

3R – 215

2014 GWMR

11 / 25 / 2015



ENTERPRISE PRODUCTS PARTNERS L.P.
ENTERPRISE PRODUCTS HOLDINGS LLC
(General Partner)

ENTERPRISE PRODUCTS OPERATING LLC

November 25, 2014

Return Receipt Requested
7012 1010 0003 3760 7758

Mr. Cordell TeCube - Director
Environmental Protection Office
Jicarilla Apache Nation
P.O. Box 507
Dulce, NM 87528-0507

**RE: Monitoring Well Installation, Groundwater Monitoring (June 2013 to June 2014 Sampling Events) and Product Recovery Report
Enterprise Field Services, LLC - Lindrith Compressor Station
SE/4 Section 18, Township 24 North, Range 5 West
NM Oil Conservation Division GW Discharge Permit No. GW-209
RP# 3R-215
Rio Arriba County, New Mexico**

Dear Mr. TeCube:

Enterprise Field Services, LLC (Enterprise) is submitting the enclosed *Monitoring Well Installation, Groundwater Monitoring (June 2013 to June 2014 Sampling Events) and Product Recovery Report*, dated November 11, 2014, for the facility referenced above.

This report documents the observations and analytical results derived from the June 2013 through June 2014 groundwater monitoring events, as well as documenting two (2) groundwater monitoring well installations and six (6) evaluation point monitoring well installations, and non-aqueous phase liquid (NAPL) condensate recovery events during 2013 and the first half of 2014.

During this reporting period, Two (2) additional monitoring wells were added to the existing network, one (1) at the western edge of the Site (MW-49), and one (1) south of the former pond area (MW-50). Additionally, six (6) evaluation point wells (EP-43 through EP-48) were installed near monitoring wells MW-1R and MW-9 to evaluate the system performance and the High Vacuum Recovery (HVR) radius of influence.

One (1) 72-hour HVR event was performed during October 2013. The HVR technology allows the removal of NAPL as well as facilitating vapor-phase recovery. The October 2013 recovery event yielded low results believed to be due to the small radius of influence and limited transmissivity of the formation near the top of the water bearing zone. In addition to the HVR recovery event, monthly hand-bailing was performed at wells exhibiting NAPL between January 2014 and May 2014.

NAPL hydrocarbon is present on the groundwater in the vicinity of the former condensate storage tank release (near MW-1R), at the former ponds/burn pit, and near a former subgrade tank at the western corner of the facility.

COC concentrations in groundwater in the vicinities of each NAPL plume area exceed the WQCC standards, and appear to be relatively stable in magnitude over the three sampling events described herein.

Additional delineation of affected groundwater is scheduled to further address NAPL identified at monitoring well MW-49 at the western corner of the Site, and near monitoring well MW-6.

If you have any questions, or require additional information, please do not hesitate to contact me at (713) 381-2286, or via email at: drsmith@eprod.com.

Sincerely,



David R. Smith, P.G.
Sr. Environmental Scientist



Greg E. Miller, P.G.
Supervisor, Environmental

/dep
Enclosure

cc: Mr. Kurt Sandoval
Bureau of Indian Affairs, Realty Program
P.O. Box 167
Dulce, NM 87528-0167

Mr. Guillermo DeHerrera
Jicarilla Oil & Gas Administration
P.O. Box 146
Dulce, NM 87528-0146

Mr. Hobson Sandoval
Jicarilla Environmental Protection Office
P.O. Box 507
Dulce, NM 87528-0507

ec: Jim Griswold, NMOCD, Santa Fe, NM (ftp submittal)
Glenn von Gonten, NMOCD,

Elizabeth Scaggs, APEX
Kyle Summers, APEX



**MONITORING WELL INSTALLATION, GROUNDWATER MONITORING
(June 2013 to June 2014 Sampling Events)
and PRODUCT RECOVERY REPORT**

**GROUNDWATER DISCHARGE PLAN GW-209
RP # 3R-215**

Property:

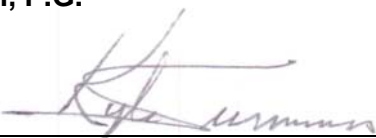
Lindrith Compressor Station
Southeast ¼ Section 18, Township 24N, Range 5W
Rio Arriba County, New Mexico

November 11, 2014
Apex Project No. 7030410G006

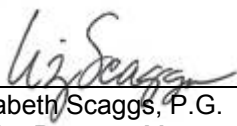
Prepared for:

Enterprise Field Services, LLC
P.O. Box 4324
Houston, Texas 77210-4324
Attn: Mr. David R. Smith, P.G.

Prepared by:



Kyle Summers, C.P.G.
Branch Manager / Senior Geologist



Elizabeth Scaggs, P.G.
Senior Program Manager

TABLE OF CONTENTS

1.0	EXECUTIVE SUMMARY	1
2.0	INTRODUCTION.....	3
2.1	Site Ranking.....	3
2.2	Constituents of Concern.....	4
2.3	Chronology of Events	5
2.4	Objectives	6
2.5	Standard of Care, Limitations & Reliance	6
3.0	SITE CHARACTERIZATION.....	7
3.1	Geology & Hydrogeology	7
3.1.1	Groundwater Gradient	8
3.1.2	Groundwater Classification.....	8
3.2	Land Use & Classification	8
4.0	MONITORING WELL & EVALUATION POINT WELL INSTALLATIONS.....	8
4.1	Soil Borings & Monitoring Wells.....	9
4.1.1	Soil Boring Sampling Program	9
4.2	Soil Borings & Evaluation Point Wells	10
4.3	Laboratory Analytical Program – Soil	10
4.3.1	Quality Assurance/Quality Control (QA/QC) - Soil	10
4.4	Data Evaluation - Soil.....	11
5.0	GROUNDWATER MONITORING.....	11
5.1	Groundwater Sampling Program	11
5.2	Laboratory Analytical Program	12
5.2.1	Quality Assurance/Quality Control (QA/QC).....	12
5.3	Groundwater Data Evaluation	13
6.0	PRODUCT RECOVERY - NAPL	16
6.1	High Vacuum Recovery	16
6.1.1	Radius of Influence	18
6.2	Hand Bailing.....	18
7.0	FINDINGS	19
8.0	RECOMMENDATIONS.....	20

LIST OF APPENDICES

- Appendix A:** Figure 1 – Topographic Map
Figure 2 – Site Vicinity Map
Figure 3 – Site Map
Figure 4A – Groundwater Gradient Map (June 2013)
Figure 4B – Groundwater Gradient Map (December 2013)
Figure 4C – Groundwater Gradient Map (June 2014)
Figure 5 – RAL Exceedance Zone in Soil Map
Figure 6A – Groundwater GQS Exceedance Zone Map (June 2013)
Figure 6B – Groundwater GQS Exceedance Zone Map (Dec 2013)
Figure 6C – Groundwater GQS Exceedance Zone Map (June 2014)
- Appendix B:** Table 1 – Soil Analytical Summary
Table 2 – Groundwater Analytical Summary
Table 3 – Groundwater Elevations
Table 4A – MDPE Controller Data – Area 1
Table 4B – MDPE Controller Data – Area 2
Table 4C – MDPE Controller Data – Area 3
Table 5A – Radius of Influence – MR-1R
Table 5B – Radius of Influence – MW-9
- Appendix C:** Soil Boring/Monitoring Well Logs
- Appendix D:** Laboratory Analytical Reports &
Chain of Custody Documentation

**MONITORING WELL INSTALLATION, GROUNDWATER MONITORING
(June 2013 to June 2014 Sampling Events)
and PRODUCT RECOVERY REPORT**

**GROUNDWATER DISCHARGE PLAN GW-209
RP # 3R-215**

Lindrith Compressor Station
Southeast ¼ Section 18, Township 24N, Range 5W
Rio Arriba County, New Mexico

Apex Project No. 7030410G006

1.0 EXECUTIVE SUMMARY

The Enterprise Field Services, LLC (Enterprise) Lindrith Compressor Station is located off Jicarilla Road J-36, approximately 7.2 miles west of State Highway 537, in the southeast (SE) ¼ of Section 8, Township 24N, Range 5W (36.309300 N, 107.396700 W) Rio Arriba County, Jicarilla Apache Nation, New Mexico, referred to hereinafter as the “Site” or “subject Site”. The Site is a natural gas compressor station utilized to dehydrate and compress natural gas collected from production wells in the area for transportation via pipeline. The Site was constructed in the 1950s and currently includes three (3) compressor engines, a dehydration unit, a flare, one (1) bullet storage tank, a condensate storage tank battery, which includes eight (8) condensate storage tanks, two (2) below-grade tanks, inlet scrubbers, an unused water tower, and office/shop buildings.

On December 27, 2007, a natural gas condensate release (initially reported as 50 bbls (25 bbls recovered)) occurred within the containment berm at the former condensate storage tanks. The release penetrated the berm and flowed outside the south fence of the facility. The release was immediately reported the New Mexico Energy, Minerals, and Natural Resources Department (EMNRD), Oil Conservation Division's (OCD) Aztec field office, and the OCD *Release Notification and Corrective Action* form (Form C-141) was submitted to the OCD (January 4, 2008). Initial response activities included the removal of some impacted soil, as well as soil boring sampling to evaluate the extent of impact (*Spill Cleanup Report Lindrith Compressor Station, Rio Arriba County, New Mexico*, Envirotech, Inc., September 2008). Based on the results of initial soil and groundwater sampling activities, constituent of concern (COC) concentrations were identified in soil above the New Mexico EMNRDOCD *Remediation Action Levels* (RALs) and in groundwater above the New Mexico Water Quality Control Commission (WQCC) *Groundwater Quality Standards* (GQSs). Supplemental excavation, delineation, and remediation activities were performed between November 2009 and March 2013 (*Subsurface Investigation Report*, LT Environmental, Inc. (LTE), February 2011) (*Supplemental Site Investigation & Corrective Action Work Plan*, Southwest Geoscience (now Apex TITAN, Inc. (Apex)), November 30, 2011), resulting in the removal of approximately 4,182 cubic yards of hydrocarbon affected soils, the advancement of a total of forty-two (42) soil borings, and the installation and sampling of twenty-five (25) groundwater monitoring wells. The former condensate tanks and associated below-grade tank have been permanently removed from the facility, and groundwater monitoring continues at the Site.

This report documents the observations and analytical results derived from the June 2013 through June 2014 groundwater monitoring events, as well as documenting two (2) groundwater monitoring well installations and six (6) evaluation point monitoring well installations, and non-

aqueous phase liquid (NAPL) condensate recovery events during 2013 and the first half of 2014. Pertinent findings and information from these activities include the following:

- **Two (2) additional monitoring wells were added to the existing network, one (1) at the western edge of the Site (MW-49), and one (1) south of the former pond area (MW-50).**
- **Six (6) evaluation point wells (EP-43 through EP-48) were installed near monitoring wells MW-1R and MW-9 to evaluate the system performance and the HVR radius of influence.**
- **One (1) 72-hour High Vacuum Remediation (HVR) event was performed during October 2013. The HVR technology allows the removal of NAPL as well as facilitating vapor-phase recovery. The October 2013 recovery event yielded low results (39.9 gallons of hydrocarbon liquid and vapor) believed to be due to the radius of influence and limited transmissivity of the formation near the top of the water bearing zone. Enterprise continues to evaluate potential recovery methods to remove NAPL from the Site groundwater.**
- **In addition to the HVR recovery event, monthly hand-bailing was performed at wells exhibiting NAPL between January 2014 and May 2014. These hand bailing events resulted in the removal of approximately 80 gallons of NAPL during this period.**
- **NAPL hydrocarbon is present on the groundwater in the vicinity of the former condensate storage tank release (near MW-1R), at the former ponds/burn pit, and near a former subgrade tank at the western corner of the facility.**
- **COC concentrations in groundwater in the vicinities of each NAPL plume area exceed the WQCC standards, and appear to be relatively stable in magnitude over the three sampling events described herein.**
- **Additional delineation of affected groundwater is needed downgradient of monitoring well MW-49 at the western corner of the Site, and near monitoring well MW-6.**

2.0 INTRODUCTION

The Site is under the jurisdiction of the Jicarilla Apache Nation Environmental Protection Office (JANEPO). In the absence of published JANEPO regulatory guidance, Apex referenced the New Mexico OCD's *Guidelines for Remediation of Leaks, Spills and Releases* as guidance, in addition to the OCD rules, specifically NMAC (New Mexico Administrative Code) 19.15.29 *Remediation Plan*. These guidance documents establish investigation and abatement action requirements for sites subject to reporting and/or corrective action.

Based on the results of soil and groundwater sampling activities at the Site, COC concentrations were identified in soil above the New Mexico EMNRD OCD RALs and in groundwater above the New Mexico WQCC GQSS.

The following historical source areas are suspected as contributors to the identified soil and/or groundwater impact at the facility:

- Former condensate storage tanks and associated below-grade tank in the south central portion of the facility and possibly a hydrocarbon tank formerly located southeast of the water tower. An NAPL plume is present in this area.
- Former pond locations (and possible historical burn pit location) in the southeastern portion of the facility in the vicinity of monitoring wells MW-30 and MW-32. An NAPL plume is present in this area.
- Below-grade tank formerly located at the west boundary of the facility. NAPL was present in monitoring wells MW-39 and MW-49 during the July 2014 groundwater sampling event.

The Site location is depicted on Figure 1 of Appendix A which was reproduced from a portion of the United States Geological Survey (USGS) 7.5-minute series topographic map. A Site Vicinity Map is included as Figure 2, and a Site Map, which indicates the approximate locations of the monitoring wells in relation to pertinent structures and general Site boundaries, is included as Figure 3 of Appendix A.

2.1 Site Ranking

In accordance with the OCD's *Guidelines for Remediation of Leaks, Spills and Releases*, Apex utilized the general site characteristics to determine the appropriate "ranking" for the Site. The ranking criteria and associated scoring are provided in the following table:

Ranking Criteria			Ranking Score
Depth to Groundwater	<50 feet	20	20
	50 to 99 feet	10	
	>100 feet	0	
Wellhead Protection Area • <1,000 feet from a water source, or; <200 feet from private domestic water source.	Yes	20	20
	No	0	
Distance to Surface Water Body	<200 feet	20	0
	200 to 1,000 feet	10	
	>1,000 feet	0	
Total Ranking Score			40

Based on Apex's evaluation of the scoring criteria, the Site would have a maximum Total Ranking Score of 40. This ranking is based on the following:

- The depth to the initial groundwater-bearing zone is <50 feet below grade surface (bgs) at the Site.
- A livestock water well is located upgradient/cross-gradient (Southeast) of the facility.
- Largo wash is greater than 1000' from the Site.

Based on a Total Ranking Score of 40, cleanup goals for soil located at the Site include: 10 milligrams per kilogram (mg/Kg) for benzene, 50 mg/Kg for total benzene, toluene, ethylbenzene, and xylenes (BTEX), and 100 mg/Kg for total petroleum hydrocarbon (TPH) gasoline range organics (GRO)/diesel range organics (DRO).

In addition, cleanup goals for groundwater located at the Site include the WQCC GQSs of: 10 micrograms per liter (µg/L) for benzene, 750 µg/L for toluene, 705 µg/L for ethylbenzene, and 620 µg /L for total xylenes.

2.2 Constituents of Concern

The soil and groundwater samples collected from *previously* installed soil borings/monitoring wells were analyzed for TPH utilizing Environmental Protection Agency (EPA) method SW-846 #8015M and BTEX using EPA SW-846 method #8021B. Additionally, one soil sample (B-21 @ 23') was analyzed for glycols, and two soil samples (B-27 @ 12' and B-27@ 33') were analyzed for volatile organic compounds (VOCs) utilizing EPA method SW-846 #8260.

- Based on the laboratory analytical results from *previous* investigations, combined TPH GRO/DRO concentrations were identified in soil samples collected from borings B-3 (25'), B-11(35'), B-12 (33.5'), B-13 (30'), B-15 (33'), B-16 (32'), B-18 (33'), B-20 (30'), B-24 (29'), B-27 (12'), B-28 (30'), B-29 (27'), MW-30 (12' and 35'), MW-32 (17' and 35'), MW-37 (30'), and MW-39 (31') above the OCD RAL of 100 mg/Kg.
- Based on the laboratory analytical results from *previous* investigations, total BTEX concentrations were identified in soil samples collected from borings B-13 (30'), B-20 (30'), MW-30 (35'), MW-32 (35'), MW-37 (30'), and MW-39 (31') above the OCD RAL of 50 mg/Kg.
- The soil samples analyzed for glycols and VOCs did not exhibit elevated concentrations of these constituents.
- Based on the laboratory analytical results from groundwater sampling events prior to 2013, benzene concentrations have been identified in groundwater samples collected from monitoring wells MW-2, MW-3, MW-4, MW-6, MW-7, MW-12, MW-36, MW-38, and MW-42 above the WQCC GQS of 10 µg/L.
- Based on the laboratory analytical results from groundwater sampling events prior to 2013, toluene concentrations have been identified in groundwater samples collected from monitoring wells MW-3 and MW-4 above the WQCC GQS of 750 µg /L.
- Based on the laboratory analytical results from groundwater sampling events prior to 2013, total xylenes concentrations have been identified in groundwater samples collected from monitoring wells MW-2, MW-3, MW-4, MW-6, and MW-38 above the WQCC GQS of 620 µg /L.

