPH (Gas only) | TPH 8015B CRO / DRO / MRO) | TPH (Method 418.1) | EDB (Method 504.1) | PAH's (8310 or | RCRA 8 Metals | Anions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> ) | 8081 Pesticides / 8082 | 8260B (VOA) | 8270 (Semi-VOA) |          |    |   | Air Bubbles (Y or N) |
| 4/23                                 | 1300                           | S           | MW02@55'                  | 1-402.                       | cool                 |                  | 105                                      | X                   |                              | X                          |                    |                    |                |               |   |                        |             |                 |          |    |   | T                    |
| 4/24                                 | 1100                           | j           | BH02@65'                  |                              |                      |                  | Ta.                                      | X                   |                              | X                          |                    |                    |                |               |   |                        |             |                 |          |    |   |                      |
| 4/24                                 | 1400                           |             | MW09@55                   |                              |                      |                  | 703                                      | X                   |                              | X                          |                    |                    |                |               |   |                        |             |                 |          |    |   |                      |
| 4/25                                 | 1000                           |             | MW03@40'                  |                              |                      |                  | 204                                      | X                   |                              | X                          |                    |                    |                |               |   |                        |             |                 |          |    |   |                      |
| 4/25                                 | 1245                           |             | MW08@45'                  |                              |                      |                  | 205                                      | X                   |                              | X                          |                    |                    |                |               |   |                        |             |                 |          | -  |   |                      |
| 4/25                                 | 1300                           | -           | MW08@55'                  |                              |                      |                  | -cul                                     | Х                   |                              | X                          |                    |                    |                |               |   |                        |             |                 |          |    |   |                      |
| 4/26                                 | 1045                           | V           | MWIDE50'                  | V                            | V                    |                  | -007                                     | X                   |                              | X                          |                    |                    |                |               |   |                        |             |                 |          |    |   |                      |
|                                      |                                |             |                           |                              |                      |                  |  |                     |                              |                            |                    |                    |                |               | 1   |                        |             |                 |          |    | / |                      |
|                                      |                                |             |                           |                              |                      |                  |  |                     |                              |                            |                    |                    | 1              |               |   |                        |             |                 |          |    |   |                      |
|                                      |                                |             |                           | 1/                           | T.                   |                  |  |                     |                              |                            | 1                  |                    |                |               |   |                        |             |                 |          |    |   |                      |
|                                      | . /                            |             |                           |                              |                      |                  | . (                                      |                     | -                            |                            |                    |                    |                |               |   |                        |             |                 |          |    |   |                      |
|                                      |                                |             |                           |                              |                      |                  |  |                     |                              |                            |                    |                    |                |               |   |                        |             |                 |          |    |   |                      |
| Date:<br>4 27 12<br>Date:<br>4 27 12 | Time:<br>ISD9<br>Time:<br>ISSD | Relinquishe | UB-                       | Received by:<br>Received by: | last                 | Date<br>20129/13 | Time<br>1509<br>Time<br>1040             |                     | narks                        |                            |                    | bhi                | ere            | e1            | ten   | env                    | co v<br>.co | m               |          |    |   |                      |
| 10/10                                | 100-                           | YYW         |                           |                              | 1                    |                  |  |                     |                              |                            |                    |                    |                |               |   |                        |             |                 | a haring |    |   |                      |

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Lab Order 1804A28

| CLIENT: Williams Four CornersProject: Lowery TBLab ID: 1804A28-001 | Client Sample ID: MW04Collection Date: 4/18/2018 4:00:00 PMMatrix: AQUEOUSReceived Date: 4/19/2018 7:12:00 AM |         |          |     |                       |        |  |  |  |  |
|--|---|---------|----------|-----|-----------------------|--------|--|--|--|--|
| Analyses   | Result  | PQL Qua | al Units | DF  | Date Analyzed         | Batch  |  |  |  |  |
| EPA METHOD 8260B: VOLATILES  |   |         |          |     | Analyst               | RAA    |  |  |  |  |
| Benzene  | 2800  | 100     | μg/L     | 100 | 4/19/2018 12:28:00 PM | R50700 |  |  |  |  |
| Toluene  | 110   | 10      | µg/L     | 10  | 4/19/2018 12:52:00 PM | R50700 |  |  |  |  |
| Ethylbenzene   | 180   | 10      | µg/L     | 10  | 4/19/2018 12:52:00 PM | R50700 |  |  |  |  |
| Xylenes, Total   | 1600  | 15      | µg/L     | 10  | 4/19/2018 12:52:00 PM | R50700 |  |  |  |  |
| Surr: 1,2-Dichloroethane-d4  | 90.7  | 70-130  | %Rec     | 10  | 4/19/2018 12:52:00 PM | R50700 |  |  |  |  |
| Surr: 4-Bromofluorobenzene   | 94.7  | 70-130  | %Rec     | 10  | 4/19/2018 12:52:00 PM | R50700 |  |  |  |  |
| Surr: Dibromofluoromethane   | 92.8  | 70-130  | %Rec     | 10  | 4/19/2018 12:52:00 PM | R50700 |  |  |  |  |
| Surr: Toluene-d8   | 102   | 70-130  | %Rec     | 10  | 4/19/2018 12:52:00 PM | R50700 |  |  |  |  |

Hall Environmental Analysis Laboratory, Inc.

Date Reported:

| Qualifiers: | *   | Value exceeds Maximum Contaminant Level.   | т   | Analyte detected in the associated Method Blank           |
|-------------|-----|--|-----|---|
|             | D   | Value exceeds Maximum Contaminant Level.<br>Sample Diluted Due to Matrix RELIMIT | NAI | Value above quantitation range                            |
|             | Н   | Holding times for preparation or analysis exceeded                               | J   | Analyte detected below quantitation limits                |
|             | ND  | Not Detected at the Reporting Limit  | Р   | Sample pH Not In Range                                    |
|             | PQL | Practical Quanitative Limit  | RL  | Reporting Detection Limit                                 |
|             | S   | % Recovery outside of range due to dilution or matrix                            | W   | Sample container temperature is out of limit as specified |

#### Lab Order 1804A28

| CLIENT: Williams Four CornersProject:Lowery TBLab ID:1804A28-002 | Client Sample ID: MW06Collection Date: 4/18/2018 4:40:00 PMMatrix: AQUEOUSReceived Date: 4/19/2018 7:12:00 AM |        |      |       |    |                      |        |  |  |  |  |
|--|---|--------|------|-------|----|----------------------|--------|--|--|--|--|
| Analyses   | Result  | PQL    | Qual | Units | DF | Date Analyzed        | Batch  |  |  |  |  |
| EPA METHOD 8260B: VOLATILES                                      |   |        |      |       |    | Analyst              | RAA    |  |  |  |  |
| Benzene  | 3.9   | 1.0    |      | µg/L  | 1  | 4/19/2018 1:16:00 PM | R50700 |  |  |  |  |
| Toluene  | ND  | 1.0    |      | µg/L  | 1  | 4/19/2018 1:16:00 PM | R50700 |  |  |  |  |
| Ethylbenzene   | ND  | 1.0    |      | µg/L  | 1  | 4/19/2018 1:16:00 PM | R50700 |  |  |  |  |
| Xylenes, Total   | ND  | 1.5    |      | µg/L  | 1  | 4/19/2018 1:16:00 PM | R50700 |  |  |  |  |
| Surr: 1,2-Dichloroethane-d4                                      | 90.0  | 70-130 |      | %Rec  | 1  | 4/19/2018 1:16:00 PM | R50700 |  |  |  |  |
| Surr: 4-Bromofluorobenzene                                       | 95.3  | 70-130 |      | %Rec  | 1  | 4/19/2018 1:16:00 PM | R50700 |  |  |  |  |
| Surr: Dibromofluoromethane                                       | 92.5  | 70-130 |      | %Rec  | 1  | 4/19/2018 1:16:00 PM | R50700 |  |  |  |  |
| Surr: Toluene-d8   | 102   | 70-130 |      | %Rec  | 1  | 4/19/2018 1:16:00 PM | R50700 |  |  |  |  |

### Hall Environmental Analysis Laboratory, Inc.

Date Reported:

| Qualifiers: | *   | Value exceeds Maximum Contaminant Level  | - ,B - | _Analyte detected in the associated Method Blank          |
|-------------|-----|--|--------|---|
|             | D   | Value exceeds Maximum Contaminant Level.<br>Sample Diluted Due to Matrix RELIMIT | NA     | Value above quantitation range                            |
|             | Н   | Holding times for preparation or analysis exceeded                               | J      | Analyte detected below quantitation limits                |
|             | ND  | Not Detected at the Reporting Limit  | Р      | Sample pH Not In Range                                    |
|             | PQL | Practical Quanitative Limit  | RL     | Reporting Detection Limit                                 |
|             | S   | % Recovery outside of range due to dilution or matrix                            | W      | Sample container temperature is out of limit as specified |

Lab Order 1804B36

Date Reported:

| CLIENT:Williams Four CornersProject:Lowery TBLab ID:1804B36-001 | Client Sample ID: MW05<br>Collection Date: 4/20/2018 2:00:00 PM<br>Matrix: GROUNDWA Received Date: 4/21/2018 9:40:00 AM |        |            |     |           |             |        |  |  |  |
|---|---|--------|------------|-----|-----------|-------------|--------|--|--|--|
| Analyses  | Result  | PQL    | Qual Units | DF  | Date Ana  | lyzed       | Batch  |  |  |  |
| EPA METHOD 8260B: VOLATILES                                     |   |        |            |     |           | Analyst     | DJF    |  |  |  |
| Benzene   | 1200  | 100    | µg/L       | 100 | 4/23/2018 | 1:33:58 PM  | R50772 |  |  |  |
| Toluene   | 3500  | 100    | µg/L       | 100 | 4/23/2018 | 1:33:58 PM  | R50772 |  |  |  |
| Ethylbenzene  | 150   | 2.0    | µg/L       | 2   | 4/23/2018 | 12:34:49 PM | R50772 |  |  |  |
| Xylenes, Total  | 1700  | 150    | µg/L       | 100 | 4/23/2018 | 1:33:58 PM  | R50772 |  |  |  |
| Surr: 1,2-Dichloroethane-d4                                     | 119   | 70-130 | %Rec       | 2   | 4/23/2018 | 12:34:49 PM | R50772 |  |  |  |
| Surr: 4-Bromofluorobenzene                                      | 111   | 70-130 | %Rec       | 2   | 4/23/2018 | 12:34:49 PM | R50772 |  |  |  |
| Surr: Dibromofluoromethane                                      | 95.3  | 70-130 | %Rec       | 2   | 4/23/2018 | 12:34:49 PM | R50772 |  |  |  |
| Surr: Toluene-d8  | 99.8  | 70-130 | %Rec       | 2   | 4/23/2018 | 12:34:49 PM | R50772 |  |  |  |

### Hall Environmental Analysis Laboratory, Inc.

| H Holdir<br>ND Not De | exceeds Maximum Contaminant Level.<br>e Diluted Due to Matra RELIMIN<br>ng times for preparation or analysis exceeded | NAI | Value above quantitation range<br>Analyte detected below quantitation limits |
|-----------------------|---|-----|--|
| ND Not De             |   | J   | Analyte detected below quantitation limits                                   |
|                       |   |     |  |
|                       | etected at the Reporting Limit  | Р   | Sample pH Not In Range   |
| PQL Practic           | cal Quanitative Limit   | RL  | Reporting Detection Limit  |
| S % Rec               | covery outside of range due to dilution or matrix   | W   | Sample container temperature is out of limit as specified                    |

Lab Order 1804B36

2 4/23/2018 1:04:49 PM R50772

2 4/23/2018 1:04:49 PM R50772

Date Reported:

| CLIENT: Williams Four Corners          |              | (          | Client Sampl | e ID: MV   | V07  |                              |
|--|--------------|------------|--------------|------------|--|------------------------------|
| Project: Lowery TB                     |              |            | Collection l | Date: 4/20 | 0/2018 3:00:00 PM  |                              |
| Lab ID: 1804B36-002                    | Matrix:      | GROUNDWA   | Received I   | Date: 4/2  | 1/2018 9:40:00 AM  |                              |
| Analyses                               | Result       | PQL Qual   | Units        | DF         | Date Analyzed  | Batch                        |
|  |              |            |              |            |  |                              |
| EPA METHOD 8260B: VOLATILES            |              |            |              |            | Analyst  | DJF                          |
| EPA METHOD 8260B: VOLATILES<br>Benzene | 5700         | 100        | µg/L         | 100        | Analyst<br>4/23/2018 2:03:14 PM                                      |                              |
|  | 5700<br>3900 | 100<br>100 | µg/L<br>µg/L |            | ,  | <b>DJF</b><br>R5077<br>R5077 |
| Benzene                                |              |            |              | 100        | 4/23/2018 2:03:14 PM   | R507                         |
| Benzene<br>Toluene                     | 3900         | 100        | µg/L         | 100<br>100 | 4/23/2018 2:03:14 PM<br>4/23/2018 2:03:14 PM                         | R507<br>R507                 |
| Benzene<br>Toluene<br>Ethylbenzene     | 3900<br>250  | 100        | μg/L<br>μg/L | 100<br>100 | 4/23/2018 2:03:14 PM<br>4/23/2018 2:03:14 PM<br>4/23/2018 2:03:14 PM | R507<br>R507<br>R507         |

70-130

70-130

%Rec

%Rec

110

99.4

#### Hall Environmental Analysis Laboratory, Inc.

Surr: Dibromofluoromethane

Surr: Toluene-d8

| Qualifiers: | *   | Value exceeds Maximum Contaminant Level.   | TABT | Analyte detected in the associated Method Blank           |
|-------------|-----|--|------|---|
|             | D   | Value exceeds Maximum Contaminant Level.<br>Sample Diluted Due to Matrix RELINIT | NAI  | Value above quantitation range                            |
|             | Н   | Holding times for preparation or analysis exceeded                               | J    | Analyte detected below quantitation limits                |
|             | ND  | Not Detected at the Reporting Limit  | Р    | Sample pH Not In Range                                    |
|             | PQL | Practical Quanitative Limit  | RL   | Reporting Detection Limit                                 |
|             | S   | % Recovery outside of range due to dilution or matrix                            | W    | Sample container temperature is out of limit as specified |



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

April 26, 2018

Aaron Galer Williams Four Corners 188 CR 4900 Bloomfield, NM 87413 TEL: (505) 632-4442 FAX

OrderNo.: 1804C29

RE: Lowery TB

Dear Aaron Galer:

Hall Environmental Analysis Laboratory received 1 sample(s) on 4/25/2018 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <u>www.hallenvironmental.com</u> or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 4/26/2018

| CLIENT: Williams Four Corners  |         | C        | lient Sar | nple ID: MW02                 |        |
|--------------------------------|---------|----------|-----------|-------------------------------|--------|
| Project: Lowery TB             |         |          | Collectio | on Date: 4/24/2018 3:45:00 PM |        |
| Lab ID: 1804C29-001            | Matrix: | GROUNDWA | Receive   | ed Date: 4/25/2018 6:40:00 AM |        |
| Analyses                       | Result  | PQL Qual | Units     | DF Date Analyzed              | Batch  |
| EPA METHOD 8260: VOLATILES SHO | RT LIST |          |           | Analyst:                      | AG     |
| Benzene                        | 600     | 100      | µg/L      | 100 4/25/2018 11:52:29 AM     | A50821 |
| Toluene                        | 9000    | 100      | µg/L      | 100 4/25/2018 11:52:29 AM     | A50821 |
| Ethylbenzene                   | 450     | 100      | µg/L      | 100 4/25/2018 11:52:29 AM     | A50821 |
| Xylenes, Total                 | 4800    | 150      | µg/L      | 100 4/25/2018 11:52:29 AM     | A50821 |
| Surr: 4-Bromofluorobenzene     | 104     | 70-130   | %Rec      | 100 4/25/2018 11:52:29 AM     | A50821 |
| Surr: Toluene-d8               | 92.1    | 70-130   | %Rec      | 100 4/25/2018 11:52:29 AM     | A50821 |

| Qualifiers: | *   | Value exceeds Maximum Contaminant Level.              | В  | Analyte detected in the associated Method Blank           |
|-------------|-----|---|----|---|
|             | D   | Sample Diluted Due to Matrix                          | Е  | Value above quantitation range                            |
|             | Н   | Holding times for preparation or analysis exceeded    | J  | Analyte detected below quantitation limits Page 1 of 2    |
|             | ND  | Not Detected at the Reporting Limit                   | Р  | Sample pH Not In Range                                    |
|             | PQL | Practical Quanitative Limit                           | RL | Reporting Detection Limit                                 |
|             | S   | % Recovery outside of range due to dilution or matrix | W  | Sample container temperature is out of limit as specified |

WO#: **1804C29** 26-Apr-18

Page 2 of 2

Client: Project: Williams Four Corners Lowery TB

| Sample ID 100ng Ics        | SampT      | ype: LC | S4        | Tes         | tCode: El | PA Method | 8260: Volatile | es Short I | _ist     |      |
|----------------------------|------------|---------|-----------|-------------|-----------|-----------|----------------|------------|----------|------|
| Client ID: BatchQC         | Batch      | DID: A5 | 0821      | F           | RunNo: 5  | 0821      |                |            |          |      |
| Prep Date:                 | Analysis D | ate: 4/ | 25/2018   | S           | SeqNo: 1  | 649367    | Units: µg/L    |            |          |      |
| Analyte                    | Result     | PQL     | SPK value | SPK Ref Val | %REC      | LowLimit  | HighLimit      | %RPD       | RPDLimit | Qual |
| Benzene                    | 20         | 1.0     | 20.00     | 0           | 100       | 80        | 120            |            |          |      |
| Toluene                    | 21         | 1.0     | 20.00     | 0           | 103       | 80        | 120            |            |          |      |
| Ethylbenzene               | 21         | 1.0     | 20.00     | 0           | 105       | 80        | 120            |            |          |      |
| Xylenes, Total             | 61         | 1.5     | 60.00     | 0           | 102       | 80        | 120            |            |          |      |
| Surr: 4-Bromofluorobenzene | 9.7        |         | 10.00     |             | 96.7      | 70        | 130            |            |          |      |
| Surr: Toluene-d8           | 10         |         | 10.00     |             | 102       | 70        | 130            |            |          |      |
| Sample ID rb               | SampT      | ype: ME | BLK       | Tes         | tCode: El | PA Method | 8260: Volatile | es Short L | ist      |      |
| Client ID: PBW             | Batch      | D: A5   | 0821      | R           | aunNo: 5  | 0821      |                |            |          |      |
| Prep Date:                 | Analysis D | ate: 4/ | 25/2018   | S           | SeqNo: 1  | 649369    | Units: µg/L    |            |          |      |
| Analyte                    | Result     | PQL     | SPK value | SPK Ref Val | %REC      | LowLimit  | HighLimit      | %RPD       | RPDLimit | Qual |
| Benzene                    | ND         | 1.0     |           |             |           |           |                |            |          |      |
| Toluene                    | ND         | 1.0     |           |             |           |           |                |            |          |      |
| Ethylbenzene               | ND         | 1.0     |           |             |           |           |                |            |          |      |
| Xylenes, Total             | ND         | 1.5     |           |             |           |           |                |            |          |      |
| Surr: 4-Bromofluorobenzene | 12         |         | 10.00     |             | 119       | 70        | 130            |            |          |      |
| Surr: Toluene-d8           | 10         |         | 10.00     |             | 99.6      | 70        | 130            |            |          |      |
|                            |            |         |           |             |           |           |                |            |          |      |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

| HALL<br>ENVIRONMENTAL<br>ANALYSIS<br>LABORATORY   | Hall Environmental<br>Albi<br>TEL: 505-345-3975<br>Website: www.ha | 490<br>uquerg<br>FAX:   |              | ins NE<br>87109<br>5-4107   | Sar        | nple Log-In Check List                       |
|---|--|---|--------------|---|------------|--|
| Client Name: WILLIAMS FOUR CORN   | Work Order Number  | 1804  | 4C29         |   |            | RcptNo: 1                                    |
| and and a second  |  |   |              |   |            |  |
| Received By: Anne Thorne  | 4/25/2018 6:40:00 AM   |   |              | am  | An         | ~  |
| Completed By: Anne Thorne   | 4/25/2018 6:45:49 AM   |   |              | Den   | A.         |  |
| Reviewed By: Ar 04/25/18  |  |   | Ĵ.           | C. M.   |            |  |
| Chain of Custoda  |  |   |              |   | •          |  |
| <u>Chain of Custody</u><br>1. Is Chain of Custody complete?   |  | Yes   |              | No  |            | Not Present                                  |
|   |  |   |              | 140   |            |  |
| 2. How was the sample delivered?  |  | Cou   | ner          |   |            |  |
| Log in  |  |   |              |   |            |  |
| 3. Was an attempt made to cool the samples?   |  | Yes   | $\checkmark$ | No  |            | NA 🗌   |
| 4. Were all samples received at a temperature of  | of >0° C to 6.0°C  | Yes   | $\checkmark$ | No  |            | NA   |
| 5. Sample(s) in proper container(s)?  |  | Yes   |              | No  |            |  |
| 6. Sufficient sample volume for indicated test(s)   | ?  | Yes   | $\checkmark$ | No  |            |  |
| 7. Are samples (except VOA and ONG) properly  | preserved?   | Yes   | ~            | No  |            |  |
| 8. Was preservative added to bottles?   |  | Yes   |              | No  |            | NA 🗆   |
| 9. VOA vials have zero headspace?   |  | Yes   |              | No  |            | No VOA Vials                                 |
| 10. Were any sample containers received broker  | 1?   |   |              | No  | ~          |  |
| 11. Does paperwork match bottle labels?   |  | Yes   | $\checkmark$ | No  |            | # of preserved<br>bottles checked<br>for pH: |
| (Note discrepancies on chain of custody)  |  |   |              | N   |            | (<2 or >12 unless noted)<br>Adjusted?        |
| <ul><li>12. Are matrices correctly identified on Chain of C</li><li>13. Is it clear what analyses were requested?</li></ul> | Justody?   | Yes<br>Yes  |              | No<br>No  |            |  |
| 14. Were all holding times able to be met?<br>(If no, notify customer for authorization.)                                   |  |   |              | No  |            | Checked by:                                  |
| Special Handling (if applicable)  |  |   |              |   |            | ·  |
| 15. Was client notified of all discrepancies with the   | nis order?   | Yes   |              | No  |            | NA 🗹   |
| . Person Notified:  | Date   | -   |              |   | IR WILLIAM |  |
| By Whom:  | Via:   | eMa   | ail 🗌        | Phone   | Fax        | In Person                                    |
| Regarding:  | an a                           |   |              | William and the second s |            |  |
| Client Instructions:  |  | - Alamata and a second as a |              |   |            |  |
| 16. Additional remarks:   |  |   |              |   |            |  |
| 17. <u>Cooler Information</u><br>Cooler No   Temp ⁰C   Condition   Se   | al Intact   Seal No   S  | eal Da  | ate          | Signed  | Ву         | I  |
| 1 1.0 Good Yes  |  |   |              |   |            | 1  |