- During gauging events prior to 2013, NAPL has been identified in monitoring wells MW-1R, MW-2, MW-3, MW-6, MW-9, MW-30, MW-32, MW-37, and MW-39.

Soil and groundwater analytical results for the Site borings and monitoring wells from previous investigations are included in Tables 1 and 2, respectively.

2.3 Chronology of Events

December 27, 2007	An estimated 50 barrel (bbl) (25 bbls recovered) release of condensate occurred at the former condensate storage tanks location due to suspected theft or vandalism. The OCD was notified immediately, and a C-141 Release Notification was submitted to the OCD on January 4, 2008. Condensate penetrated the secondary containment berm and flowed outside the south fence of the facility. Initial response activities included the removal of some soil, and the advancement of soil borings.
September 2008	<i>Spill Cleanup Report Lindrith Compressor Station, Rio Arriba County, New Mexico, September 2008 (Envirotech).</i>
November 2009	LTE oversaw the removal of an additional 3,200 cubic yards of hydrocarbon affected soil from the affected area. Apparent historically impacted soil was identified underlying the floor of the excavation, which extended to approximately 9 feet bgs.
December 2009	Six (6) soil borings were advanced in the immediate vicinity of the former condensate storage tanks. Three (3) of the soil borings were converted into groundwater monitoring wells. Groundwater impact was confirmed through laboratory analysis.
March 2010	Proposed <i>Delineation Work Plan</i> , (LTE) presented to the JANEPO detailing the proposed subsurface investigation activities.
April 2010	<i>Supplemental Work Plan</i> , (LTE) presented to JANEPO describing proposed below-grade tank removal and remediation activities.
May 2010	Removal of the below-grade tank, as well as an additional 982 cubic yards of hydrocarbon affected soils.
June 2010	<i>Combined ORC Injection and Delineation Work Plan and Remediation Work Plan</i> (LTE) submitted to JANEPO. This work plan proposed in-situ treatment at the source and additional soil and groundwater delineation activities.
July-November 2010	Bureau of Indian Affairs (BIA) approves the combined work plans. Oxygen Release Compound® (ORC) is introduced into the excavation floor, a drain/injection system is installed, and the excavation is backfilled. The ORC is hydrated immediately after the drain/injection system installation, and again in September, October and November 2010.
October 2010	LTE begins supplemental site delineation activities which included twenty (20) additional soil borings across the southern portion of the Site and adjacent property. Ten (10) of the soil borings are completed as groundwater monitoring wells, including the replacement of MW-1 with MW-1R.
February 2011	<i>Subsurface Investigation Report</i> (LTE) describes the results of the subsurface investigation activities. The investigation identified NAPL in association with the initial groundwater bearing unit, as well as identifying historical apparent impact from undetermined sources. Additional investigation will be required to further evaluate the extent of the NAPL and dissolved-phase groundwater COCs, as well as the historic soil

impacts.

August 2011	<i>Supplemental Site Investigation Work Plan (LTE)</i> submitted to JANEPO on August 1, 2011. <i>Supplemental Site Investigation Work Plan (LTE)</i> approved by JANEPO on August 12, 2011.
August/September 2011	Supplemental site investigation activities performed which included the advancement and sampling of thirteen (13) additional soil borings across the southern portion of the Site and adjacent property. Each of the soil borings were converted into groundwater monitoring wells which were sampled during the September 2011 groundwater sampling event. Two previously undocumented NAPL plumes were identified and delineated during the course of the investigation and sampling activities.
December 12, 2011	<i>Supplemental Environmental Site Investigation & Corrective Action Work Plan (SWG)</i> submitted to JANEPO for review/approval.
February 12, 2012	JANEPO approves the activities proposed in the <i>Supplemental Site Investigation & Corrective Action Work Plan (SWG)</i> .
May-July 2012	HVR activities performed at the former condensate release site. A total of approximately 584 gallons of hydrocarbon product were removed from the subsurface during this HVR event. Most of the recovery was in gaseous phase, the bulk of which was consumed during the removal of product by the HVR's internal combustion engine.
April 2013	Two (2) delineation monitoring wells (MW-49 and MW-50) and six (6) evaluation point wells (EP-43 through EP-48) were installed at the Site to allow a determination of "radius of influence" calculations during the next HVR event.
October 2013	Performed 72-hour HVR event split between monitoring wells MW-1R, MW-6, MW-9, MW-30 and MW-39. Total hydrocarbon product recovery during this event was 39.3 gallons.
January-May 2014	Hand bailing events were conducted between January 2014 and May 2014 to further evaluate the rate of product recovery at each monitoring well and evaluation point well location.

2.4 Objectives

The objectives of the additional monitoring well installations and the continued groundwater monitoring events were to further evaluate the concentrations of COCs in groundwater at the Site and to further define the lateral extent of the dissolved-phase COC plume. The objectives of the evaluation point monitoring well installations, product removal (utilizing HVR), and hand-bailing events were to remove NAPL from the groundwater at the Site, and to further evaluate NAPL recharge rates in the weathered sandstone units.

2.5 Standard of Care, Limitations & Reliance

Apex Companies, LLC's (Apex's) services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Apex makes no warranties, expressed or implied, as to the services performed hereunder. Additionally, Apex does not warrant the work of third parties supplying information used in the report (e.g. laboratories, regulatory agencies, or other third parties). This scope of services was performed in accordance with the scope of work agreed with the client.

Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-Site activities and other services performed under this scope of work and it should be noted that this information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, or not present during these services, and Apex cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this scope of services. Environmental conditions at other areas or portions of the Site may vary from those encountered at actual sample locations. Apex's findings and recommendations are based solely upon data available to Apex at the time of these services.

This report has been prepared for the exclusive use of Enterprise Field Services, LLC (Enterprise), and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the expressed written authorization of Enterprise and Apex. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the proposal, the report, and Apex's Agreement. The limitation of liability defined in the agreement is the aggregate limit of Apex's liability to the client.

3.0 SITE CHARACTERIZATION

The Lindrith Compressor Station is located off Jicarilla Road J-36, approximately 7.2 miles west of State Highway 537, in Section 8, Township 24N, Range 5W (36.309300 N, 107.396700 W), within the Jicarilla Apache Nation. The Site is located within the Largo Canyon watershed which ultimately feeds to the San Juan River. The terrain is high desert canyon rangeland, with vegetation primarily limited to draught- and temperature-tolerant species.

3.1 Geology & Hydrogeology

According to the New Mexico Bureau of Geology and Mineral Resource (Geologic Map of New Mexico 2003), the Site overlies the San Jose geologic formation. The Eocene age San Jose geologic formation contains a mixture of clastic sedimentary rocks varying from siltstone to conglomerate, dominated by rocks containing sand-sized particles. The lithology encountered at the Site during boring activities is composed of Quaternary alluvial deposits derived from erosion of the parent San Jose sandstones and siltstones. Based on the data collected during the completion of soil borings, the alluvia generally consist of brown silty/clayey sands and weathered sandstones from the ground surface to at least 20 feet bgs.

The lithology observed during the advancement of soil boring MW-37 at the Site included a pale to moderate yellowish brown silty sand from the surface to approximately 15.0 feet bgs. The silty sand stratum was underlain by a moderate to dark yellowish brown fine sand from 15.0 feet bgs to 24.0 feet bgs. A moderate brown to dark gray weathered silty sandstone was encountered from 24.0 feet bgs to 31.0 feet bgs. At approximately 31.0 feet bgs the color of the weathered sandstone changed to a moderate to pale yellowish brown until a depth of 39.5 feet at which point the color changed to a moderately dark to olive gray. The boring was terminated at 40 feet bgs. The lithologies observed in the remaining soil borings at the Site were generally similar to soil boring MW-37, with occasional clay stringers, and sandstones weathered to varying degrees.

The initial groundwater-bearing unit (GWBU) at the Site was encountered at depths ranging from approximately 30 to 35 feet bgs during the investigation activities. This shallow water-bearing unit is observed in alluvium and weathered sandstone bedrock. The major aquifer underlying the Site vicinity is listed as the Colorado Plateaus Aquifer, which is made up of four smaller aquifers,

the Uinta-Animas, the Mesa Verde, the Dakota-Glen, and the Coconino-De Chelly. The Uinta-Animas is the shallowest of these aquifers, and is present in the San Juan Basin. The general composition of the primary aquifers is moderately to well-consolidated sedimentary rocks of an age ranging from Permian to Tertiary. There are countless streams, rivers, and lakes that overlay the Colorado Plateaus Aquifers. The surface water bodies in this region provide a place for the aquifers to discharge. Some of the high altitude rivers and lakes may also provide recharge.

3.1.1 Groundwater Gradient

Each of the monitoring wells has been surveyed for top-of-casing (TOC) elevations. Prior to sample collection activities, Apex gauged the depth to fluids in each monitoring well. The groundwater flow direction (gradient) generally ranges from southwest to west across the Site, with a gradient that typically ranges from 0.002 ft/ft to 0.004 ft/ft.

Groundwater measurements and elevations are presented with TOC elevations in Table 3 (Appendix B). Groundwater gradient maps for the June 2013 through June 2014 events are included as Figures 4A through 4C (Appendix A).

3.1.2 Groundwater Classification

In accordance with 19.15.30 NMAC *Remediation*, a groundwater-bearing unit is classified as an “Underground Source of Drinking Water” provided the groundwater-bearing unit is capable of producing water for human consumption or that contains ground water having a total dissolved solids (TDS) concentration of 10,000 milligrams per liter (mg/l) or less and that is not an exempted aquifer. Based on conductivity readings collected during quarterly sampling events (averaging 2.7 millisiemens per centimeter (mS/cm)), groundwater at the site is likely to exhibit TDS results of less than 2,200 mg/l.

3.2 Land Use & Classification

Due to the absence of land use classification guidelines in the OCD *Guidelines for Remediation of Leaks, Spills and Releases* and/or NMAC 19.15.30 *Remediation*, land use was determined by comparison of existing land use of the Site to the definitions for residential and non-residential land use published in the available New Mexico Environment Department (NMED) regulatory guidance. Based on the available NMED guidance, non-residential land use encompasses all commercial and industrial land uses.

The Site, and adjacent and surrounding (beyond adjacent) properties are currently utilized as undeveloped rangeland occasionally interrupted by oil and gas gathering facilities. Based on Apex’s review of the available information and visual inspection of the Site and vicinity, the Site appears to meet the non-residential land use classification.

4.0 MONITORING WELL & EVALUATION POINT WELL INSTALLATIONS

As part of the continuing delineation activities, two (2) soil borings (MW-49 and MW-50) were advanced outside the west corner of the facility fence and south of the former pond area. These soil borings were subsequently completed as groundwater monitoring wells. These monitoring wells were located to further define the western COC groundwater plume and pond area COC groundwater plume, respectively.

In addition to the groundwater monitoring well installations, Apex also advanced six (6) soil borings within the NAPL plume near monitoring wells MW-9 and MW-1R. These soil borings

were subsequently completed as evaluation point wells EP-43 through EP-48 to facilitate the evaluation of the “radius-of-influence” created by HVR events.

Drill cuttings derived from the advancement of the soil borings were transported to Envirotech Landfarm near Angel Peak, New Mexico for treatment/disposal.

Figure 3 of Appendix A is a Site Map which depicts the location of the monitoring wells and evaluation point wells in relation to pertinent Site features.

4.1 Soil Borings & Monitoring Wells

Soil samples from the two (2) monitoring well soil borings were collected continuously, utilizing five-foot core barrel samplers to the termination depth of each soil boring. An on-Site geoscientist documented the lithology encountered and constructed a continuous profile of the soil column from the surface to the boring terminus. Soil samples were examined to document soil lithology, color, moisture content, and visual and olfactory evidence of petroleum hydrocarbons. Field headspace analysis was conducted by placing the portion of the soil sample designated for field screening into a plastic Ziplock® bag. The plastic bag was sealed, and the sample allowed to volatilize. The air in the sealed bag, the headspace, was then evaluated using a photoionization detector (PID) capable of detecting VOCs. The PID was calibrated utilizing an isobutylene standard prior to use in the field.

Overall, PID readings ranged from zero (0) parts per million (ppm) to 23 ppm. The soil boring for monitoring well MW-49 exhibited the highest PID reading (23 ppm) at a depth of 29' to 30' bgs. Field screening results are presented on soil boring/monitoring well logs included in Appendix C.

Subsequent to advancement, each of the monitoring well soil borings were converted to permanent groundwater monitoring wells. The monitoring wells were completed using the following methodology:

- Installation of 15 feet of 2-inch diameter, 0.010-inch machine slotted PVC well screen with a threaded bottom cap;
- Installation of 2-inch diameter, threaded flush joint PVC riser pipe to the ground surface;
- Addition of a pre-sieved 10/20 grade annular silica sand pack from the bottom of the soil boring to 2-feet above the top of the well screen;
- Addition of a hydrated bentonite seal above the sand pack filter zone;
- Addition of grout to the surface; and,
- Installation of a locking well cap and protective steel riser.

Monitoring well construction details are presented on the soil boring/monitoring well logs provided in Appendix C.

4.1.1 Soil Boring Sampling Program

Apex's soil sampling program involved submitting one (1) or more soil sample(s) from each soil boring for laboratory analysis. Soil samples were collected from the zone exhibiting the highest PID reading. If the PID readings were inconclusive, the sample(s) were collected from a change in lithology, or from the capillary fringe zone, based on the field professional's judgment.

Soil sample intervals are presented with the soil sample analytical results (Table 1) in Appendix B and are provided on the soil boring/monitoring well logs included in Appendix C.

4.2 Soil Borings & Evaluation Point Wells

The soil borings advanced for the completion of evaluation point wells were not intended to be sampled, so a core barrel was not utilized during drilling. This allowed for quicker well completion times. The lithologic logs for these borings were created by examining the auger cuttings. An on-Site geoscientist documented the lithology encountered and constructed an approximate profile of the soil column based on the auger cuttings. Soil samples were examined to document soil lithology and color. The soil boring/monitoring well logs are included in Appendix C.

Subsequent to advancement, the soil borings were completed as evaluation point wells. The evaluation point wells were completed using the following methodology:

- Installation of 15 feet of 2-inch diameter, 0.010-inch machine slotted PVC well screen with a threaded bottom cap;
- Installation of 2-inch diameter, threaded flush joint PVC riser pipe to the ground surface;
- Addition of a pre-sieved 10/20 grade annular silica sand pack from the bottom of the soil boring to 2-feet above the top of the well screen;
- Addition of a hydrated bentonite seal above the sand pack filter zone;
- Addition of grout to the surface; and,
- Installation of a locking well cap and protective steel riser.

Evaluation point well construction details are presented on the monitoring well logs provided in Appendix C.

4.3 Laboratory Analytical Program – Soil

The soil samples collected during the advancement of the monitoring well soil borings were analyzed for TPH GRO/DRO using EPA method SW-846 #8015 and BTEX using EPA method SW-846 method #8021.

Laboratory results are summarized in the tables included in Appendix B. The executed chain-of-custody form and laboratory data sheets are provided in Appendix D.

4.3.1 Quality Assurance/Quality Control (QA/QC) - Soil

All non-disposable sampling equipment was cleaned using an Alconox® wash and potable water rinse prior to the beginning of the project and before the collection of each sample.

Soil samples were collected and placed in laboratory prepared glassware, sealed with custody tape and placed on ice in a cooler, which was secured with a custody seal. The sample coolers and completed chain-of-custody forms were relinquished to Hall Environmental Analysis Laboratory (HEAL) in Albuquerque, New Mexico for standard turnaround.

HEAL performed the analyses of samples under an adequate and documented quality assurance program to meet the project and data quality objectives. The laboratory's quality assurance program is generally consistent the quality standards outlined in the National Environmental Laboratory Accreditation Program, as amended. In addition, the data generated by HEAL meet the intralaboratory performance standards for the selected analytical method and the performance standards are sufficient to meet the bias, precision, sensitivity, representativeness, comparability, and completeness, as specified in the project data quality objectives. Sample results that resulted in Data Qualifier (DQ) flags are listed below.

Soil Sample ID	Data Qualifier Flag	Comments/Reactions
None	No DQ Flags Reported	None

4.4 Data Evaluation - Soil

Apex compared the TPH GRO/DRO and BTEX concentrations or laboratory reporting limits (RLs) associated with the soil samples to the OCD *Remediation Action Levels* for a Site ranking of 40.

Total Petroleum Hydrocarbons

Soil samples collected from soil borings MW-49 and MW-50 did not exhibit combined TPH GRO/DRO concentrations above the laboratory RLs, which are below the OCD's *Remediation Action Level* of 100 mg/Kg.

Benzene

The soil samples collected from soil borings MW-49 and MW-50 did not exhibit benzene concentrations above the laboratory RLs, which are below the OCD's *Remediation Action Level* of 10 mg/Kg.

Total BTEX

The soil samples collected from soils borings MW-49 and MW-50 did not exhibit total BTEX concentrations above the laboratory RLs, which are below the OCD's *Remediation Action Level* of 50 mg/Kg.

The results of soil sample analyses are summarized in Table 1 of Appendix B. Figure 5 (Appendix A) details the OCD *Remediation Action Level* Exceedance Zone in soil.

5.0 GROUNDWATER MONITORING

Enterprise initiated the Lindrieth Compressor Station groundwater monitoring program in December 2009. Since that time, over 170 groundwater samples have been collected from the shallow GWBU and submitted for laboratory analyses on an effort to delineate and evaluate the groundwater COC and NAPL plumes.