| C                | hain         | -of-Cu       | istody Record                            | I urn-Around            | Time:                | same                              |              |                |                   |                    |                    |                     |               |   |                              |             |                 |           |         |                      |
|------------------|--------------|--------------|--|-------------------------|----------------------|-----------------------------------|--------------|----------------|-------------------|--------------------|--------------------|---------------------|---------------|---|------------------------------|-------------|-----------------|-----------|---------|----------------------|
| Client:          | Wi           | 1100         | ms                                       | □ Standard              | 2                    | Day                               |              |                |                   |                    |                    |                     |               |   |                              |             |                 | MEN<br>RA |         |                      |
|                  |              |              |  | Project Name            | <b>:</b>             |                                   |              |                | a ŝ               |                    |                    |                     |               |   |                              | tal.co      |                 |           |         |                      |
| Mailing          | Address      | :(775        | S Arroyo Dr                              | -                       | LO                   | wery TB                           |              | 490            | )1 H              | awkir              |                    |                     |               |   |                              |             |                 | 109       |         |                      |
|                  | Blo          | omfie        | ld NM                                    | Project #:              | ,                    |                                   | 1            |                |                   | 5-345              |                    |                     |               |   |                              | 345-        |                 |           |         |                      |
| Phone            |              |              |  | 1                       |                      |                                   |              |                |                   |                    |                    |                     |               |   | -                            | uest        |                 |           |         |                      |
|                  |              | aaron        | . yeler @ williams.com                   | Project Mana            | ger: William         | NS-Aciton Galer                   |              | <u>[y]</u>     | 0                 |                    |                    |                     |               | -   |                              |             |                 |           |         |                      |
|                  | Package:     |              | □ Level 4 (Full Validation)              | LTE                     | - Dan                | ny Burns                          | TMB's (8021) | TPH (Gas only) | (GRO / DRO / MRO) |                    |                    | SIMS)               |               | 04,50   | PCB's                        | ΕX          |                 |           |         |                      |
| Accredi          |              | _            |  | Sampler:                | NO                   | 2                                 | B's          | H              | DR                |                    |                    | IS O                |               | 02,F  | 82                           | 87          |                 |           |         |                      |
| D NEL            |              | □ Othe       | r  | On Ice                  | V Yes                | Durns<br>DNO                      |              | E              | 0                 | 8.1                | 4.1                | 327(                | ·             | 3,NG  | / 80                         | 3           | 2               |           |         | Î                    |
|                  | (Type)       | PPF          |  | Sample Tem              |                      | a STIP WELLIN T                   | +<br>        | + 3            | GR                | d 41               | d 50               | or                  | als           | N   | des                          |             | V0              |           |         | X                    |
| Date             | Time         | Matrix       | Sample Request ID                        | Container<br>Type and # | Preservative<br>Type | AND THE REAL PROPERTY OF          | BTEX + MTBE  | BTEX + MTBE    | TPH 8015B         | TPH (Method 418.1) | EDB (Method 504.1) | PAH's (8310 or 8270 | RCRA 8 Metals | Anions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> ) | 8081 Pesticides / 8082 PCB's | 8260B (VOA) | 8270 (Semi-VOA) |           |         | Air Bubbles (Y or N) |
| 4-24             | 1545         | GW           | MWOZ                                     | 3-40mL                  | NONE                 | -201                              |              | -              | İ                 |                    | -                  | -                   | -             |   |                              | Ž           |                 | -         | +       |                      |
|                  |              |              |  |                         |                      |                                   |              |                |                   |                    |                    | -                   |               |   |                              | - 10        |                 |           | +       |                      |
|                  |              |              |  |                         |                      |                                   |              |                | 1                 | -                  | -                  | -                   | -             | )   |                              |             |                 |           | +       |                      |
|                  |              |              |  |                         |                      |                                   |              | -              |                   | +                  | +                  | +                   | -             | /   |                              |             | -               |           | +       | ++-                  |
|                  |              |              |  |                         |                      |                                   |              |                | -+                |                    | +                  | +                   | 1             |   |                              |             |                 | -         | +       |                      |
|                  |              |              |  |                         | -/                   |                                   |              | -              | -                 | +                  | +                  |                     | $\mathcal{H}$ |   |                              | _           |                 |           | +       |                      |
|                  |              |              |  |                         | //                   |                                   |              | -              | +                 | +                  | +                  |                     |               |   | -                            |             | -               |           | +       |                      |
|                  |              |              |  |                         | 0                    |                                   |              | -              | +                 | -                  | +                  | +                   |               | -   |                              |             |                 |           | +       |                      |
|                  |              | /            | · · · · · · · · · · · · · · · · · · ·    |                         |                      |                                   |              |                | +                 | -                  | +                  | +                   |               |   |                              |             |                 |           | +       |                      |
|                  |              |              |  |                         |                      |                                   |              |                |                   |                    | +                  | +                   |               |   |                              |             |                 |           | +       | + +-                 |
|                  |              |              |  |                         |                      |                                   |              |                |                   |                    | +                  | -                   |               |   |                              |             |                 | -         | +       |                      |
|                  |              |              |  |                         |                      |                                   |              |                |                   |                    |                    |                     |               |   |                              |             |                 |           | -       |                      |
| Date:<br>4-24-18 | Time:        | Relinquishe  | ilp                                      | Received by:            | Whet,                | Date Time                         | Rem          | arks           | :                 |                    |                    |                     |               |   |                              |             |                 |           |         | 1                    |
| Date:            | Time:        | Relinquish   | atullales                                | Received by:            | hn                   | Date Time 8<br>04/25/18           |              |                |                   |                    |                    |                     |               |   |                              |             |                 |           |         |                      |
| 1                | f necessary, | samples subr | mitted to Hall Environmental may be subc | ontracted to other a    | ccredited laboratori | es. This serves as notice of this | s possib     | ility. A       | ny su             | b-contra           | acted              | data w              | vill be       | clearl  | y nota                       | ited on     | the ar          | alytical  | report. |                      |



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: <u>www.hallenvironmental.com</u>

May 08, 2018

Aaron Galer Williams Four Corners 188 CR 4900 Bloomfield, NM 87413 TEL: (505) 632-4442 FAX

OrderNo.: 1804E28

Dear Aaron Galer:

**RE:** Lowery TB

Hall Environmental Analysis Laboratory received 5 sample(s) on 4/28/2018 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <u>www.hallenvironmental.com</u> or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

#### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/8/2018

| CLIENT: Williams Four Corners  |         |          | Client Sampl | e ID: MW01                  |        |
|--------------------------------|---------|----------|--------------|-----------------------------|--------|
| Project: Lowery TB             |         |          | Collection   | Date: 4/26/2018 4:00:00 PM  |        |
| Lab ID: 1804E28-001            | Matrix: | GROUNDWA | Received     | Date: 4/28/2018 10:40:00 AM |        |
| Analyses                       | Result  | PQL Qua  | l Units      | DF Date Analyzed            | Batch  |
| EPA METHOD 8260: VOLATILES SHO | RT LIST |          |              | Analyst:                    | AG     |
| Benzene                        | 5300    | 100      | µg/L         | 100 5/4/2018 4:44:34 PM     | C51035 |
| Toluene                        | 7100    | 100      | µg/L         | 100 5/4/2018 4:44:34 PM     | C51035 |
| Ethylbenzene                   | 510     | 100      | µg/L         | 100 5/4/2018 4:44:34 PM     | C51035 |
| Xylenes, Total                 | 4100    | 150      | µg/L         | 100 5/4/2018 4:44:34 PM     | C51035 |
| Surr: 4-Bromofluorobenzene     | 115     | 70-130   | %Rec         | 100 5/4/2018 4:44:34 PM     | C51035 |
| Surr: Toluene-d8               | 94.9    | 70-130   | %Rec         | 100 5/4/2018 4:44:34 PM     | C51035 |

| Qualifiers: | *  | Value exceeds Maximum Contaminant Level.           | В | Analyte de |
|-------------|----|--|---|------------|
|             | D  | Sample Diluted Due to Matrix                       | Е | Value abov |
|             | Н  | Holding times for preparation or analysis exceeded | J | Analyte de |
|             | ND | Not Detected at the Reporting Limit                | Р | Sample pH  |

- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 6
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

|       | -          |               |             | ~     |
|-------|------------|---------------|-------------|-------|
| Hall  | Fnvironmen | tal Analysis  | Laboratory, | Inc   |
| 11411 | LINNUUMIU  | ital mary sis | Laboratory, | IIIC. |

Date Reported: 5/8/2018

| CLIENT: Williams Four Corners            |                |  | <b>Client Sampl</b> | e ID: M          | W03   |   |
|--|----------------|--|---------------------|------------------|---|---|
| Project: Lowery TB                       |                |  | Collection I        | Date: 4/2        | 26/2018 5:00:00 PM  |   |
| Lab ID: 1804E28-002                      | Matrix:        | GROUNDWA   | Received l          | Date: 4/2        | 28/2018 10:40:00 AM   |   |
| Analyses                                 | Result         | PQL Qua  | l Units             | DF               | Date Analyzed   | Batch   |
|  |                | STATISTICS. SHOW IN THE REAL PROPERTY AND ADDRESS OF THE PARTY  |                     |                  |   |   |
| EPA METHOD 8260: VOLATILES SH            | ORT LIST       |  |                     |                  | Analys  | t: AG   |
| EPA METHOD 8260: VOLATILES SH<br>Benzene | ORT LIST       | 1.0  | µg/L                | 1                | Analys<br>5/4/2018 5:07:36 PM                                     |   |
|  |                | 1.0<br>1.0   | μg/L<br>μg/L        | 1<br>1           | ,   | C51035  |
| Benzene                                  | ND             |  |                     | 1<br>1<br>1      | 5/4/2018 5:07:36 PM   | C5103<br>C5103  |
| Benzene<br>Toluene                       | ND<br>ND       | 1.0  | µg/L                | 1<br>1<br>1      | 5/4/2018 5:07:36 PM<br>5/4/2018 5:07:36 PM                        | C5103<br>C5103<br>C5103                                 |
| Benzene<br>Toluene<br>Ethylbenzene       | ND<br>ND<br>ND | 1.0<br>1.0   | μg/L<br>μg/L        | 1<br>1<br>1<br>1 | 5/4/2018 5:07:36 PM<br>5/4/2018 5:07:36 PM<br>5/4/2018 5:07:36 PM | t: AG<br>C51038<br>C51038<br>C51038<br>C51038<br>C51038 |

| Qualifiers: | * | Value exceeds Maximum Contaminant Level. |
|-------------|---|--|
|             | D | Sample Diluted Due to Matrix             |

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 6
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

| 12 | boratory, | Inc.     | Г | Dat |
|----|-----------|----------|---|-----|
|    |           | A A A CO |   | Jai |

# Hall Environmental Analysis L

te Reported: 5/8/2018

| CLIENT: Williams Four Corners |          | Client Sample ID: MW08 |             |            |                     |        |  |  |  |
|-------------------------------|----------|------------------------|-------------|------------|---------------------|--------|--|--|--|
| Project: Lowery TB            |          |                        | Collection  | Date: 4/26 | 5/2018 5:30:00 PM   |        |  |  |  |
| Lab ID: 1804E28-003           | Matrix:  | GROUNDV                | VA Received | Date: 4/28 | 8/2018 10:40:00 AM  |        |  |  |  |
| Analyses                      | Result   | PQL (                  | Qual Units  | DF         | Date Analyzed       | Batch  |  |  |  |
| EPA METHOD 8260: VOLATILES SH | ORT LIST |                        |             |            | Analys              | t: AG  |  |  |  |
| Benzene                       | 600      | 50                     | μg/L        | 50         | 5/4/2018 5:53:42 PM | C51035 |  |  |  |
| Toluene                       | 13000    | 200                    | μg/L        | 200        | 5/4/2018 5:30:36 PM | C51035 |  |  |  |
| Ethylbenzene                  | 580      | 50                     | μg/L        | 50         | 5/4/2018 5:53:42 PM | C51035 |  |  |  |
| Xylenes, Total                | 5600     | 75                     | µg/L        | 50         | 5/4/2018 5:53:42 PM | C51035 |  |  |  |
| Surr: 4-Bromofluorobenzene    | 106      | 70-130                 | %Rec        | 50         | 5/4/2018 5:53:42 PM | C51035 |  |  |  |
| Surr: Toluene-d8              | 99.5     | 70-130                 | %Rec        | 50         | 5/4/2018 5:53:42 PM | C51035 |  |  |  |

| Qualifiers: | *  | Value exceeds Maximum Contaminant Level. |
|-------------|----|--|
|             | D  | Sample Diluted Due to Matrix             |
|             | TT | TT-11' Company Company Company           |

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S
- Analyte detected in the associated Method Blank В
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 3 of 6 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified W

| Hall | Environmental | Analysis | Laboratory, | Inc. |
|------|---------------|----------|-------------|------|
|------|---------------|----------|-------------|------|

Date Reported: 5/8/2018

| CLIENT: Williams Four Corners | Client Sample ID: MW09 |  |          |                             |       |  |  |  |  |  |
|-------------------------------|------------------------|--|----------|-----------------------------|-------|--|--|--|--|--|
| Project: Lowery TB            |                        | Collection Date: 4/26/2018 12:15:00 PM |          |                             |       |  |  |  |  |  |
| Lab ID: 1804E28-004           | Matrix:                | GROUNDWA                               | Received | Date: 4/28/2018 10:40:00 AM |       |  |  |  |  |  |
| Analyses                      | Result                 | PQL Qu                                 | al Units | DF Date Analyzed            | Batch |  |  |  |  |  |
| EPA METHOD 8260: VOLATILES SH | ORT LIST               |  |          | Analys                      | t: AG |  |  |  |  |  |
| Benzene                       | 1200                   | 100                                    | µg/L     | 100 5/4/2018 6:39:41 PM     | C5103 |  |  |  |  |  |
| Toluene                       | 7800                   | 100                                    | µg/L     | 100 5/4/2018 6:39:41 PM     | C5103 |  |  |  |  |  |
| Ethylbenzene                  | 520                    | 100                                    | µg/L     | 100 5/4/2018 6:39:41 PM     | C5103 |  |  |  |  |  |
| Xylenes, Total                | 5400                   | 150                                    | µg/L     | 100 5/4/2018 6:39:41 PM     | C5103 |  |  |  |  |  |
| Surr: 4-Bromofluorobenzene    | 113                    | 70-130                                 | %Rec     | 100 5/4/2018 6:39:41 PM     | C5103 |  |  |  |  |  |
| Surr: Toluene-d8              | 99.6                   | 70-130                                 | %Rec     | 100 5/4/2018 6:39:41 PM     | C5103 |  |  |  |  |  |

| Qualifiers: | *   | Value exceeds Maximum Contaminant Level.           | В  | Analyte detected in the associated Method B | lank         |
|-------------|-----|--|----|---|--------------|
|             | D   | Sample Diluted Due to Matrix                       | E  | Value above quantitation range              |              |
|             | Н   | Holding times for preparation or analysis exceeded | J  | Analyte detected below quantitation limits  | Page 4 of 6  |
|             | ND  | Not Detected at the Reporting Limit                | Р  | Sample pH Not In Range                      | 1 age 4 01 0 |
|             | PQL | Practical Quanitative Limit                        | RL | Reporting Detection Limit                   |              |

- S % Recovery outside of range due to dilution or matrix
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

### Date Reported: 5/8/2018

| CLIENT: Williams Four Corners            | Client Sample ID: MW10 |                                       |              |                  |   |                                  |  |  |  |  |
|--|------------------------|---------------------------------------|--------------|------------------|---|----------------------------------|--|--|--|--|
| Project: Lowery TB                       |                        | Collection Date: 4/26/2018 4:30:00 PM |              |                  |   |                                  |  |  |  |  |
| Lab ID: 1804E28-005                      | Matrix: (              | GROUNDWA                              | Received I   | Date: 4/2        | 28/2018 10:40:00 AM   |                                  |  |  |  |  |
| Analyses                                 | Result                 | PQL Qua                               | l Units      | DF               | Date Analyzed   | Batch                            |  |  |  |  |
|  |                        |                                       |              |                  |   |                                  |  |  |  |  |
| EPA METHOD 8260: VOLATILES SH            | IORT LIST              |                                       |              |                  | Analys  | t: AG                            |  |  |  |  |
| EPA METHOD 8260: VOLATILES SH<br>Benzene | IORT LIST              | 1.0                                   | μg/L         | 1                | Analys<br>5/4/2018 7:25:49 PM                                     |                                  |  |  |  |  |
|  |                        | 1.0<br>1.0                            | μg/L<br>μg/L | 1<br>1           | ,   | t: <b>AG</b><br>C51035<br>C51035 |  |  |  |  |
| Benzene                                  | ND                     |                                       |              | 1<br>1<br>1      | 5/4/2018 7:25:49 PM   | C51035                           |  |  |  |  |
| Benzene<br>Toluene                       | ND<br>ND               | 1.0                                   | µg/L         | 1<br>1<br>1      | 5/4/2018 7:25:49 PM<br>5/4/2018 7:25:49 PM                        | C5103<br>C5103<br>C5103          |  |  |  |  |
| Benzene<br>Toluene<br>Ethylbenzene       | ND<br>ND<br>ND         | 1.0<br>1.0                            | μg/L<br>μg/L | 1<br>1<br>1<br>1 | 5/4/2018 7:25:49 PM<br>5/4/2018 7:25:49 PM<br>5/4/2018 7:25:49 PM | C5103                            |  |  |  |  |

#### Hall Environmental Analysis Laboratory, Inc.

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

| Qualifiers: | *   | Value exceeds Maximum Contaminant Level.           | В  | Analyte detected in the associated Method I | Blank        |
|-------------|-----|--|----|---|--------------|
|             | D   | Sample Diluted Due to Matrix                       | Е  | Value above quantitation range              |              |
|             | Η   | Holding times for preparation or analysis exceeded | J  | Analyte detected below quantitation limits  | Page 5 of 6  |
|             | ND  | Not Detected at the Reporting Limit                | Р  | Sample pH Not In Range                      | 1 age 5 01 0 |
|             | PQL | Practical Quanitative Limit                        | RL | Reporting Detection Limit                   |              |
|             | 0   |  |    |   |              |