5.1 Groundwater Sampling Program

Semi-annual groundwater sampling events were conducted during June 2013, December 2013, and June 2014 by Aaron Bentley, Aaron Bryant, and Mahlia Abaya, Apex environmental professionals. Apex's groundwater sampling program consisted of the following:

Prior to sample collection, Apex gauged the depth to fluids in each monitoring well using an interface probe capable of detecting NAPL. Monitoring wells exhibiting measurable NAPL were not sampled during the completion of the groundwater monitoring event.

Each monitoring well was micro-purged utilizing low-flow sampling techniques. Low-flow refers to the velocity with which groundwater enters the pump intake and that is imparted to the formation pore water in the immediate vicinity of the well screen. It does not necessarily refer to the flow rate of water discharged at the surface which can be affected by flow regulators or restrictions. Water level drawdown provides the best indication of the stress imparted by a given flow-rate for a given hydrological situation. The objective is to pump in a manner that minimizes stress (drawdown) to the system, to the extent practical, taking into account established Site sampling objectives. Flow rates on the order of 0.1 to 0.5 liters per minute (L/min) are maintained during sampling activities, using dedicated sampling equipment.

The utilization of low-flow minimal drawdown techniques enables the isolation of the screened interval groundwater from the overlying stagnant casing water. The pump intake is placed within the screened interval such that the groundwater recovered is drawn in directly from the formation with little mixing of casing water or disturbance to the sampling zone.

Subsequent to the completion of the micro-purge process, one (1) groundwater sample was collected from each monitoring well not observed to contain NAPL. The groundwater samples were collected from each monitoring well once produced groundwater was consistent in color, clarity, pH, dissolved oxygen, oxidation-reduction potential, temperature and conductivity.

5.2 Laboratory Analytical Program

The groundwater samples collected from the monitoring wells during the groundwater sampling events were analyzed for TPH GRO/DRO utilizing EPA method SW-846 #8015, and BTEX utilizing EPA method SW-846 #8021. The containers containing the samples for organic analyses were pre-preserved with HgCl_2 to minimize effervescence and retain any COCs in solution.

A summary of the analysis, sample type, sample frequency range, and EPA-approved methods are presented on the following table.

Analysis	Sample Type	No. of Samples	EPA Method
TPH GRO/DRO	Groundwater	18-19/event	SW-846 8015
BTEX	Groundwater	18-19/event	SW-846 8021

Laboratory results are summarized in Table 1 included in Appendix B. The executed chain-of-custody form and laboratory data sheets are provided in Appendix D.

5.2.1 Quality Assurance/Quality Control (QA/QC)

All non-disposable sampling equipment was cleaned using an Alconox® wash and potable water rinse prior to the beginning of the project and before the collection of each sample.

Groundwater samples were collected and placed in laboratory prepared glassware, sealed with custody tape and placed on ice in a cooler, which was secured with a custody seal. The sample

coolers and completed chain-of-custody forms were relinquished to HEAL in Albuquerque, New Mexico for standard turnaround.

HEAL performed the analyses of samples under an adequate and documented quality assurance program to meet the project and data quality objectives. The laboratory's quality assurance program is generally consistent the quality standards outlined in the National Environmental Laboratory Accreditation Program, as amended. In addition, the data generated by HEAL meet the intralaboratory performance standards for the selected analytical method and the performance standards are sufficient to meet the bias, precision, sensitivity, representativeness, comparability, and completeness, as specified in the project data quality objectives. Sample results that resulted in Data Qualifier flags are listed below.

Sample ID	Data Qualifier Flag	Comments/Reactions
MW-3 (June 2013)	TPH Diesel Range Spike Recovery was outside the accepted recovery limits.	The "non-detect" TPH DRO data is suitable for the intended use as a non-regulated screening result. Benzene is present above WQCC GQs at this location, but no flags are associated with the SW-846 #8021 analysis.
MW-42 (December 2013)	TPH Diesel Range Spike Recovery was outside the accepted recovery limits.	The "non-detect" TPH DRO data is suitable for the intended use as a non-regulated screening result. No BTEX constituents were reported above laboratory RLs and no flags are associated with the SW-846 #8021 analysis.
MW-12 (December 2013)	TPH Gasoline Range Spike Recovery was outside the accepted recovery limits.	The 0.52 µg/L TPH GRO data is suitable for the intended use as a non-regulated screening result. Benzene is present above WQCC GQs at this location, but no flags are associated with the SW-846 #8021 analysis.
MW-12 (June 2014)	TPH Gasoline Range Spike Recovery was outside the accepted recovery limits.	The 0.37 µg/L TPH GRO data is suitable for the intended use as a non-regulated screening result. Benzene is present above WQCC GQs at this location, but no flags are associated with the SW-846 #8021 analysis.
MW-2 (June 2014)	TPH Gasoline Range Spike Recovery was outside the accepted recovery limits.	The "non-detect" TPH DRO data is suitable for the intended use as a non-regulated screening result. Benzene is present above WQCC GQs at this location, but no flags are associated with the SW-846 #8021 analysis.

5.3 Groundwater Data Evaluation

Apex compared BTEX concentrations or laboratory RLs associated with the groundwater samples collected from monitoring wells during the June 2013, December 2013, and June 2014 sampling events to the New Mexico WQCC GQs.

June 2013 - Benzene, Toluene, Ethylbenzene, and Xylenes

The groundwater samples collected from monitoring wells MW-5, MW-7, MW-8, MW-10, MW-11, MW-31, MW-33, MW-34, MW-35, MW-36, MW-40, MW-41, and MW-42 did not exhibit benzene, toluene, ethylbenzene or xylenes concentrations above the respective WQCC GQSs.

The groundwater samples collected from monitoring wells MW-2, MW-3, MW-4, MW-12, MW-38, and MW-49 exhibited benzene concentrations ranging from 71 µg/L (MW-12) to 4,300 µg/L (MW-4) which exceed the WQCC GQS of 10 µg/L.

The groundwater sample collected from monitoring well MW-4 exhibited a toluene concentration of 1,800 µg/L which exceeds the WQCC GQS of 750 µg/L.

The groundwater samples collected from monitoring wells MW-2, MW-4, MW-38, and MW-49 exhibited xylene concentrations ranging from 800 µg/L (MW-38) to 1,700 µg/L (MW-4), which exceed the WQCC GQS of 620 µg/L.

Groundwater samples were not collected from monitoring wells MW-1R, MW-6, MW-9, MW-30, MW-32, MW-37 or MW-39 during the June 2013 monitoring event due to the presence of NAPL. MW-50 was not sampled due to insufficient water column within the casing.

The results of groundwater sample analyses are summarized in Table 1 of Appendix B. Figure 6A (Appendix A) details the WQCC *Groundwater Quality Standard Exceedance Zone* in groundwater for June 2013.

June 2013 - TPH GRO/DRO

The groundwater samples collected from monitoring wells MW-2, MW-3, MW-4, MW-5, MW-7, MW-12, MW-36, MW-38, MW-40, and MW-49 exhibited TPH GRO concentrations ranging from 0.065 mg/L (MW-36) to 34 mg/L (MW-4).

The groundwater samples collected from monitoring wells MW-4, MW-5, MW-38, and MW-41 exhibited TPH DRO concentrations ranging from 1.1 mg/L (MW-5 and MW-38) to 1.2 mg/L (MW-4 and MW-41).

December 2013 - Benzene, Toluene, Ethylbenzene, and Xylenes

The groundwater samples collected from monitoring wells MW-3, MW-5, MW-7, MW-8, MW-10, MW-11, MW-31, MW-33, MW-34, MW-35, MW-36, MW-40, MW-41, and MW-42 did not exhibit benzene, toluene, ethylbenzene or xylenes concentrations above the respective WQCC GQSs.

The groundwater samples collected from monitoring wells MW-2, MW-4, MW-12, MW-38, and MW-39 exhibited benzene concentrations ranging from 70 µg/L (MW-12) to 3,900 µg/L (MW-4) which exceed the WQCC GQS of 10 µg/L.

The groundwater sample collected from monitoring well MW-4 exhibited a toluene concentration of 1,500 µg/L which exceeds the WQCC GQS of 750 µg/L.

The groundwater samples collected from monitoring wells MW-2, MW-4, MW-38, and MW-39 exhibited xylene concentrations ranging from 930 µg/L (MW-2) to 1,300 µg/L (MW-4), which exceed the WQCC GQS of 620 µg/L.

Groundwater samples were not collected from monitoring wells MW-1R, MW-6, MW-9, MW-30, MW-32, or MW-49 during the December 2013 monitoring event due to the presence of NAPL.

Monitoring well MW-50 was not sampled due to insufficient water column within the casing, and monitoring well MW-37 was plugged and abandoned (P&A'd) during July 2013 to accommodate the corrective actions of a separate surface release at the facility. Monitoring well MW-37 was physically removed from the boring, and the borehole was permanently plugged and abandoned, in accordance with guidance set forth in the NMAC 19.27.4.30 *Rules and Regulations Governing Well Driller Licensing; Construction, Repair and Plugging of Wells*.

The results of groundwater sample analyses are summarized in Table 1 of Appendix B. Figure 6B (Appendix A) details the WQCC *Groundwater Quality Standard Exceedance Zone* in groundwater for June 2013.

December 2013 - TPH GRO/DRO

The groundwater samples collected from monitoring wells MW-2, MW-3, MW-4, MW-5, MW-7, MW-12, MW-36, MW-38, MW-39, and MW-42 exhibited TPH GRO concentrations ranging from 0.063 mg/L (MW-42) to 20 mg/L (MW-4).

The groundwater samples collected from monitoring wells MW-4 and MW-38 exhibited TPH DRO concentrations ranging of 1.2 mg/L and 1.0 mg/L, respectively.

June 2014 - Benzene, Toluene, Ethylbenzene, and Xylenes

The groundwater samples collected from monitoring wells MW-3, MW-5, MW-7, MW-8, MW-10, MW-11, MW-31, MW-33, MW-34, MW-35, MW-36, MW-40, MW-41, and MW-42 did not exhibit benzene, toluene, ethylbenzene or xylenes concentrations above the respective WQCC GQSs.

The groundwater samples collected from monitoring wells MW-2, MW-4, MW-12, and MW-38 exhibited benzene concentrations ranging from 46 µg/L (MW-12) to 4,200 µg/L (MW-4) which exceed the WQCC GQS of 10 µg/L.

The groundwater sample collected from monitoring well MW-4 exhibited a toluene concentration of 1,500 µg/L which exceeds the WQCC GQS of 750 µg/L.

The groundwater sample collected from monitoring well MW-4 exhibited a xylene concentration of 1,400 µg/L which exceeds the WQCC GQS of 620 µg/L.

Groundwater samples were not collected from monitoring wells MW-1R, MW-6, MW-9, MW-30, MW-32, MW-39, or MW-49, due to the presence of NAPL. MW-50 was not sampled due to insufficient water column within the casing. Monitoring well MW-37 was P&A'd during July 2013.

The results of groundwater sample analyses for are summarized in Table 1 of Appendix B. Figure 6C (Appendix A) details the WQCC *Groundwater Quality Standard Exceedance Zone* in groundwater for June 2014.

June 2014 - TPH GRO/DRO

The groundwater samples collected from monitoring wells MW-2, MW-3, MW-4, MW-5, MW-7, MW-12, MW-36, MW-38, MW-40, and MW-42 exhibited TPH GRO concentrations ranging from 0.063 mg/L (MW-42) to 23 mg/L (MW-4).

The groundwater sample collected from monitoring well MW-4 exhibited a TPH DRO concentration of 1.1 mg/L.

6.0 PRODUCT RECOVERY - NAPL

The August 20, 2013 proposed Corrective Action Workplan, as submitted in correspondence dated August 26, 2013, anticipated that a total of six (6) HVR events would be performed at the facility. The HVR technology allows the removal of NAPL product as well as facilitating vapor-phase recovery. However, after performing the first 72-hour event during October 2013 and experiencing low recovery, the subsequent events were suspended. Additionally, Apex performed monthly hand-bailing activities at wells exhibiting NAPL between January 2014 and May 2014.

6.1 High Vacuum Recovery

The mobile HVR Internal Combustion Engine (ICE) system is a dual-phase extraction (DPE) unit designed to draw a vacuum on the subsurface formation to facilitate the recovery of vapor-phase and free-phase hydrocarbons (in this case, NAPL), as well as recover a limited amount of hydrocarbon affected groundwater.

The HVR unit utilized at the Site included one trailer mounted ICE system combining DPE with proprietary vapor abatement and data logging technology. Hydrocarbon vapor recovered from the targeted formation was utilized as fuel for the ICE engine during the recovery operations and was supplemented by commercial propane as necessary to maintain proper engine performance. Subsequent to the internal combustion process, a catalytic converter was utilized to minimize residual harmful emissions prior to atmospheric discharge.

Apex performed HVR on three groups of wells during the 72-hour recovery event in October, 2013:

- Group 1 included monitoring wells MW-1R, MW-6, and MW-9, with an event duration of approximately 35 hours.
- Group 2 included monitoring well MW-30, with an event duration of approximately 21 hours.
- Group 3 included monitoring well MW-39, with an event duration of approximately 17.5 hours.

HVR recovery results are summarized in the following table:

Group No.	NAPL (gallons)	Vapor (equivalent gallons)	Total Hydrocarbon Recovery (equivalent gallons)	Affected Groundwater (gallons)
Group 1 (MW-1R, MW-6, MW-9) <i>Recovery: 35 hours</i>	Sheen	22	22	162
Group 2 (MW-30) <i>Recovery: 21 hours</i>	Sheen	17	17	72
Group 3 (MW-39) <i>Recovery: 17.5 hours</i>	Sheen	0.3	0.3	11
Total	Sheen	39.3	39.3	245

The total hydrocarbon recovery (measured in equivalent gallons) for this event is lower than expected considering the significant NAPL thicknesses measured in the monitoring wells prior to initiation. The most likely cause of the limited recovery is the inability of the targeted liquids to adequately recharge into the well bore due to low transmissivity of that interval of the formation containing the NAPL hydrocarbons.

In addition to the NAPL recovery, approximately 245 gallons of recovered groundwater was temporarily stored on-Site prior to off-Site disposal by Enterprise as oil and gas waste at a Underground Injection Control Program (UIC) Class II Disposal Facility, in accordance with applicable state and federal regulations. A more detailed presentation of the raw recovery data is presented as Table 4A, Table 4B, and Table 4C (Appendix A).

The following pre-event and post-event NAPL thicknesses were measured in the subject monitoring wells:

NAPL Thickness (feet) – Group No. 1		
Monitoring Well	10.7.13 (Pre-Event)	10.9.13 (Post-Event)
MW-1R	2.01	0.04
MW-6	1.44	0.02
MW-9	2.39	0.03

NAPL Thickness (feet) – Group No. 2		
Monitoring Well	10.9.13 (Pre-Event)	10.10.13 (Post-Event)
MW-30	1.12	0.09

NAPL Thickness (feet) – Group No. 3		
Monitoring Well	10.10.13 (Pre-Event)	10.11.13 (Post-Event)
MW-39	0.98	0.00

The British thermal unit, or BTU, is a basic measure of thermal energy, and BTU/hr is a common measure of energy used in the heating and cooling industry in North America. The HVR unit used at this Site utilizes a computer-controlled carburetion device that is calibrated specifically to this unit's ICE system. The computer not only controls the amount of "make-up" fuel (in this case propane) that is added to the fuel stream to maintain projected engine performance, but also calculates the amount of recovered vapor that is being used by the ICE in the form of BTU/hr (gasoline BTU equivalent).

The calculated BTU/hr measurements recorded during HVR activities at each of the well sets was high at the onset of recovery due to the presence of NAPL hydrocarbon in the monitoring wells, but quickly fell to very low readings once the readily available NAPL was vaporized and combusted. These rapid drop-offs further support the inability of the monitoring wells to

adequately recharge NAPL or associated hydrocarbon vapors from the NAPL bearing formation or vadose zone. Average BTU/hr performances are provided in the following table:

Group No.	Estimated Average BTU/hr
Group 1	78,743
Group 2	100,571
Group 3	2,222

6.1.1 Radius of Influence

During the initial stages of recovery operations at Group 1, two (2) monitoring well locations (MW-1R and MW-9) were designated for “radius of influence” (ROI) evaluations. ROI study area MW-1R included nearby evaluation point wells EP-43, EP-44, and EP-45. ROI study area MW-9 included evaluation point wells EP-46, EP-47, and EP-48. At each location, the central evaluation point well (EP-44 at MW-1R, and EP-47 at MW-9) were fitted with vacuum gauges to evaluate the amount of vacuum imparted on the formation at approximately a 10 foot distance from the extraction point (i.e. either monitoring well MW-1R or MW-9). Meanwhile, the extraction point wells at 5 foot and 15 foot distances from the extraction points were continuously gauged for depth to water and depth to product readings.

Results of the radius of influence evaluation indicate no significant affect on the nearby evaluation point wells. The highest observed vacuum reading at an evaluation point well was measured at EP-44 (1.2 inches of water), indicating no significant influence. The tabulated results of the evaluation are presented as Tables 5A and 5B (Appendix A).