S % Recovery outside of range due to dilution or matrix

W Sample container temperature is out of limit as specified

TB

WO#: **1804E28** *08-May-18* 

#### Client: Williams Four Corners

| Project: | Lowery |
|----------|--------|
|----------|--------|

| SampType: LCS4  |   |  | Test   | TestCode: EPA Method 8260: Volatiles Short List  |  |   |  |   |  |
|---|---|--|--|--|--|---|--|---|--|
| Batch ID: C51035  |   |  | RunNo: 51035   |  |  |   |  |   |  |
| Analysis D  | ate: 5/   | 3/2018   | S  | eqNo: 1  | 657258   | Units: µg/L   |  |   |  |
| Result  | PQL   | SPK value  | SPK Ref Val  | %REC   | LowLimit   | HighLimit   | %RPD   | RPDLimit  | Qual   |
| 18  | 1.0   | 20.00  | 0  | 89.4   | 80   | 120   |  |   |  |
| 20  | 1.0   | 20.00  | 0  | 99.4   | 80   | 120   |  |   |  |
| 20  | 1.0   | 20.00  | 0  | 102  | 80   | 120   |  |   |  |
| 60  | 1.5   | 60.00  | 0  | 100  | 80   | 120   |  |   |  |
|   |   |  |  |  |  |   |  |   |  |
| 9.5   |   | 10.00  |  | 95.3   | 70   | 130   |  |   |  |
| 9.5<br>9.5  |   | 10.00<br>10.00   |  | 95.3<br>95.5   | 70<br>70   | 130<br>130  |  |   |  |
| 9.5   | ype: ME   | 10.00  | Test   | 95.5   | 70   |   | es Short L   | ist   |  |
| 9.5<br>SampT  | ype: ME   | 10.00<br>BLK   |  | 95.5   | 70<br>PA Method  | 130   | es Short L   | ist   |  |
| 9.5<br>SampT  | 1D: C5  | 10.00<br>BLK<br>1035   | R  | 95.5<br>Code: El   | 70<br>PA Method<br>1035  | 130   | es Short L   | ist   |  |
| 9.5<br>SampT<br>Batch   | 1D: C5  | 10.00<br>BLK<br>1035<br>3/2018   | R  | 95.5<br>Code: El   | 70<br>PA Method<br>1035  | 130<br>8260: Volatile   | <b>95 Short L</b><br>%RPD  | .ist<br>RPDLimit  | Qual   |
| 9.5<br>SampT<br>Batch<br>Analysis D                             | ate: 5/   | 10.00<br>BLK<br>1035<br>3/2018   | R  | 95.5<br>Code: El<br>cunNo: 5<br>SeqNo: 1   | 70<br>PA Method<br>1035<br>657269  | 130<br>8260: Volatile<br>Units: µg/L  |  |   | Qual   |
| 9.5<br>SampT<br>Batch<br>Analysis D<br>Result                   | n ID: C5<br>ate: 5/<br>PQL                      | 10.00<br>BLK<br>1035<br>3/2018   | R  | 95.5<br>Code: El<br>cunNo: 5<br>SeqNo: 1   | 70<br>PA Method<br>1035<br>657269  | 130<br>8260: Volatile<br>Units: µg/L  |  |   | Qual   |
| 9.5<br>SampT<br>Batch<br>Analysis D<br>Result<br>ND             | n ID: C5<br>ate: 5/<br>PQL<br>1.0               | 10.00<br>BLK<br>1035<br>3/2018   | R  | 95.5<br>Code: El<br>cunNo: 5<br>GeqNo: 1   | 70<br>PA Method<br>1035<br>657269  | 130<br>8260: Volatile<br>Units: µg/L  |  |   | Qual   |
| 9.5<br>SampT<br>Batch<br>Analysis D<br>Result<br>ND<br>ND       | ate: 5/2<br>PQL<br>1.0<br>1.0                   | 10.00<br>BLK<br>1035<br>3/2018   | R  | 95.5<br>Code: El<br>cunNo: 5<br>GeqNo: 1   | 70<br>PA Method<br>1035<br>657269  | 130<br>8260: Volatile<br>Units: µg/L  |  |   | Qual   |
| 9.5<br>SampT<br>Batch<br>Analysis D<br>Result<br>ND<br>ND<br>ND | ate: 5/2<br>PQL<br>1.0<br>1.0<br>1.0            | 10.00<br>BLK<br>1035<br>3/2018   | R  | 95.5<br>Code: El<br>cunNo: 5<br>GeqNo: 1   | 70<br>PA Method<br>1035<br>657269  | 130<br>8260: Volatile<br>Units: µg/L  |  |   | Qual   |
|   | Batch<br>Analysis D<br>Result<br>18<br>20<br>20 | Batch ID:         C5           Analysis Date:         5/           Result         PQL           18         1.0           20         1.0           20         1.0 | Batch ID:         C51035           Analysis Date:         5/3/2018           Result         PQL         SPK value           18         1.0         20.00           20         1.0         20.00           20         1.0         20.00 | Batch ID: C51035       R         Analysis Date:       5/3/2018       S         Result       PQL       SPK value       SPK Ref Val         18       1.0       20.00       0         20       1.0       20.00       0         20       1.0       20.00       0 | Batch ID: C51035       RunNo: 5         Analysis Date:       5/3/2018       SeqNo: 10         Result       PQL       SPK value       SPK Ref Val       %REC         18       1.0       20.00       0       89.4         20       1.0       20.00       0       99.4         20       1.0       20.00       0       102 | RunNo: 51035         RunNo: 51035         Analysis Date: 5/3/2018       SeqNo: 1657258         Result       PQL       SPK value       SPK Ref Val       %REC       LowLimit         18       1.0       20.00       0       89.4       80         20       1.0       20.00       0       99.4       80         20       1.0       20.00       0       102       80 | RunNo: 51035         RunNo: 51035         Analysis Date: 5/3/2018       SeqNo: 1657258       Units: µg/L         Result       PQL       SPK value       SPK Ref Val       %REC       LowLimit       HighLimit         18       1.0       20.00       0       89.4       80       120         20       1.0       20.00       0       102       80       120         20       1.0       20.00       0       102       80       120 | RunNo: 51035         Batch ID: C51035       RunNo: 51035         Analysis Date: 5/3/2018       SeqNo: 1657258       Units: µg/L         Result       PQL       SPK value       SPK Ref Val       %REC       LowLimit       HighLimit       %RPD         18       1.0       20.00       0       89.4       80       120         20       1.0       20.00       0       99.4       80       120         20       1.0       20.00       0       102       80       120 | Batch ID: C51035       RunNo: 51035         Analysis Date: 5/3/2018       SeqNo: 1657258       Units: µg/L         Result       PQL       SPK value       SPK Ref Val       %REC       LowLimit       HighLimit       %RPD       RPDLimit         18       1.0       20.00       0       89.4       80       120       120       120         20       1.0       20.00       0       102       80       120       120         20       1.0       20.00       0       102       80       120       120 |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified
- Page 6 of 6

| HALL<br>ENVIRONMENTAL<br>ANALYSIS<br>LABORATORY   | TEL: 505-345-2                          | ntal Analysis Labora<br>4901 Hawkin:<br>Albuquerque, NM 87<br>3975 FAX: 505-345-4<br>w.hallenvironmental. | NE<br>7109 San<br>4107 | nple Log-In C                                | heck List           |
|---|---|---|------------------------|--|---------------------|
| Client Name: WILLIAMS FOUR CORN   | Work Order Num                          | ber: 1804E28  | 2                      | RcptNo:                                      | 1                   |
| ·   |   |   | ··· · · ·              | 1 6 19                                       |                     |
| Received By: Andy Freeman   | 4/28/2018 10:40:00                      | AM  | anly                   |  |                     |
| Completed By: Anne Thorne<br>Reviewed By: ENM<br>Labeled by!                              | 4/30/2018 10:51:4<br>4/30/18            | B AM  | Anne Hr.               |  |                     |
| Chain of Custody  |   |   |                        |  | •                   |
| 1. Is Chain of Custody complete?  |   | Yes 🔽   | No 🗌                   | Not Present                                  |                     |
| 2. How was the sample delivered?  |   | Courier   |                        |  |                     |
| Log In  | 2                                       |   | No 🗆                   |  |                     |
| <ol><li>Was an attempt made to cool the samples</li></ol>                                 | (                                       | Yes 🗹   | No 🛄                   | NA   |                     |
| 4. Were all samples received at a temperature   | e of >0° C to 6.0°C                     | Yes 🗹   | No 🗔                   |  |                     |
| 5. Sample(s) in proper container(s)?  | •<br>•                                  | Yes 🗹   | No 🗌                   |  | ·<br>· .            |
| 6. Sufficient sample volume for indicated test(   | s)?                                     | Yes 🗹   | No 🗌                   |  |                     |
| 7. Are samples (except VOA and ONG) prope   | rly preserved?                          | Yes 🗹   | No 🗌 ·                 |  |                     |
| 8. Was preservative added to bottles?   |   | Yes   | No 🔽                   | NA 🗌   |                     |
| 9. VOA vials have zero headspace?   |   | Yes 🗹   | No 🗌                   | No VOA Viałs                                 |                     |
| 10. Were any sample containers received brok  | en?                                     | Yes   | No 🗹                   |  |                     |
| 11. Does paperwork match bottle labels?<br>(Note discrepancies on chain of custody)       |   | Yes 🗹   | No 🗆                   | # of preserved<br>bottles checked<br>for pH: | >12 unless noted)   |
| 12. Are matrices correctly identified on Chain of   | f Custody?                              | Yes 🖌   | No                     | Adjusted?                                    |                     |
| 13. Is it clear what analyses were requested?   | ······································· | Yes 🗹   | No 🗌                   |  |                     |
| 14. Were all holding times able to be met?<br>(If no, notify customer for authorization.) |   | Yes 🗹   | No 🗌                   | Checked by:                                  |                     |
| Special Handling (if applicable)  |   |   |                        | 4  | 2. <sup>10</sup> 24 |
| 15. Was client notified of all discrepancies with   | this order?                             | Yes   | No 🗌                   | NA 🔽   |                     |

| 15. | Was | client | notified | of all | discrepancies | with | this orde | r? · |
|-----|-----|--------|----------|--------|---------------|------|-----------|------|
|     |     |        |          |        |               |      |           |      |

|                      |   | -    |  |             |
|----------------------|---|------|--|-------------|
| Person Notified:     | 1 | Date |  | •           |
| By Whom:             |   | Via: | eMail Phone Fax In Person                                    |             |
| Regarding:           |   |      |  | atatar      |
| Client Instructions: |   |      | Ko-coll:0427406400484094044640464646464646464646464646464646 | angenerate. |

\_

\_ \_

16. Additional remarks:

17. Cooler Information

| Cooler No | Temp °C | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|-----------|---------|-----------|-------------|---------|-----------|-----------|
| 1 3       | 3.1     | Good      | Yes         |         |           |           |

|  |                                |              | stody Record                              | Turn-Around Time:            |                      |   |             | HALL ENVIRONMENTAL   |                             |                    |                     |               |   |                              |                  |                 |               |        |  |                      |  |
|--|--------------------------------|--------------|---|------------------------------|----------------------|---|-------------|--|-----------------------------|--------------------|---------------------|---------------|---|------------------------------|------------------|-----------------|---------------|--------|--|----------------------|--|
| Client: Williams Four Courners             |                                |              |   | X Standard                   |                      |   |             | ANALYSIS LABORATORY  |                             |                    |                     |               |   |                              |                  |                 |               |        |  |                      |  |
|  |                                |              |   | Project Name:                |                      |   |             |  |                             |                    |                     |               |   |                              |                  |                 |               |        |  |                      |  |
| Mailing                                    | Address                        | 1775         | 5 Arroug Dr                               | Lowery TB                    |                      |   |             | www.hallenvironmental.com<br>4901 Hawkins NE - Albuquerque, NM 87109 |                             |                    |                     |               |   |                              |                  |                 |               |        |  |                      |  |
|  |                                | BIDOM        | 5 Arroyo Dr<br>Afield, NM                 | Project #:                   |                      |   |             | Tel. 505-345-3975 Fax 505-345-4107                                   |                             |                    |                     |               |   |                              |                  |                 |               |        |  |                      |  |
| Phone :                                    | #:                             |              |   |                              |                      |   |             |  |                             |                    | 1                   | Anal          | ysis  | Req                          | uest             | t               |               |        |  |                      |  |
| email o                                    | r Fax#:                        | Aaron        | Galer@williams.com                        | Project Manager:             |                      |   |             | only)  | 20                          |                    |                     |               | (†0   |                              |                  |                 |               |        |  |                      |  |
| QA/QC I                                    | Package:                       |              | · · ·                                     | Williams - A. Gales          |                      |   |             | O SE   | / MF                        |                    | (s                  |               | 4,S(  | CB's                         |                  |                 |               |        |  |                      |  |
| Stan                                       |                                |              | Level 4 (Full Validation)                 |                              | D. Burn              |   | s's (8021)  | Ö  | RO                          |                    | SIMS)               |               | PO,   | 2 PC                         | X                |                 |               |        |  |                      |  |
| Accredi                                    |                                | □ Othe       | r   | Sampler:                     | Danny I              | Burns   | + TMB's     | HdT  | 0/0                         | 8.1)               | 3270                |               | 3,NO2   | / 808;                       | TF               | 2               |               |        | 114  | Î N                  |  |
| É EDD                                      | (Type)                         | PDF          | :   | Sample Terry                 | perature: 3./.       | Ф.С.,   | 3E +        | Ш÷   | (GR                         | d 41               | or                  | tals          | NON.  | des                          | B                | NO/             |               |        |  | ž                    |  |
| Date                                       | Time                           | Matrix       | Sample Request ID                         |                              | Preservative<br>Type |   | BTEX + MTBE | BTEX + MTBE + TPH (Gas   | TPH 8015B (GRO / DRO / MRO) | TPH (Method 418.1) | PAH's (8310 or 8270 | RCRA 8 Metals | Anions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> ) | 8081 Pesticides / 8082 PCB's | 8260B (VOA) BTEX | 8270 (Semi-VOA) |               |        | and dates of the second s | Air Bubbles (Y or N) |  |
| 4-26                                       | 1600                           | GW           | MWOI                                      | 3-40mL                       | NONE                 | -001  |             |  |                             |                    |                     |               |   |                              | X                |                 |               |        |  |                      |  |
| 1  | 1700                           | 1            | MW03                                      | [                            | 1                    | 702   |             |  |                             |                    |                     |               |   |                              | X                |                 |               |        |  |                      |  |
|  | 1730                           |              | MWOS                                      |                              |                      | 203   |             |  |                             |                    |                     | 1             |   |                              | X                |                 |               |        |  | ٦                    |  |
|  | 1215                           |              | MW09                                      |                              |                      | -204  |             |  |                             |                    |                     | 1             |   |                              | X                |                 |               | -      |  |                      |  |
| V  | 1630                           | $\mathbb{V}$ | MW10                                      | V                            | V                    | 705   |             |  |                             |                    |                     |               |   |                              | X                |                 |               |        |  |                      |  |
|  |                                |              |   |                              |                      |   |             |  |                             |                    |                     |               |   |                              |                  |                 |               |        |  | _                    |  |
|  |                                |              |   | =  1                         |                      |   |             | 4  | _                           |                    | -                   | -             |   | _                            | -                |                 |               |        |  |                      |  |
|  |                                |              |   | /                            |                      | [   |             |  | _                           |                    |                     | $\vdash$      | [   |                              |                  |                 | $\rightarrow$ |        | $\downarrow$   |                      |  |
|  |                                |              |   |                              |                      |   | 4           |  |                             | 4                  | 1                   |               |   |                              |                  |                 |               |        |  | _                    |  |
|  |                                |              |   |                              |                      |   | 2           | -1   | 4                           |                    |                     |               |   |                              |                  |                 |               |        |  | _                    |  |
|  |                                | ~            |   |                              | 2                    |   |             |  | _                           |                    |                     |               |   |                              |                  |                 |               |        | $\downarrow$   |                      |  |
| Deter                                      | <b>T</b> '                     |              |   | Dessived by                  |                      | Deta Tina   |             |  |                             |                    |                     |               |   |                              |                  |                 |               |        |  |                      |  |
| Date:<br><u>4 24 5</u><br>Date:<br>4 07 18 | Time:<br>/509<br>Time:<br>/850 | Relinquishe  | US-                                       | Received by:<br>Received by: | Wall                 | Date Time<br><u>427/18 1589</u><br>Date Time<br><u>42/18</u> 1690 | Ren<br>C    | narks<br>C   | 5:<br>0<br>1                | ager<br>hert       | Q                   | lter<br>1+e   | nv.<br>nv   | CO 7                         | m                |                 | ,             |        |  |                      |  |
|  | f necessary,                   | samples subr | nitted to Hall Environmental may be subco | ontracted to other ac        | ccredited laboratori | es. This serves as notice of this                                 | possil      | oil <b>i</b> ty. A   | Any sub                     | -contrac           | ted data            | a will b      | e clear   | ly nota                      | ated or          | n the ar        | alytical r    | eport. |  |                      |  |