6.2 Hand Bailing

In addition to the 72-hour HVR event, monthly hand-bailing was performed at wells exhibiting NAPL between January 2014 and May 2014. The hand bailing activities were performed utilizing dedicated disposable polyethylene bailers. The hand bailing events resulted in the removal of approximately 80 gallons of NAPL during this 5 month period.

The hand bailing events at the Site also included evacuation of the evaluation point wells (EP-43 through EP-48) located near monitoring wells MW-1R and MW-9. It was observed during these events that NAPL recovery in some of the evaluation point wells was slightly faster than in the adjacent monitoring wells, and that the NAPL thickness in these wells was also often greater than that in the adjacent monitoring well.

The observed variations in product thickness and recovery may simply be due to variations in the weathered bedrock unit at the top of the shallow aquifer. Alternatively, the product accumulation observations might be explained by the difference in drilling methodology between the two well types. The monitoring wells were drilled with a hollow-stem auger equipped with a continuous core sample tube, whereas the evaluation point wells were drilled without a sample tube. The auger rig typically advances more slowly in the weathered bedrock while the sample tube is installed, significantly increasing drilling time over the wells drilled without the sample tube. Significant fine grained material is present in this weathered sandstone, and the increased drilling time may have sealed off portions of the weathered unit by “cooking” the well bore sidewalls due to the increased frictional heat, resulting in reduced NAPL recovery due to reduced transmissivity. For comparison, the following table represents product thickness measurements from the March 2014 hand bailing event at MW-1R, MW-9, and the evaluation point wells:

Well ID	March 12, 2014 Product Thickness (feet)
MW-1R	0.95
EP-43	4.96
EP-44	1.41
EP-45	0.96
MW-9	1.78
EP-46	1.96
EP-47	1.97
EP-48	1.82

7.0 FINDINGS

As part of the continuing delineation activities, two (2) soil borings (MW-49 and MW-50) were advanced outside the west corner of the facility fence and south of the former pond area. These soil borings were subsequently completed as groundwater monitoring wells. These monitoring wells were located to further define the western COC groundwater plume and pond area COC groundwater plume, respectively.

In addition to the groundwater monitoring well installations, Apex also advanced six (6) soil borings within the NAPL plume near monitoring wells MW-9 and MW-1R. These soil borings were subsequently completed as evaluation point wells EP-43 through EP-48 to facilitate the evaluation of the “radius-of-influence” created by HVR events.

NAPL hydrocarbon is present on the groundwater in the vicinity of the former condensate storage tank release (near MW-1R), at the former sewage ponds and/or burn pit, and near a former subgrade tank at the western corner of the facility. The NAPL plumes at the facility appear to be relatively stable based on the available information with the possible exception of the plume near the former subgrade tank at the western corner of the Site, which has not yet been fully delineated.

COC concentrations in groundwater in the vicinities of each NAPL plume area exceed the WQCC standards, and appear to be relatively stable in magnitude over the three sampling events described herein.

One (1) 72-hour HVR event was performed during October 2013. The HVR technology allows the removal of NAPL as well as facilitating vapor-phase recovery. The October 2013 recovery event yielded low results (39.9 gallons of hydrocarbon liquid and vapor) believed to be due to the radius of influence and limited transmissivity of the formation near the top of the water bearing zone. Based on pilot testing of the HVR technology, Enterprise recommends the installation of a pneumatic pump system for recovery of NAPL. This will be implemented as a “pilot” system in the vicinity of the former condensate tank release, and expanded if effective.

In addition to the HVR recovery event, monthly hand-bailing was performed at wells exhibiting NAPL between January 2014 and May 2014. These hand bailing events resulted in the removal of approximately 80 gallons of NAPL during this period.

Additional delineation of affected groundwater is needed downgradient of monitoring well MW-49 at the western corner of the Site, and near monitoring well MW-6.

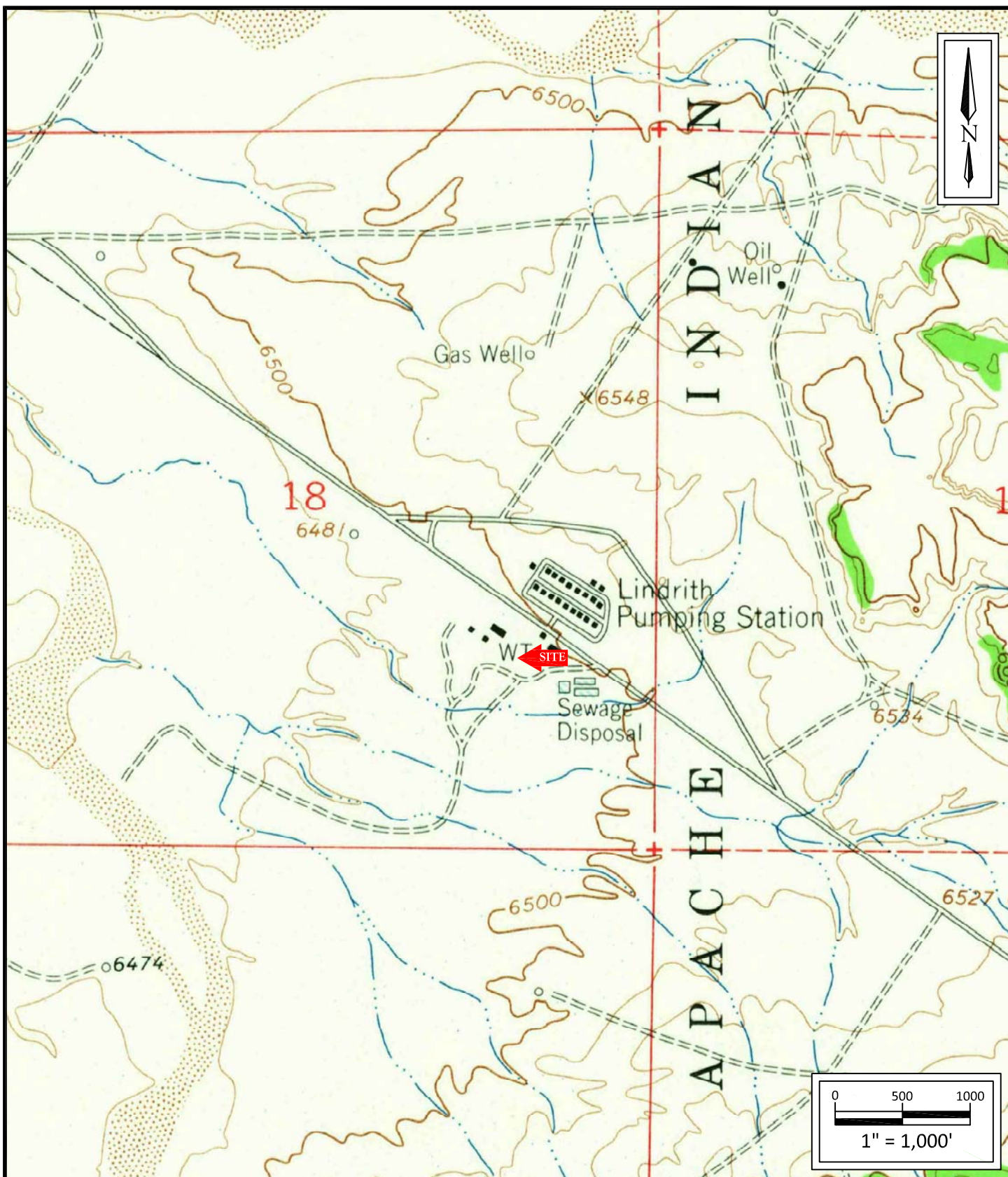
8.0 RECOMMENDATIONS

Based on the results of groundwater monitoring and NAPL removal activities, Apex has the following recommendations:

- **Report the groundwater monitoring results to the JANEPO and the OCD;**
- **Continue with Supplemental Site Investigation activities to further evaluate the extent of COCs in groundwater downgradient of monitoring well MW-49 and in the vicinity of monitoring well MW-6. This will complete the delineation of affected groundwater at the Site; and**
- **Continue the evaluation of corrective actions to remove NAPL from groundwater at the Site to the extent practical, and continue to develop and execute groundwater COC remediation strategies once the bulk of the NAPL has been removed.**

APPENDIX A

Figures



Lindrith Compressor Station

SE $\frac{1}{4}$ S18 T24N R5W
Rio Arriba County, NM
36.309300N, 107.396700W

Project No. 7030410G006



Apex TITAN, Inc.

606 S. Rio Grande, Suite A
Aztec, New Mexico 87410
Phone: (505) 334-5200
www.apexcos.com

A Subsidiary of Apex Companies, LLC

FIGURE 1 Topographic Map

Tayfoya Canyon, NM Quadrangle
1963



Lindrith Compressor Station

SE $\frac{1}{4}$ S18 T24N R5W
 Rio Arriba County, NM
 36.309300N, 107.396700W

Project No. 7030410G006



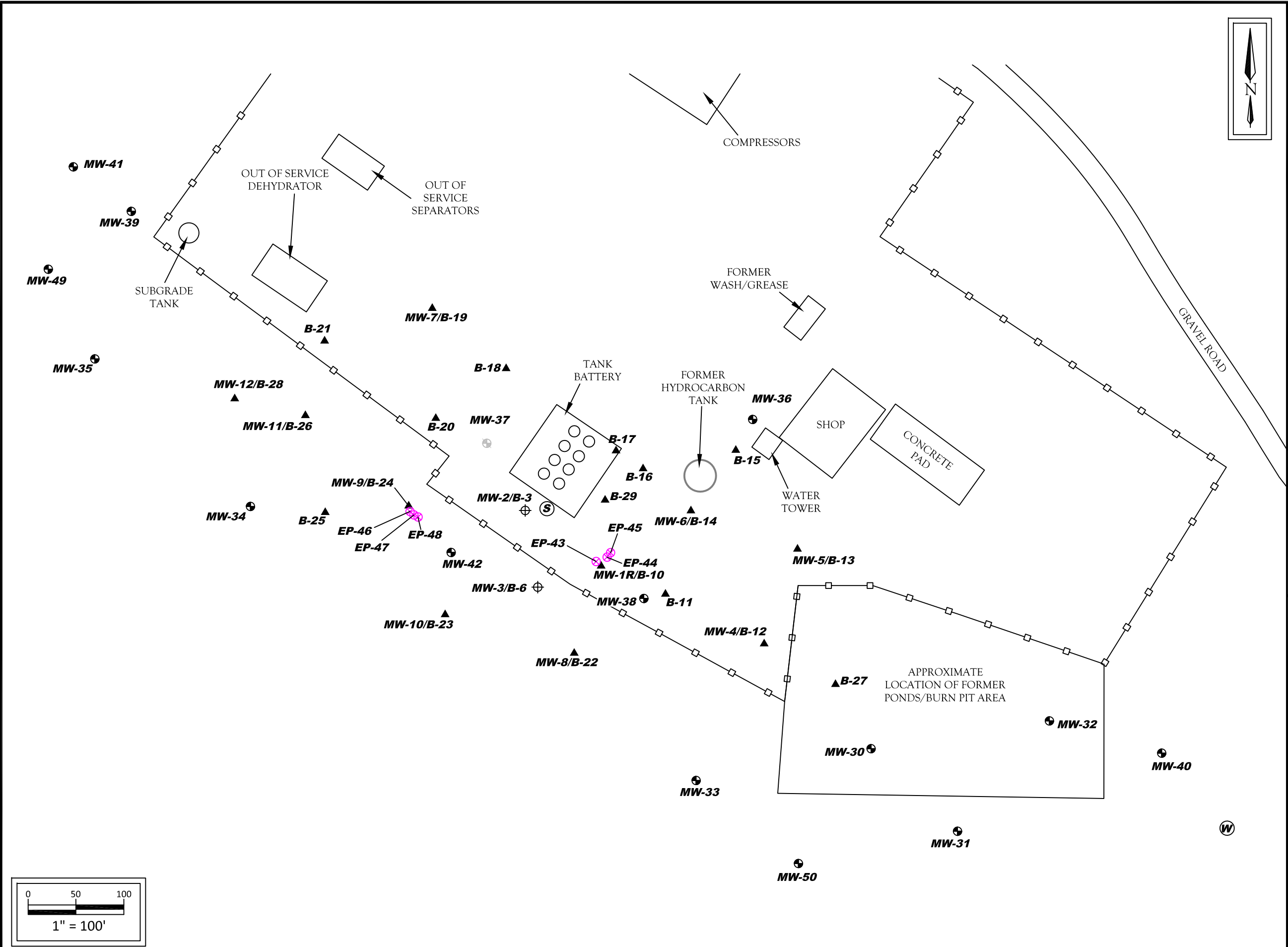
Apex TITAN, Inc.

606 S. Rio Grande, Suite A
 Aztec, New Mexico 87410
 Phone: (505) 334-5200

www.apexcos.com

A Subsidiary of Apex Companies, LLC


FIGURE 2
Site Vicinity Map
 2014 Aerial Photograph



LEGEND

- FENCE
- MONITORING WELL LOCATION (LTE 12/2009)
- SOIL BORING/MONITORING WELL LOCATION (LTE 10/2010)
- MONITORING WELL LOCATION (SWG)
- PLUGGED MONITORING WELL LOCATION (SWG)
- EP WELL LOCATION
- FORMER SUMP
- APPROXIMATE LOCATION OF LIVESTOCK WELL

NOTE

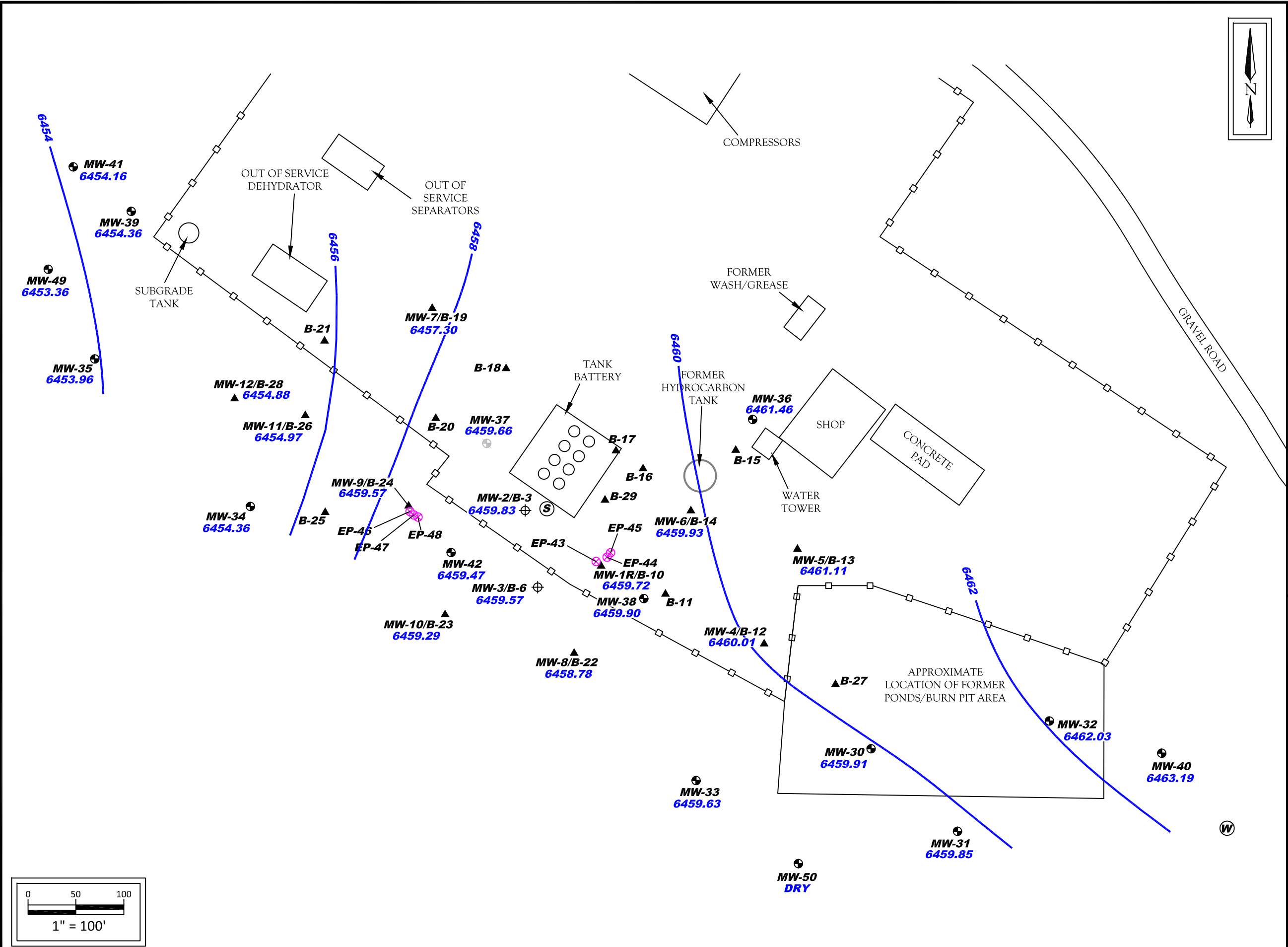


Apex TITAN, Inc.
606 S. Rio Grande, Suite A
Aztec, New Mexico 87410
Phone: (505) 334-5200
www.apexcos.com
A Subsidiary of Apex Companies, LLC

Lindrith Compressor Station
SE $\frac{1}{4}$ S18 T24N R5W
Rio Arriba County, NM
36.309300N, 107.396700W

Project No. 7030410G006

FIGURE 3
Site Map



LEGEND

- FENCE
- MONITORING WELL LOCATION (LTE 12/2009)
- SOIL BORING/MONITORING WELL LOCATION (LTE 10/2010)
- MONITORING WELL LOCATION (SWG)
- PLUGGED MONITORING WELL LOCATION (SWG)
- EP WELL LOCATION
- FORMER SUMP
- APPROXIMATE LOCATION OF LIVESTOCK WELL
- GROUNDWATER ELEVATION (FEET AMSL)
- GROUNDWATER ELEVATION CONTOUR (FEET AMSL)

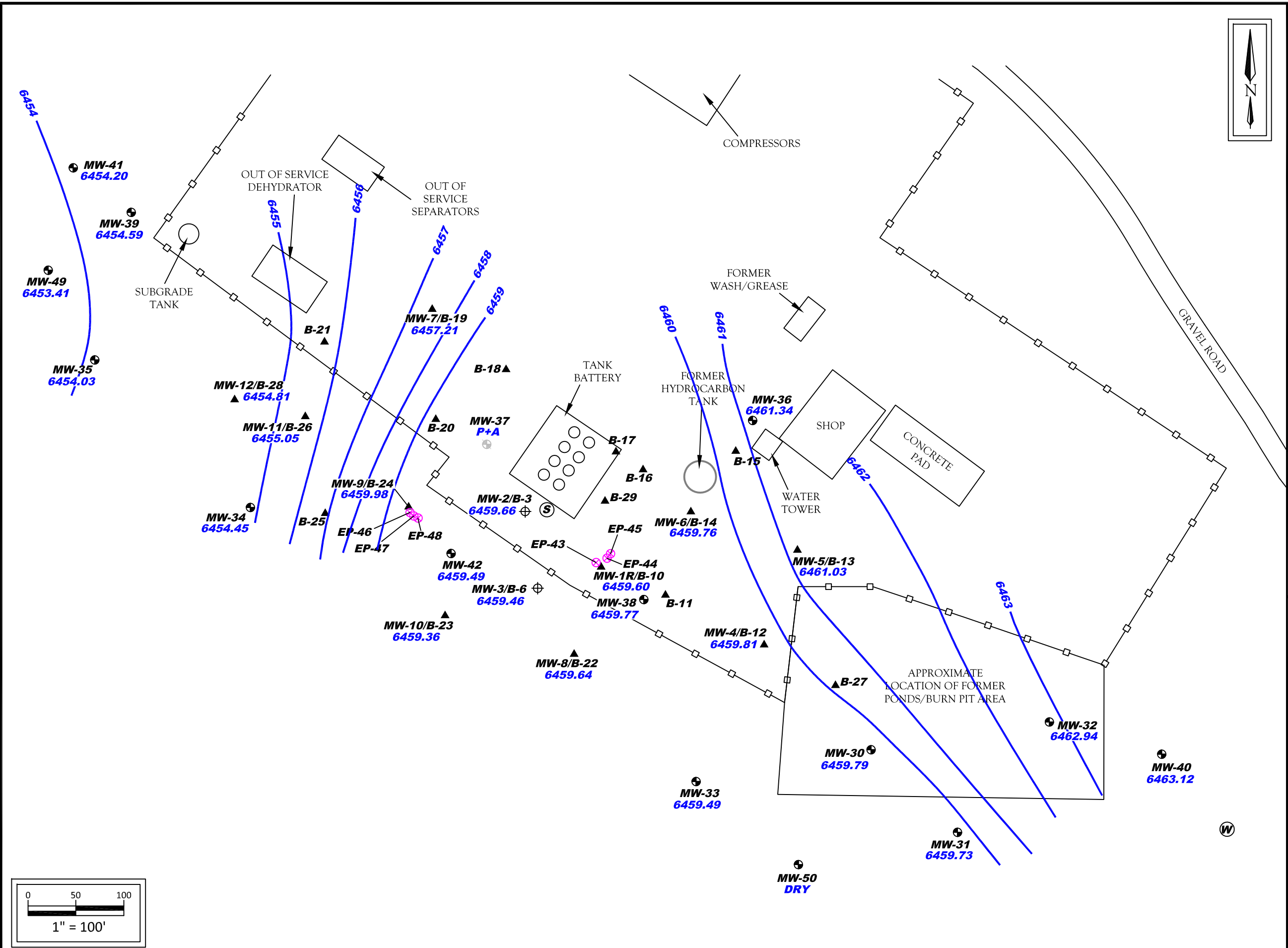
NOTE

Apex TITAN, Inc.
606 S. Rio Grande, Suite A
Aztec, New Mexico 87410
Phone: (505) 334-5200
www.apexcos.com
A Subsidiary of Apex Companies, LLC

Lindrieth Compressor Station
SE $\frac{1}{4}$ S18 T24N R5W
Rio Arriba County, NM
36.309300N, 107.396700W

Project No. 7030410G006

FIGURE 4A
Groundwater Gradient Map
June 2013



LEGEND

- FENCE
- MONITORING WELL LOCATION (LTE 12/2009)
- SOIL BORING/MONITORING WELL LOCATION (LTE 10/2010)
- MONITORING WELL LOCATION (SWG)
- PLUGGED MONITORING WELL LOCATION (SWG)
- EP WELL LOCATION
- FORMER SUMP
- APPROXIMATE LOCATION OF LIVESTOCK WELL
- 6459.49 GROUNDWATER ELEVATION (FEET AMSL)
- 6463- GROUNDWATER ELEVATION CONTOUR (FEET AMSL)

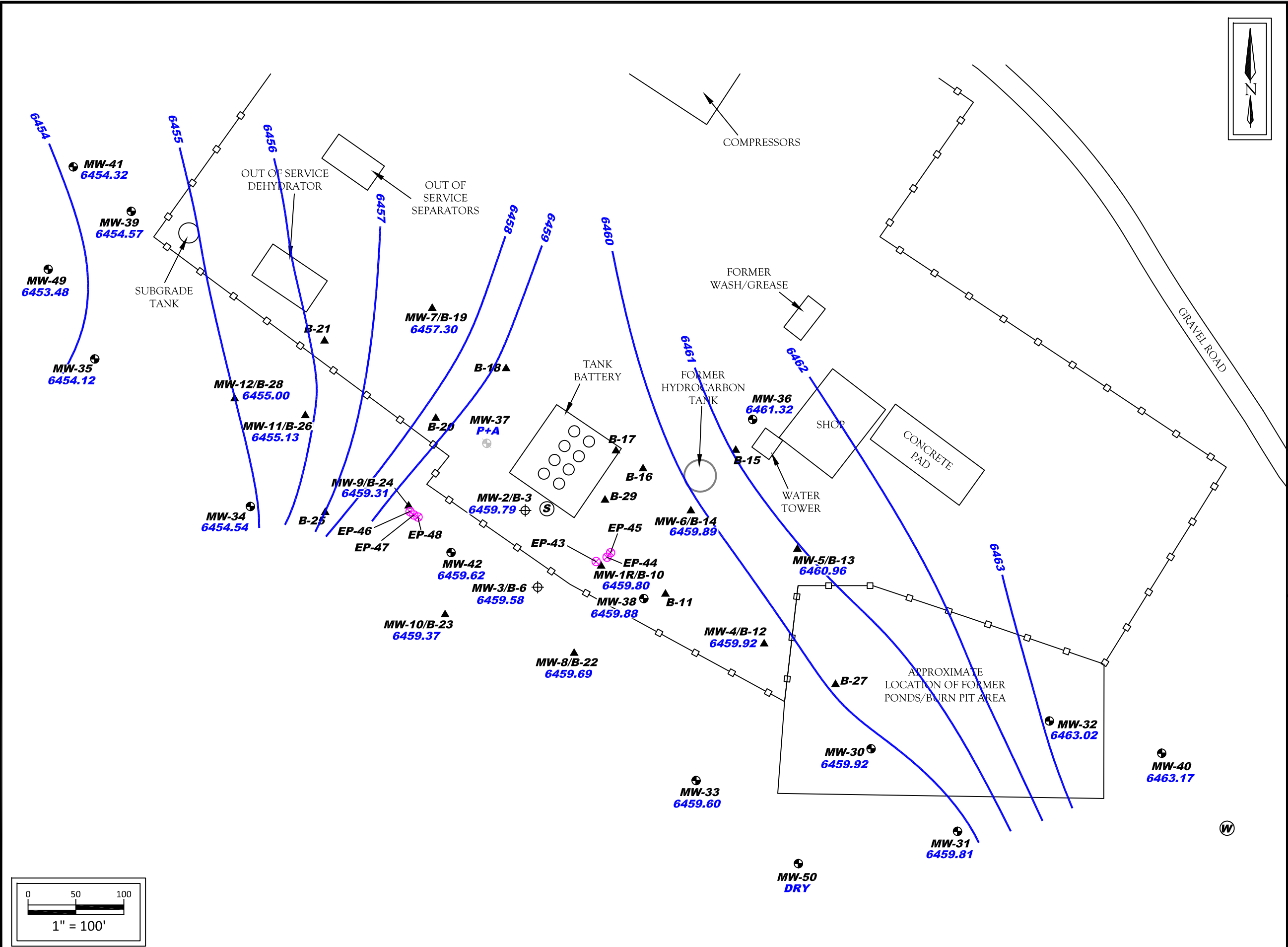
NOTE

Apex TITAN, Inc.
 606 S. Rio Grande, Suite A
 Aztec, New Mexico 87410
 Phone: (505) 334-5200
www.apexcos.com
 A Subsidiary of Apex Companies, LLC

Lindrith Compressor Station
 SE $\frac{1}{4}$ S18 T24N R5W
 Rio Arriba County, NM
 36.309300N, 107.396700W

Project No. 7030410G006

FIGURE 4B
 Groundwater Gradient Map
 December 2013



LEGEND

- FENCE
- MONITORING WELL LOCATION (LTE 12/2009)
- SOIL BORING/MONITORING WELL LOCATION (LTE 10/2010)
- MONITORING WELL LOCATION (SWG/APEX)
- PLUGGED MONITORING WELL LOCATION (SWG/APEX)
- EP WELL LOCATION
- FORMER SUMP
- APPROXIMATE LOCATION OF LIVESTOCK WELL
- 6461.32 GROUNDWATER ELEVATION (FEET AMSL)
- 6463- GROUNDWATER ELEVATION CONTOUR (FEET AMSL)

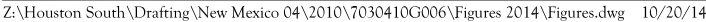
NOTE

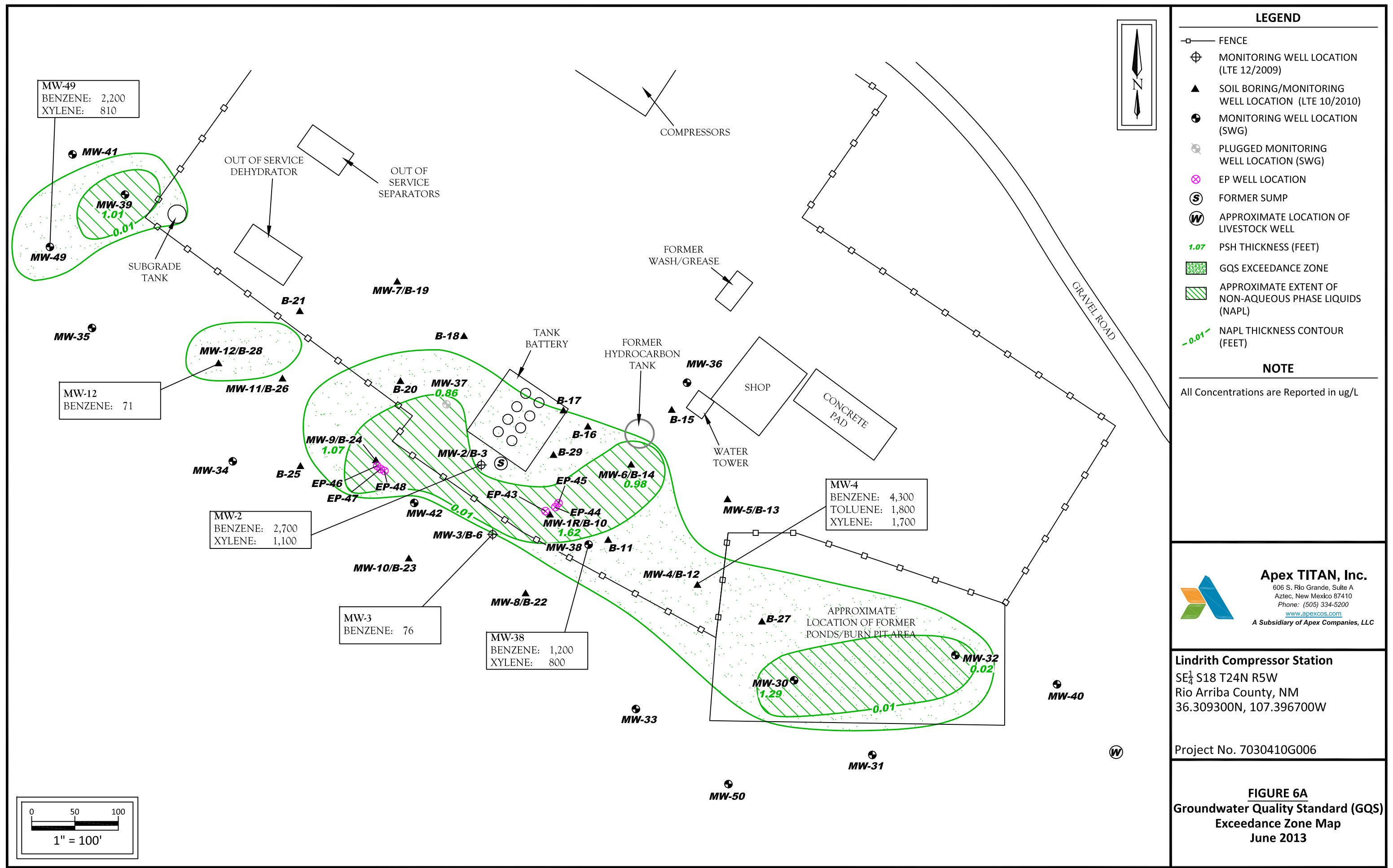
Apex TITAN, Inc.
 606 S. Rio Grande, Suite A
 Aztec, New Mexico 87410
 Phone: (505) 334-5200
www.apexcos.com
 A Subsidiary of Apex Companies, LLC

Lindrith Compressor Station
 SE $\frac{1}{4}$ S18 T24N R5W
 Rio Arriba County, NM
 36.309300N, 107.396700W

Project No. 7030410G006

FIGURE 4C
Groundwater Gradient Map
 June 2014





LEGEND

FENCE

MONITORING WELL LOCATION (LTE 12/2009)

SOIL BORING/MONITORING WELL LOCATION (LTE 10/2010)

MONITORING WELL LOCATION (SWG)

PLUGGED MONITORING WELL LOCATION (SWG)

EP WELL LOCATION

FORMER SUMP

APPROXIMATE LOCATION OF LIVESTOCK WELL

PSH THICKNESS (FEET)

GQS EXCEEDANCE ZONE

APPROXIMATE EXTENT OF NON-AQUEOUS PHASE LIQUIDS (NAPL)

NAPL THICKNESS CONTOUR (FEET)

NOTE

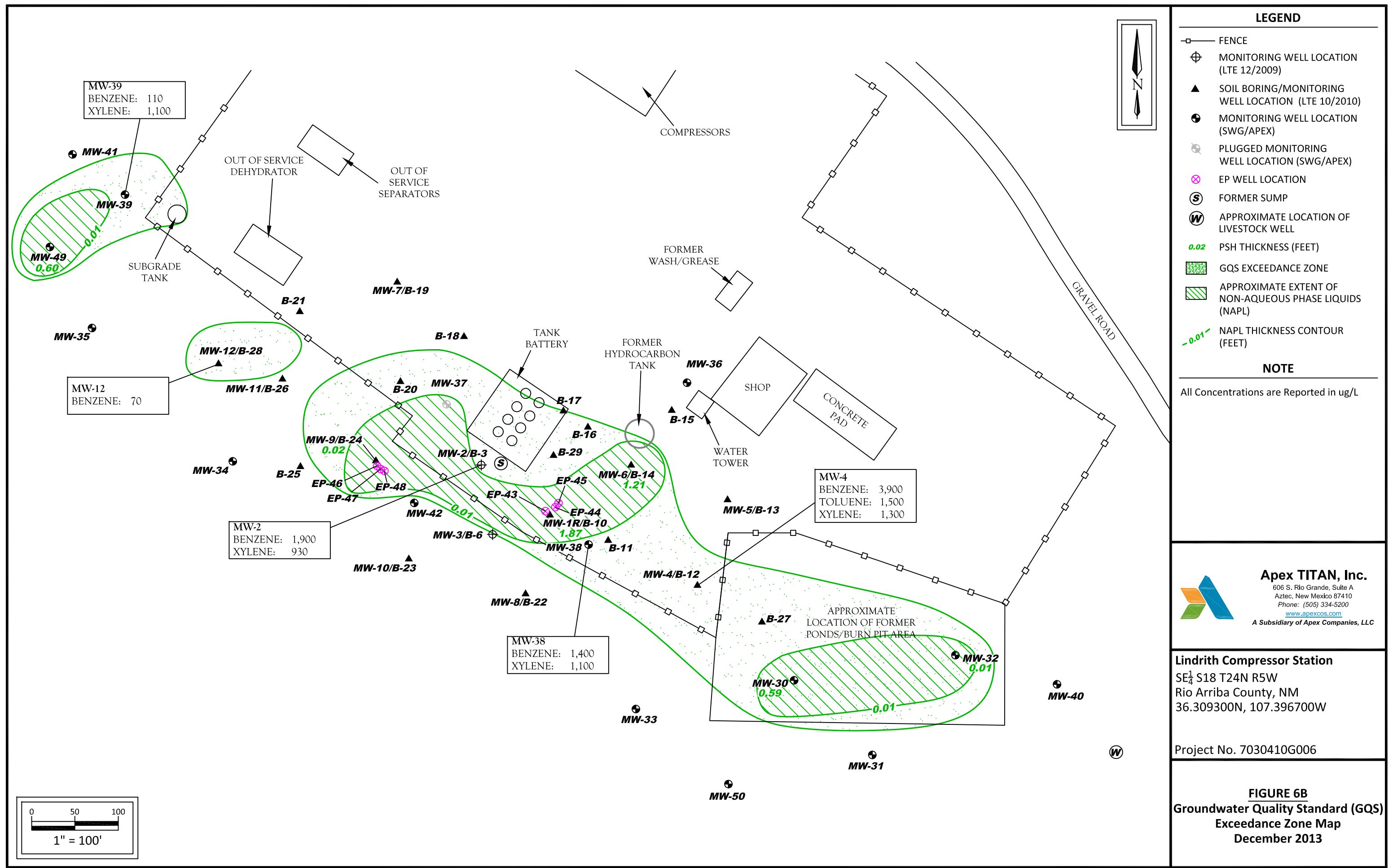
All Concentrations are Reported in ug/L

Apex TITAN, Inc.
606 S. Rio Grande, Suite A
Aztec, New Mexico 87410
Phone: (505) 334-5200
www.apexcos.com
A Subsidiary of Apex Companies, LLC

Lindrith Compressor Station
SE $\frac{1}{4}$ S18 T24N R5W
Rio Arriba County, NM
36.309300N, 107.396700W

Project No. 7030410G006

FIGURE 6A
Groundwater Quality Standard (GQS)
Exceedance Zone Map
June 2013



LEGEND

FENCE

MONITORING WELL LOCATION (LTE 12/2009)

SOIL BORING/MONITORING WELL LOCATION (LTE 10/2010)

MONITORING WELL LOCATION (SWG/APEX)

PLUGGED MONITORING WELL LOCATION (SWG/APEX)

EP WELL LOCATION

FORMER SUMP

APPROXIMATE LOCATION OF LIVESTOCK WELL

PSH THICKNESS (FEET)

GQS EXCEEDANCE ZONE

APPROXIMATE EXTENT OF NON-AQUEOUS PHASE LIQUIDS (NAPL)

NAPL THICKNESS CONTOUR (FEET)

NOTE

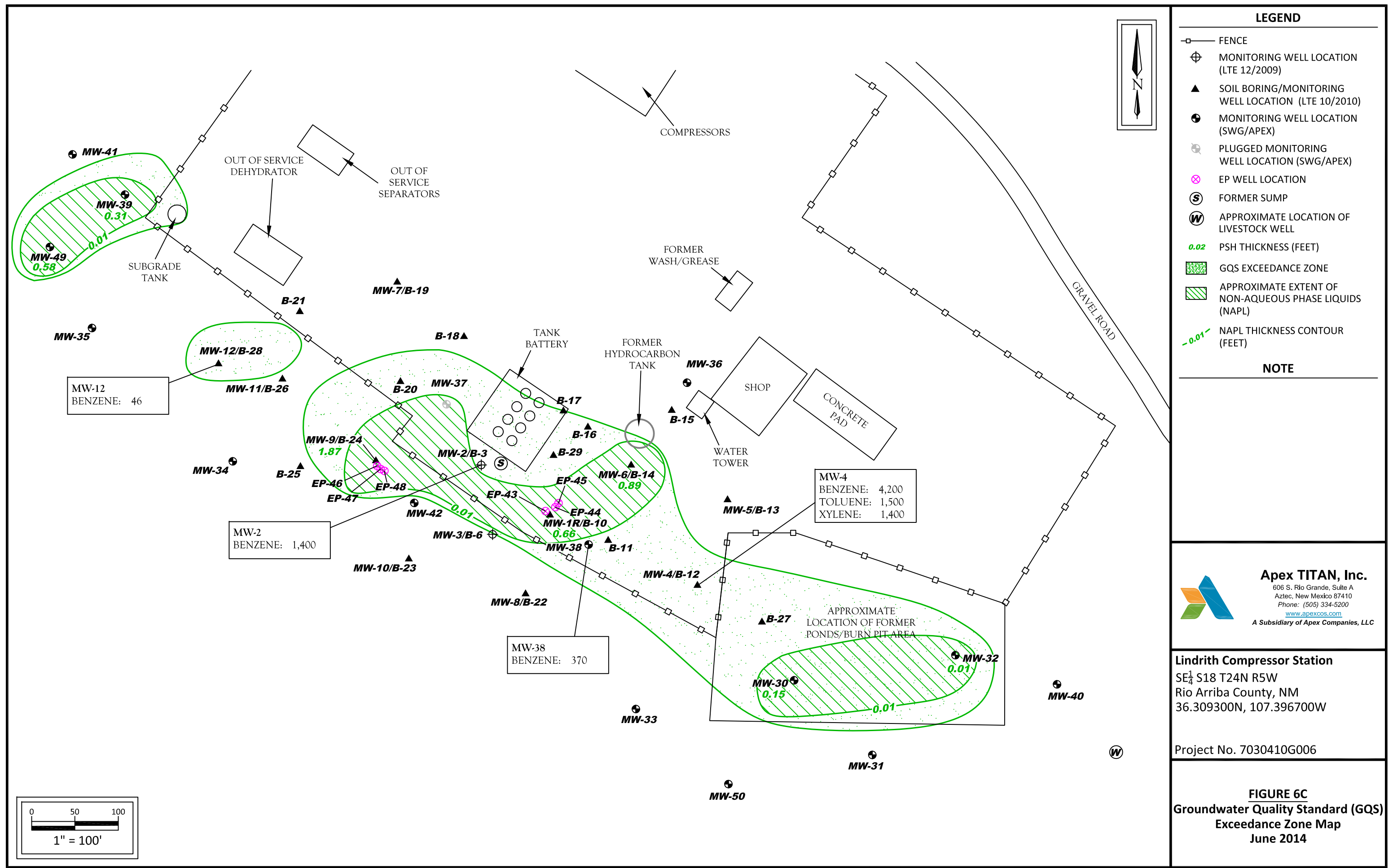
All Concentrations are Reported in ug/L

Apex TITAN, Inc.
606 S. Rio Grande, Suite A
Aztec, New Mexico 87410
Phone: (505) 334-5200
www.apexcos.com
A Subsidiary of Apex Companies, LLC

Lindrith Compressor Station
SE $\frac{1}{4}$ S18 T24N R5W
Rio Arriba County, NM
36.309300N, 107.396700W

Project No. 7030410G006

FIGURE 6B
Groundwater Quality Standard (GQS)
Exceedance Zone Map
December 2013



APPENDIX B

Tables

TABLE 1
Lindrith Compressor Station - Soil Borings
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	TPH Total (mg/kg)
New Mexico Entergy, Mineral & Natural Resources Department, Oil Conservation Division, Remediation Action Level			10	NE	NE	NE	50	100			
Soil Boring Advanced by Lodestar/LTE											
B-1*	12.15.09	15.0	0.057	0.19	<0.5	0.22	<0.967	28	<10	NA	<38
B-1*	12.15.09	25.0	0.25	0.84	0.1	0.81	2	82	<10	NA	<92
B-2*	12.15.09	20.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	NA	ND
B-3	12.17.09	25.0	0.27	1.2	0.24	2.2	3.91	100	<10	NA	<110
B-3	12.17.09	30.0	<0.05	0.36	0.11	1.0	<1.52	19	<10	NA	<29
B-3	12.17.09	35.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	NA	ND
B-4*	12.17.09	20.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	NA	ND
B-5*	12.17.09	20.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	NA	ND
B-6	12.17.09	25-30	<0.05	0.06	<0.05	0.11	<0.27	8	<10	NA	<18
B-6	12.17.09	35.0	<0.05	0.15	<0.05	0.23	<0.48	12	<10	NA	<22
B-6	12.17.09	40.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	NA	ND
B-10	10.18.10	22.0	<0.25	1.0	0.3	3.4	<4.95	64	<10	<50	<124
B-10	10.18.10	45.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	<50	ND
B-11	10.19.10	35.0	2.6	15	3.3	28	48.9	1,000	18	<50	<1068
B-11	10.19.10	45.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	<50	ND
B-12	10.20.10	33.5	0.31	1.8	0.75	5.4	8.26	130	15	<50	<195
B-12	10.20.10	48.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	<50	ND
B-13	10.20.10	30.0	<2.5	17	9.0	57	<85.5	1,000	400	810	2210
B-13	10.20.10	45.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	<50	ND
B-14	10.21.10	28.0	<0.05	0.067	<0.05	0.37	<0.537	13	30	74	117
B-14	10.21.10	40.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	<50	ND
B-15	10.22.10	33.0	<0.50	<0.50	<0.50	<1.0	ND	<50	170	210	<430
B-15	10.22.10	35.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	<50	ND
B-16	10.22.10	32.0	<0.50	2.9	1.6	13	<18	260	130	150	540
B-16	10.22.10	45.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	<50	ND
B-17	10.22.10	33.0	<0.10	<0.10	0.12	1.2	<1.52	31	51	78	160
B-17	10.22.10	45.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	<50	ND
B-18	10.25.10	33.0	<0.20	0.79	0.98	7.7	<9.67	230	110	120	460
B-18	10.25.10	40.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	<50	ND
B-19	10.25.10	33.0	<0.05	<0.05	<0.05	<0.10	ND	14	18	<50	<82
B-19	10.25.10	45.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	<50	ND
B-20	10.25.10	30.0	<1.0	7.9	6.5	50	<65.4	1,900	450	420	2770
B-20	10.26.10	40.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	<50	ND
B-21	10.26.10	23.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	<50	ND
B-21	10.27.10	40.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	<50	ND
B-22	10.27.10	24.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	<50	ND
B-22	10.28.10	42.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	<50	ND
B-23	10.29.10	33.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	<50	ND
B-23	10.29.10	40.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	<50	ND
B-24	10.29.10	29.0	<0.25	1.6	0.73	6.9	<9.48	230	63	210	503
B-24	10.29.10	45.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	<50	ND
BH-25	11.01.10	39.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	<50	ND

TABLE 1
Lindrith Compressor Station - Soil Borings
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	TPH Total (mg/kg)
New Mexico Entergy, Mineral & Natural Resources Department, Oil Conservation Division, Remediation Action Level			10	NE	NE	NE	50	100			
B-26	11.02.10	29.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	<50	ND
B-26	11.02.10	45.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	<50	ND
B-27	11.02.10	12.0	<0.05	<0.05	<0.05	0.11	<0.26	<25	100	290	<415
B-27	11.02.10	33.0	<0.05	<0.05	<0.05	0.26	<0.41	30	33	98	161
BH-27	11.03.10	45.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	<50	ND
BH-28	11.03.10	30.0	<0.05	<0.05	0.22	2.4	<2.72	110	360	680	1150
BH-28	11.03.10	45.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	<10	<50	ND
BH-29	11.04.10	27.0	<0.05	<0.05	<0.05	<0.10	ND	<5.0	100	130	<235
BH-29	11.04.10	40.0	<0.05	<0.05	<0.05	<0.10	ND	6.6	<10	<50	<66.6
Soil Borings Advanced by SWG/Apex											
MW-30	8.15.11	12.0	<0.47	<0.47	<0.47	<0.94	ND	<47	2,300	NA	<2347
MW-30	8.15.11	35.0	<0.48	7.0	18	100	125	8,500	360	NA	8,860
MW-31	8.15.11	16.0	<0.24	<0.24	<0.24	<0.47	ND	<24	<9.9	NA	ND
MW-31	8.15.11	37.0	<0.048	<0.048	<0.048	<0.097	ND	<4.8	<9.6	NA	ND
MW-32	8.16.11	17.0	<0.50	1.2	2.4	16	19.6	640	19	NA	659
MW-32	8.16.11	35.0	9.7	34	33	190	266.7	11,000	250	NA	11,250
MW-33	8.16.11	35.0	<0.048	<0.048	<0.048	<0.097	ND	<4.8	<9.8	NA	ND
MW-34	8.17.11	30.0	<0.048	<0.048	<0.048	<0.096	ND	<4.8	<10	NA	ND
MW-35	8.17.11	30.0	<0.049	<0.049	<0.049	<0.098	ND	<4.9	<9.9	NA	ND
MW-35	8.17.11	36.0	<0.048	<0.048	<0.048	<0.096	ND	<4.8	<10	NA	ND
MW-36	8.18.11	30.0	<0.049	<0.049	<0.049	<0.098	ND	10	<10	NA	<20
MW-36	8.18.11	35.0	<0.047	<0.047	<0.047	<0.095	ND	<4.7	<10	NA	ND
MW-37	8.19.11	26.0	<0.049	<0.049	<0.049	<0.097	ND	<4.9	27	NA	<31.9
MW-37	8.19.11	30.0	1.2	5.7	5.2	40	52.1	1,400	310	NA	1,710
MW-38	8.19.11	34.0	<0.049	<0.049	<0.049	<0.098	ND	<4.9	<10	NA	ND
MW-38	8.19.11	28.0	<0.048	<0.048	<0.048	<0.096	ND	<4.8	<9.8	NA	ND
MW-39	8.22.11	31.0	11	18	35	230	294	7,600	990	NA	8,590
MW-40	8.23.11	32.0	<0.048	<0.048	<0.048	<0.096	ND	<4.8	<9.8	NA	ND
MW-40	8.23.11	35.0	<0.047	<0.047	<0.047	<0.093	ND	<4.7	<10	NA	ND
MW-41	8.23.11	30.0	<0.048	<0.048	<0.048	<0.095	ND	<4.8	<9.9	NA	ND
MW-42	8.23.11	27.0	<0.048	<0.048	0.058	0.85	0.908	15	12	NA	27
MW-49	4.26.13	30.0	<0.047	<0.047	<0.047	<0.095	ND	<4.7	<10	NA	ND
MW-50	4.26.13	30.0	<0.046	<0.046	<0.046	<0.093	ND	<4.6	<10	NA	ND

Note: Concentrations in **bold** and yellow exceed the applicable OCD Remediation Action Level

NA = Not Analyzed

NE = Not Established

NAPL = Non-aqueous phase liquid

* = boring location from former condensate tank leak. Not shown on map due to scale.

TABLE 2
Lindrith Compressor Station
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)	TPH MRO (mg/L)	pH (Standard Units)	Nitrate (mg/L)	Iron (mg/L)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10	750	750	620	NE	NE	NE	6-9	10	1.0*
MW-1*	12.30.09	1,900	2,600	120	870	NA	NA	NA	NA	NA	NA
MW-1R	11.16.10	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-1R	6.24.11	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-1R	9.21.11	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-1R	12.14.11	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-1R	3.28.12	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-1R	6.21.12 ^M	NAPL ^M	NAPL ^M	NAPL ^M	NAPL ^M	NAPL ^M	NAPL ^M	NAPL ^M	NA	NA	NA
MW-1R	12.18.12	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-1R	6.25.13	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-1R	12.17.13	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-1R	6.18.14	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-2	12.30.09	3,000	3,200	270	1,900	NA	NA	NA	NA	NA	NA
MW-2	11.16.10	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-2	6.24.11	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-2	9.21.11	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-2	12.14.11	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-2	3.28.12	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-2	6.20.12 ^M	1,300 ^M	720 ^M	75 ^M	1,200 ^M	11 ^M	<1.0 ^M	NA	NA	NA	NA
MW-2	12.19.12	1,000	<20	23	440	8.7	<1.0	NA	NA	NA	NA
MW-2	6.25.13	2,700	<20	110	1,100	24	<1.0	NA	NA	NA	NA
MW-2	12.31.13	1,900	<10	120	930	13	<1.0	NA	NA	NA	NA
MW-2	6.26.14	1,400	<5.0	62	420	8.2	<1.0	NA	NA	NA	NA
MW-3	12.30.09	130	370	76	530	NA	NA	NA	NA	NA	NA
MW-3	11.16.10	5,500	62	350	1,000	16	<1.0	<5.0	7.16	<1.0	210
MW-3	6.24.11	5,700	3,300	340	2,300	31	1.7	NA	NA	NA	NA
MW-3	9.21.11	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-3	12.15.11	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-3	3.29.12	1,400	90	220	240	7.2	<1.0	NA	NA	NA	NA
MW-3	6.20.12 ^M	130 ^M	<5.0 ^M	37 ^M	100 ^M	1.5 ^M	<1.0 ^M	NA	NA	NA	NA
MW-3	12.18.12	140	<5.0	81	34	0.92	<1.0	NA	NA	NA	NA
MW-3	6.25.13	76	<5.0	46	16	0.78	<1.0	NA	NA	NA	NA
MW-3	12.18.13	2.5	<1.0	6.2	2.2	0.12	<1.0	NA	NA	NA	NA
MW-3	6.25.14	6.5	1.7	15	8.2	0.27	<1.0	NA	NA	NA	NA
MW-4	11.16.10	2,600	1,600	280	1,700	0.35	3.1	<5.0	6.93	<1.0	470
MW-4	6.24.11	3,900	1,600	220	1,400	26	<1.0	NA	NA	NA	NA
MW-4	9.21.11	4,000	1,700	280	1,700	32	1.1	NA	NA	NA	NA
MW-4	12.14.11	3,900	1,600	260	1,700	38	<1.0	NA	NA	NA	NA
MW-4	3.28.12	3,900	1,700	250	1,500	33	<1.0	NA	NA	NA	NA
MW-4	6.20.12	4,400	1,900	280	1,700	36	<1.0	NA	NA	NA	NA
MW-4	12.19.12	4,300	1,800	270	1,700	25	<1.0	NA	NA	NA	NA
MW-4	6.25.13	4,300	1,800	250	1,700	34	1.2	NA	NA	NA	NA
MW-4	12.31.13	3,900	1,500	190	1,300	20	1.2	NA	NA	NA	NA
MW-4	6.26.14	4,200	1,500	190	1,400	23	1.1	NA	NA	NA	NA

TABLE 2
Lindrith Compressor Station
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)	TPH MRO (mg/L)	pH (Standard Units)	Nitrate (mg/L)	Iron (mg/L)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10	750	750	620	NE	NE	NE	6-9	10	1.0*
MW-5	11.15.10	4.4	<1.0	6.3	22	2.2	1.4	<5.0	6.82	<1.0	47
MW-5	6.24.11	1.2	<1.0	31	19	0.52	<1.0	NA	NA	NA	NA
MW-5	9.21.11	1.9	<1.0	3.8	9.7	0.62	1.1	NA	NA	NA	NA
MW-5	12.14.11	1.8	<1.0	2.1	7.0	0.50	1.2	NA	NA	NA	NA
MW-5	3.28.12	<10	<10	<10	<20	0.52	<1.0	NA	NA	NA	NA
MW-5	6.20.12	<5.0	<5.0	<5.0	<10	0.61	<1.0	NA	NA	NA	NA
MW-5	12.19.12	<5.0	<5.0	<5.0	<10	0.36	<1.0	NA	NA	NA	NA
MW-5	6.25.13	<5.0	<5.0	<5.0	<10	0.28	1.1	NA	NA	NA	NA
MW-5	12.31.13	<5.0	<5.0	<5.0	<10	0.47	<1.0	NA	NA	NA	NA
MW-5	6.24.14	<2.5	<5.0	<5.0	<10	<0.25	<1.0	NA	NA	NA	NA
MW-6	11.16.10	2,400	65	230	1,200	0.42	1.4	<5.0	6.57	<1.0	140
MW-6	6.24.11	4,500	68	230	1,200	25	<1.0	NA	NA	NA	NA
MW-6	9.21.11	4,900	67	330	1,800	32	1.4	NA	NA	NA	NA
MW-6	12.14.11	4,600	82	290	1,700	36	1.3	NA	NA	NA	NA
MW-6	3.28.12	4,500	71	290	1,600	33	1.2	NA	NA	NA	NA
MW-6	6.20.12	4,500	64	280	1,600	33	<1.0	NA	NA	NA	NA
MW-6	12.18.12	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-6	6.25.13	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-6	12.17.13	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-6	6.18.14	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-7	11.16.10	8.9	2.6	5.9	50	1.5	<1.0	<5.0	7.29	<1.0	53
MW-7	6.24.11	2.3	<1.0	<1.0	<2.0	0.35	<1.0	NA	NA	NA	NA
MW-7	9.21.11	3.3	<1.0	<1.0	4.9	0.57	<1.0	NA	NA	NA	NA
MW-7	12.14.11	14	<1.0	2.5	14	0.70	<1.0	NA	NA	NA	NA
MW-7	3.29.12	3.9	<1.0	1.4	5.7	0.54	<1.0	NA	NA	NA	NA
MW-7	6.20.12	3.0	<1.0	<1.0	3.2	0.49	<1.0	NA	NA	NA	NA
MW-7	12.19.12	11	<1.0	5.2	15	0.57	<1.0	NA	NA	NA	NA
MW-7	6.25.13	4.1	<1.0	1.2	2.8	0.25	<1.0	NA	NA	NA	NA
MW-7	12.30.13	3.4	<1.0	1.6	8.3	0.47	<1.0	NA	NA	NA	NA
MW-7	6.20.14	<1.0	<1.0	<1.0	<2.0	0.34	<1.0	NA	NA	NA	NA
MW-8	11.15.10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	7.36	<1.0	7.8
MW-8	6.24.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-8	9.20.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-8	12.15.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-8	3.29.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-8	6.20.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-8	12.18.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-8	6.25.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-8	12.18.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-8	6.25.14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA

TABLE 2
Lindrith Compressor Station
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)	TPH MRO (mg/L)	pH (Standard Units)	Nitrate (mg/L)	Iron (mg/L)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10	750	750	620	NE	NE	NE	6-9	10	1.0*
MW-9	11.16.10	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-9	6.24.11	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-9	9.21.11	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-9	12.15.11	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-9	3.28.12	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-9	6.21.12 ^M	NAPL ^M	NAPL ^M	NAPL ^M	NAPL ^M	NAPL ^M	NAPL ^M	NAPL ^M	NA	NA	NA
MW-9	12.18.12	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-9	6.25.13	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-9	12.17.13	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-9	6.18.14	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-10	11.15.10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	7.57	<1.0	52
MW-10	6.24.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-10	9.20.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-10	12.15.11	<1.0	<1.0	<1.0	<2.0	<0.050	3.3	NA	NA	NA	NA
MW-10	3.29.12	<1.0	<1.0	<1.0	<2.0	<0.050	3.3	NA	NA	NA	NA
MW-10	6.20.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-10	12.18.12	<1.0	<1.0	<1.0	2.6	<0.050	<1.0	NA	NA	NA	NA
MW-10	6.25.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-10	12.18.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-10	6.25.14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-11	11.16.10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	7.09	<1.0	13
MW-11	6.24.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-11	9.20.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-11	12.15.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-11	3.29.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-11	6.21.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-11	12.18.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-11	6.26.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-11	12.18.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-11	6.25.14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-12	11.15.10	23	16	13	84	1.3	<1.0	<5.0	7.28	<1.0	39
MW-12	6.24.11	27	<1.0	5.6	9.4	0.51	1.0	NA	NA	NA	NA
MW-12	9.21.11	63	<1.0	17	26	0.81	<1.0	NA	NA	NA	NA
MW-12	12.15.11	20	<1.0	3.1	9.7	0.73	<1.0	NA	NA	NA	NA
MW-12	3.28.12	57	<1.0	7.6	17	0.95	<1.0	NA	NA	NA	NA
MW-12	6.21.12	62	<1.0	6.8	17	0.58	<1.0	NA	NA	NA	NA
MW-12	12.18.12	65	<1.0	5.9	9.5	0.51	<1.0	NA	NA	NA	NA
MW-12	6.26.13	71	<1.0	5.8	10	0.41	<1.0	NA	NA	NA	NA
MW-12	12.30.13	70	<1.0	5.1	5.8	0.52	<1.0	NA	NA	NA	NA
MW-12	6.26.14	46	<1.0	2.7	2.4	0.37	<1.0	NA	NA	NA	NA

TABLE 2
Lindrith Compressor Station
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)	TPH MRO (mg/L)	pH (Standard Units)	Nitrate (mg/L)	Iron (mg/L)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10	750	750	620	NE	NE	NE	6-9	10	1.0*
MW-30	9.21.11	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-30	12.14.11	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-30	3.28.12	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-30	6.21.12	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-30	12.18.12	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-30	6.25.13	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-30	12.17.13	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-30	6.18.14	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-31	9.20.11	<1.0	1.2	1.1	7.4	0.23	<1.0	NA	NA	NA	NA
MW-31	12.14.11	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	NA	NA	NA	NA
MW-31	3.29.12	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	NA	NA	NA	NA
MW-31	6.20.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-31	12.18.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-31	6.25.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-31	12.17.13	<2.0	<2.0	<2.0	<4.0	<1.0	<1.0	NA	NA	NA	NA
MW-31	6.25.14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-32	9.21.11	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-32	12.14.11	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-32	3.28.12	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-32	6.21.12	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-32	12.18.12	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-32	6.25.13	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-32	12.17.13	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-32	6.18.14	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-33	9.20.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-33	12.14.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-33	3.29.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-33	6.20.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-33	12.18.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-33	6.25.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-33	12.18.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-33	6.25.14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-34	9.20.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-34	12.15.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-34	3.29.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-34	6.21.12	1.6	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-34	12.18.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-34	6.26.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-34	12.18.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-34	6.25.14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA

Sample I.D.		Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)	TPH MRO (mg/L)	pH (Standard Units)	Nitrate (mg/L)	Iron (mg/L)
New Mexico Water Quality Control Commission Groundwater Quality Standards			10	750	750	620	NE	NE	NE	6-9	10	1.0*
MW-35	9.21.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA	NA
MW-35	12.15.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA	NA
MW-35	3.28.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA	NA
MW-35	6.21.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA	NA
MW-35	12.18.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA	NA
MW-35	6.26.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA	NA
MW-35	12.30.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA	NA
MW-35	6.24.14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA	NA
MW-36	9.21.11	<1.0	<1.0	<1.0	<2.0	0.15	<1.0	NA	NA	NA	NA	NA
MW-36	12.14.11	<1.0	<1.0	<1.0	<2.0	0.11	<1.0	NA	NA	NA	NA	NA
MW-36	3.29.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA	NA
MW-36	6.20.12	1.3	<1.0	<1.0	<2.0	0.096	<1.0	NA	NA	NA	NA	NA
MW-36	12.19.12	18	11	5.0	31	0.32	<1.0	NA	NA	NA	NA	NA
MW-36	6.25.13	<1.0	<1.0	<1.0	<2.0	0.065	<1.0	NA	NA	NA	NA	NA
MW-36	12.31.13	<1.0	<1.0	<1.0	<2.0	0.11	<1.0	NA	NA	NA	NA	NA
MW-36	6.24.14	<1.0	<1.0	<1.0	<2.0	0.086	<1.0	NA	NA	NA	NA	NA
MW-37	9.21.11	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA	NA
MW-37	12.14.11	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA	NA
MW-37	3.29.12	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA	NA
MW-37	6.21.12	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA	NA
MW-37	12.18.12	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA	NA
MW-37	6.25.13	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA	NA
MW-37	7.23.13	Monitoring Well Plugged and Abandoned (will be replaced)										
MW-38	9.21.11	2,100	440	270	1,800	26	1.3	NA	NA	NA	NA	NA
MW-38	12.14.11	1,900	180	210	1,500	24	<1.0	NA	NA	NA	NA	NA
MW-38	3.28.12	1,800	100	230	1,400	21	<1.0	NA	NA	NA	NA	NA
MW-38	6.20.12	1,900	320	240	1,500	24	<1.0	NA	NA	NA	NA	NA
MW-38	12.19.12	1,800	280	220	1,400	17	<1.0	NA	NA	NA	NA	NA
MW-38	6.25.13	1,200	62	170	800	17	1.1	NA	NA	NA	NA	NA
MW-38	12.31.13	1,400	32	190	1,100	15	1.0	NA	NA	NA	NA	NA
MW-38	6.26.14	370	<20	64	250	7.2	<1.0	NA	NA	NA	NA	NA
MW-39	9.21.11	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA	NA
MW-39	12.15.11	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA	NA
MW-39	3.28.12	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA	NA
MW-39	6.21.12	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA	NA
MW-39	12.18.12	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA	NA
MW-39	6.25.13	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA	NA
MW-39	12.30.13	110	<20	220	1,100	5.9	<1.0	NA	NA	NA	NA	NA
MW-39	6.18.14	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA	NA

TABLE 2
Lindrith Compressor Station
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)	TPH MRO (mg/L)	pH (Standard Units)	Nitrate (mg/L)	Iron (mg/L)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10	750	750	620	NE	NE	NE	6-9	10	1.0*
MW-40	9.20.11	<1.0	<1.0	<1.0	<2.0	0.21	<1.0	NA	NA	NA	NA
MW-40	12.14.11	1.4	<1.0	<1.0	4.7	0.53	<1.0	NA	NA	NA	NA
MW-40	3.29.12	<1.0	<1.0	<1.0	<2.0	0.48	<1.0	NA	NA	NA	NA
MW-40	6.20.12	<1.0	<1.0	<1.0	<2.0	0.20	<1.0	NA	NA	NA	NA
MW-40	12.18.12	<1.0	<1.0	<1.0	<2.0	0.33	<1.0	NA	NA	NA	NA
MW-40	6.25.13	2.3	<1.0	<1.0	<2.0	0.45	<1.0	NA	NA	NA	NA
MW-40	12.17.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-40	6.25.14	<1.0	<1.0	1.0	<2.0	0.30	<1.0	NA	NA	NA	NA
MW-41	9.20.11	<10.0	<10.0	<10.0	30	<0.50	2.4	NA	NA	NA	NA
MW-41	12.15.11	<1.0	<1.0	<1.0	<2.0	0.11	4.3	NA	NA	NA	NA
MW-41	3.28.12	<1.0	<1.0	<1.0	<2.0	0.26	<1.0	NA	NA	NA	NA
MW-41	6.21.12	<1.0	<1.0	<1.0	<2.0	0.11	<1.0	NA	NA	NA	NA
MW-41	12.18.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-41	6.26.13	2.0	<1.0	<1.0	<2.0	<0.050	1.2	NA	NA	NA	NA
MW-41	12.30.13	<1.0	<1.0	<1.0	2.1	<0.050	<1.0	NA	NA	NA	NA
MW-41	6.24.14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-42	9.20.11	70	42	4.1	33	0.62	<1.0	NA	NA	NA	NA
MW-42	12.15.11	69	1.6	3.1	<2.0	0.61	<1.0	NA	NA	NA	NA
MW-42	3.29.12	2.1	<1.0	<1.0	<2.0	0.15	<1.0	NA	NA	NA	NA
MW-42	6.21.12	1.2	<1.0	<1.0	<2.0	0.12	<1.0	NA	NA	NA	NA
MW-42	12.18.12	<1.0	<1.0	<1.0	<2.0	0.091	<1.0	NA	NA	NA	NA
MW-42	6.26.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA	NA	NA	NA
MW-42	12.18.13	<1.0	<1.0	<1.0	<2.0	0.063	<1.0	NA	NA	NA	NA
MW-42	6.25.14	<1.0	<1.0	<1.0	<2.0	0.063	<1.0	NA	NA	NA	NA
MW-49	6.26.13	2,200	<10	210	810	8.8	<1.0	NA	NA	NA	NA
MW-49	12.17.13	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-49	6.18.14	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL	NA	NA	NA
MW-50	6.26.13	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA	NA
MW-50	12.17.13	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA	NA
MW-50	6.18.14	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA	NA

Note: Concentrations in **bold** and yellow exceed the applicable OCD Remediation Action Level

NA = Not Analyzed

NE = Not Established

M = Well Subjected to MDPE event

NAPL = Non-aqueous phase liquid

* = Replaced by MW-1R

<1.0 = the numeral (in this case "1.0") identifies the laboratory Reporting Limit

TABLE 3
Lindrith Compressor Station
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	TOC Elevations (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-1R	11.11.10	31.73	33.29	1.56	6494.62	6462.31
MW-1R	11.15.10	31.93	32.86	0.93	6494.62	6462.35
MW-1R	6.22.11	32.57	35.50	2.93	6494.62	6460.97
MW-1R ¹	9.21.11	32.55	38.20	5.65	6494.64	6460.00
MW-1R	12.14.11	32.41	37.85	5.44	6494.64	6460.22
MW-1R	3.28.12	32.61	38.50	5.89	6494.64	6459.85
MW-1R ^M	6.21.12 ^M	NG ^M	NG ^M	NG ^M	6494.64	NG ^M
MW-1R	12.18.12	34.16	34.45	0.29	6494.64	6460.37
MW-1R	6.25.13	34.32	35.94	1.62	6494.64	6459.72
MW-1R	12.17.13	34.35	36.22	1.87	6494.64	6459.60
MW-1R	6.18.14	34.60	35.26	0.66	6494.64	6459.80
MW-2	11.11.10	30.12	30.15	0.03	6491.08	6460.95
MW-2	11.15.10	29.86	29.90	0.04	6491.08	6461.21
MW-2	6.22.11	30.64	30.73	0.09	6491.08	6460.41
MW-2	9.21.11	30.70	30.72	0.02	6491.08	6460.37
MW-2	12.14.11	30.78	30.79	0.01	6491.08	6460.30
MW-2	3.28.12	30.86	30.91	0.05	6491.08	6460.20
MW-2	6.21.12	ND	31.14	ND	6491.08	6459.94
MW-2	12.19.12	ND	30.86	ND	6491.08	6460.22
MW-2	6.25.13	ND	31.25	ND	6491.08	6459.83
MW-2	12.17.13	ND	31.42	ND	6491.08	6459.66
MW-2	6.18.14	ND	31.29	ND	6491.08	6459.79
MW-3	11.11.10	ND	32.08	ND	6492.78	6460.70
MW-3	11.15.10	ND	32.96	ND	6492.78	6459.82
MW-3	6.22.11	ND	32.61	ND	6492.78	6460.17
MW-3	9.21.11	32.71	32.72	0.01	6492.78	6460.07
MW-3	12.15.11	32.79	32.79	0.00	6492.78	6459.99
MW-3	3.28.12	ND	32.72	ND	6492.78	6460.06
MW-3	6.21.12	ND	33.11	ND	6492.78	6459.67
MW-3	12.18.12	ND	32.87	ND	6492.78	6459.91
MW-3	6.25.13	ND	33.21	ND	6492.78	6459.57
MW-3	12.17.13	ND	33.32	ND	6492.78	6459.46
MW-3	6.18.14	ND	33.20	ND	6492.78	6459.58
MW-4	11.11.10	ND	33.31	ND	6493.99	6460.68
MW-4	11.15.10	ND	33.10	ND	6493.99	6460.89
MW-4	6.22.11	ND	33.45	ND	6493.99	6460.54
MW-4	9.21.11	ND	34.46	ND	6493.99	6459.53
MW-4	12.14.11	ND	33.51	ND	6493.99	6460.48
MW-4	3.28.12	ND	33.54	ND	6493.99	6460.45
MW-4	6.21.12	ND	33.72	ND	6493.99	6460.27
MW-4	12.19.12	ND	33.60	ND	6493.99	6460.39
MW-4	6.25.13	ND	33.98	ND	6493.99	6460.01
MW-4	12.17.13	ND	34.18	ND	6493.99	6459.81
MW-4	6.18.14	ND	34.07	ND	6493.99	6459.92

TABLE 3
Lindrith Compressor Station
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	TOC Elevations (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-5	11.11.10	ND	34.37	ND	6496.06	6461.69
MW-5	11.15.10	ND	35.64	ND	6496.06	6460.42
MW-5	6.22.11	ND	34.52	ND	6496.06	6461.54
MW-5	9.21.11	ND	34.57	ND	6496.06	6461.49
MW-5	12.14.11	ND	34.14	ND	6496.06	6461.92
MW-5	3.28.12	ND	34.70	ND	6496.06	6461.36
MW-5	6.21.12	ND	34.78	ND	6496.06	6461.28
MW-5	12.19.12	ND	34.33	ND	6496.06	6461.73
MW-5	6.25.13	ND	34.95	ND	6496.06	6461.11
MW-5	12.17.13	ND	35.03	ND	6496.06	6461.03
MW-5	6.18.14	ND	35.10	ND	6496.06	6460.96
MW-6	11.11.10	ND	33.79	ND	6494.72	6460.93
MW-6	11.15.10	ND	33.63	ND	6494.72	6461.09
MW-6	6.22.11	ND	34.09	ND	6494.72	6460.63
MW-6	9.21.11	ND	33.86	ND	6494.72	6460.86
MW-6	12.14.11	ND	34.30	ND	6494.72	6460.42
MW-6	3.28.12	ND	34.25	ND	6494.72	6460.47
MW-6	6.21.12	ND	34.55	ND	6494.72	6460.17
MW-6	12.18.12	34.31	34.92	0.61	6494.72	6460.18
MW-6	6.25.13	34.43	35.41	0.98	6494.72	6459.93
MW-6	12.17.13	34.51	35.72	1.21	6494.72	6459.76
MW-6	6.18.14	34.50	35.39	0.89	6494.72	6459.89
MW-7	11.11.10	ND	36.65	ND	6492.49	6455.84
MW-7	11.15.10	ND	34.70	ND	6492.49	6457.79
MW-7	6.22.11	ND	34.87	ND	6492.49	6457.62
MW-7	9.21.11	ND	34.95	ND	6492.49	6457.54
MW-7	12.14.11	ND	35.00	ND	6492.49	6457.49
MW-7	3.28.12	ND	35.01	ND	6492.49	6457.48
MW-7	6.21.12	ND	35.08	ND	6492.49	6457.41
MW-7	12.19.12	ND	35.07	ND	6492.49	6457.42
MW-7	6.25.13	ND	35.19	ND	6492.49	6457.30
MW-7	12.17.13	ND	35.28	ND	6492.49	6457.21
MW-7	6.18.14	ND	35.19	ND	6492.49	6457.30
MW-8	11.11.10	ND	34.39	ND	6493.10	6458.71
MW-8	11.15.10	ND	32.16	ND	6493.10	6460.94
MW-8	6.22.11	ND	32.70	ND	6493.10	6460.40
MW-8	9.21.11	ND	32.66	ND	6493.10	6460.44
MW-8	12.15.11	ND	32.92	ND	6493.10	6460.18
MW-8	3.28.12	ND	32.92	ND	6493.10	6460.18
MW-8	6.21.12	ND	33.10	ND	6493.10	6460.00
MW-8	12.18.12	ND	33.10	ND	6493.10	6460.00
MW-8	6.25.13	ND	34.32	ND	6493.10	6458.78
MW-8	12.17.13	ND	33.46	ND	6493.10	6459.64
MW-8	6.18.14	ND	33.41	ND	6493.10	6459.69

TABLE 3
Lindrith Compressor Station
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	TOC Elevations (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-9	11.11.10	29.46	30.34	0.88	6491.17	6461.38
MW-9	11.15.10	30.47	31.24	0.77	6491.17	6460.42
MW-9	6.22.11	30.76	32.14	1.38	6491.17	6459.90
MW-9	9.21.11	30.76	32.46	1.70	6491.17	6459.78
MW-9	12.15.11	31.94	33.30	1.36	6491.17	6458.73
MW-9	3.28.12	30.86	32.20	1.34	6491.17	6459.81
MW-9 ^M	6.21.12 ^M	NG ^M	NG ^M	NG ^M	6491.17	NG ^M
MW-9	12.18.12	30.90	32.53	1.63	6491.17	6459.67
MW-9	6.25.13	31.20	32.27	1.07	6491.17	6459.57
MW-9	12.17.13	31.18	31.20	0.02	6491.17	6459.98
MW-9	6.18.14	31.17	33.04	1.87	6491.17	6459.31
MW-10	11.11.10	ND	29.85	ND	6492.39	6462.54
MW-10	11.15.10	ND	31.83	ND	6492.39	6460.56
MW-10	6.22.11	ND	32.40	ND	6492.39	6459.99
MW-10	9.21.11	ND	32.62	ND	6492.39	6459.77
MW-10	12.15.11	ND	34.49	ND	6492.39	6457.90
MW-10	3.28.12	ND	32.41	ND	6492.39	6459.98
MW-10	6.21.12	ND	30.99	ND	6492.39	6461.40
MW-10	12.18.12	ND	32.65	ND	6492.39	6459.74
MW-10	6.25.13	ND	33.10	ND	6492.39	6459.29
MW-10	12.17.13	ND	33.03	ND	6492.39	6459.36
MW-10	6.18.14	ND	33.02	ND	6492.39	6459.37
MW-11	11.11.10	ND	34.05	ND	6489.84	6455.79
MW-11	11.15.10	ND	35.05	ND	6489.84	6454.79
MW-11	6.22.11	ND	34.23	ND	6489.84	6455.61
MW-11	9.21.11	ND	34.03	ND	6489.84	6455.81
MW-11	12.15.11	ND	34.50	ND	6489.84	6455.34
MW-11	3.28.12	ND	34.39	ND	6489.84	6455.45
MW-11	6.21.12	ND	34.75	ND	6489.84	6455.09
MW-11	12.18.12	ND	34.59	ND	6489.84	6455.25
MW-11	6.26.13	ND	34.87	ND	6489.84	6454.97
MW-11	12.17.13	ND	34.79	ND	6489.84	6455.05
MW-11	6.18.14	ND	34.71	ND	6489.84	6455.13
MW-12	11.11.10	ND	32.04	ND	6487.95	6455.91
MW-12	11.15.10	ND	32.74	ND	6487.95	6455.21
MW-12	6.22.11	ND	32.73	ND	6487.95	6455.22
MW-12	9.21.11	ND	32.93	ND	6487.95	6455.02
MW-12	12.15.11	ND	32.91	ND	6487.95	6455.04
MW-12	3.28.12	ND	32.35	ND	6487.95	6455.60
MW-12	6.21.12	ND	33.03	ND	6487.95	6454.92
MW-12	12.18.12	ND	33.00	ND	6487.95	6454.95
MW-12	6.26.13	ND	33.07	ND	6487.95	6454.88
MW-12	12.17.13	ND	33.14	ND	6487.95	6454.81
MW-12	6.18.14	ND	32.95	ND	6487.95	6455.00

TABLE 3
Lindrith Compressor Station
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	TOC Elevations (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-30	9.21.11	36.06	36.14	0.08	6498.21	6462.12
MW-30	12.14.11	36.16	36.19	0.03	6498.21	6462.04
MW-30	3.28.12	37.58	38.22	0.64	6498.21	6460.39
MW-30	6.21.12	35.25	35.87	0.62	6498.21	6462.73
MW-30	12.18.12	37.67	38.69	1.02	6498.21	6460.16
MW-30	6.25.13	37.82	39.11	1.29	6498.21	6459.91
MW-30	12.17.13	38.20	38.79	0.59	6498.21	6459.79
MW-30	6.18.14	38.23	38.38	0.15	6498.21	6459.92
MW-31	9.21.11	ND	37.99	ND	6498.24	6460.25
MW-31	12.14.11	ND	37.99	ND	6498.24	6460.25
MW-31	3.28.12	ND	38.13	ND	6498.24	6460.11
MW-31	6.21.12	ND	38.19	ND	6498.24	6460.05
MW-31	12.18.12	ND	38.13	ND	6498.24	6460.11
MW-31	6.25.13	ND	38.39	ND	6498.24	6459.85
MW-31	12.17.13	ND	38.51	ND	6498.24	6459.73
MW-31	6.18.14	ND	38.43	ND	6498.24	6459.81
MW-32	9.21.11	37.42	38.31	0.89	6499.30	6461.55
MW-32	12.14.11	36.11	36.16	0.05	6499.30	6463.17
MW-32	3.28.12	36.13	36.25	0.12	6499.30	6463.13
MW-32	6.21.12	36.19	36.28	0.09	6499.30	6463.08
MW-32	12.18.12	36.00	36.01	0.01	6499.30	6463.30
MW-32	6.25.13	37.26	37.28	0.02	6499.30	6462.03
MW-32	12.17.13	ND	36.36	ND	6499.30	6462.94
MW-32	6.18.14	36.28	36.29	0.01	6499.30	6463.02
MW-33	9.21.11	ND	32.90	ND	6493.04	6460.14
MW-33	12.14.11	ND	32.85	ND	6493.04	6460.19
MW-33	3.28.12	ND	32.95	ND	6493.04	6460.09
MW-33	6.21.12	ND	33.16	ND	6493.04	6459.88
MW-33	12.18.12	ND	33.12	ND	6493.04	6459.92
MW-33	6.25.13	ND	33.41	ND	6493.04	6459.63
MW-33	12.17.13	ND	33.55	ND	6493.04	6459.49
MW-33	6.18.14	ND	33.44	ND	6493.04	6459.60
MW-34	9.21.11	ND	34.50	ND	6488.60	6454.10
MW-34	12.15.11	ND	34.05	ND	6488.60	6454.55
MW-34	3.28.12	ND	33.93	ND	6488.60	6454.67
MW-34	6.21.12	ND	34.17	ND	6488.60	6454.43
MW-34	12.18.12	ND	34.09	ND	6488.60	6454.51
MW-34	6.26.13	ND	34.24	ND	6488.60	6454.36
MW-34	12.17.13	ND	34.15	ND	6488.60	6454.45
MW-34	6.18.14	ND	34.06	ND	6488.60	6454.54

TABLE 3
Lindrith Compressor Station
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	TOC Elevations (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-35	9.21.11	ND	34.36	ND	6485.71	6451.35
MW-35	12.15.11	ND	31.56	ND	6485.71	6454.15
MW-35	3.28.12	ND	31.45	ND	6485.71	6454.26
MW-35	6.21.12	ND	31.70	ND	6485.71	6454.01
MW-35	12.18.12	ND	31.62	ND	6485.71	6454.09
MW-35	6.26.13	ND	31.75	ND	6485.71	6453.96
MW-35	12.17.13	ND	31.68	ND	6485.71	6454.03
MW-35	6.18.14	ND	31.59	ND	6485.71	6454.12
MW-36	9.21.11	ND	35.16	ND	6496.77	6461.61
MW-36	12.14.11	ND	35.21	ND	6496.77	6461.56
MW-36	3.28.12	ND	35.25	ND	6496.77	6461.52
MW-36	6.21.12	ND	35.29	ND	6496.77	6461.48
MW-36	12.19.12	ND	35.16	ND	6496.77	6461.61
MW-36	6.25.13	ND	35.31	ND	6496.77	6461.46
MW-36	12.17.13	ND	35.43	ND	6496.77	6461.34
MW-36	6.18.14	ND	35.45	ND	6496.77	6461.32
MW-37	9.21.11	32.58	33.10	0.52	6492.96	6460.19
MW-37	12.14.11	32.61	33.37	0.76	6492.96	6460.07
MW-37	3.28.12	32.67	33.46	0.79	6492.96	6460.00
MW-37	6.21.12	32.86	33.68	0.82	6492.96	6459.80
MW-37	12.18.12	32.75	33.51	0.76	6492.96	6459.93
MW-37	6.26.13	32.98	33.84	0.86	6492.96	6459.66
MW-37	7.23.13	Monitoring Well Plugged and Abandoned (will be replaced)				
MW-38	9.21.11	ND	34.68	ND	6495.10	6460.42
MW-38	12.14.11	ND	34.75	ND	6495.10	6460.35
MW-38	3.28.12	ND	34.72	ND	6495.10	6460.38
MW-38	6.21.12	ND	35.06	ND	6495.10	6460.04
MW-38	12.19.12	ND	34.82	ND	6495.10	6460.28
MW-38	6.25.13	ND	35.20	ND	6495.10	6459.90
MW-38	12.17.13	ND	35.33	ND	6495.10	6459.77
MW-38	6.18.14	ND	35.22	ND	6495.10	6459.88
MW-39	9.21.11	31.83	33.12	1.29	6486.85	6454.54
MW-39	12.15.11	31.90	33.08	1.18	6486.85	6454.51
MW-39	3.28.12	31.84	32.94	1.10	6486.85	6454.60
MW-39	6.21.12	31.97	33.25	1.28	6486.85	6454.41
MW-39	12.18.12	31.89	33.22	1.33	6486.85	6454.47
MW-39	6.26.13	32.12	33.13	1.01	6486.85	6454.36
MW-39	12.17.13	ND	32.26	ND	6486.85	6454.59
MW-39	6.18.14	32.17	32.48	0.31	6486.85	6454.57

TABLE 3
Lindrith Compressor Station
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	TOC Elevations (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-40	9.21.11	ND	35.47	ND	6498.65	6463.18
MW-40	12.14.11	ND	35.38	ND	6498.65	6463.27
MW-40	3.28.12	ND	35.38	ND	6498.65	6463.27
MW-40	6.21.12	ND	35.43	ND	6498.65	6463.22
MW-40	12.18.12	ND	35.30	ND	6498.65	6463.35
MW-40	6.25.13	ND	35.46	ND	6498.65	6463.19
MW-40	12.17.13	ND	35.53	ND	6498.65	6463.12
MW-40	6.18.14	ND	35.48	ND	6498.65	6463.17
MW-41	9.21.11	ND	32.67	ND	6487.00	6454.33
MW-41	12.15.11	ND	32.63	ND	6487.00	6454.37
MW-41	3.28.12	ND	32.53	ND	6487.00	6454.47
MW-41	6.21.12	ND	32.75	ND	6487.00	6454.25
MW-41	12.18.12	ND	32.70	ND	6487.00	6454.30
MW-41	6.26.13	ND	32.84	ND	6487.00	6454.16
MW-41	12.17.13	ND	32.80	ND	6487.00	6454.20
MW-41	6.18.14	ND	32.68	ND	6487.00	6454.32
MW-42	9.21.11	ND	29.97	ND	6490.10	6460.13
MW-42	12.15.11	ND	30.80	ND	6490.10	6459.30
MW-42	3.28.12	ND	30.00	ND	6490.10	6460.10
MW-42	6.21.12	ND	30.58	ND	6490.10	6459.52
MW-42	12.18.12	ND	30.11	ND	6490.10	6459.99
MW-42	6.26.13	ND	30.63	ND	6490.10	6459.47
MW-42	12.17.13	ND	30.61	ND	6490.10	6459.49
MW-42	6.18.14	ND	30.48	ND	6490.10	6459.62
MW-49	6.26.13	ND	32.68	ND	6486.04	6453.36
MW-49	12.17.13	32.41	33.01	0.60	6486.04	6453.41
MW-49	6.18.14	32.35	32.93	0.58	6486.04	6453.48
MW-50	6.26.13	Dry	Dry	Dry	6494.83	Dry
MW-50	12.17.13	Dry	Dry	Dry	6494.83	Dry
MW-50	6.18.14	Dry	Dry	Dry	6494.83	Dry

BTOC - below top of casing

AMSL - above mean sea level

TOC - top of casing

M - Well connected to MDPE Unit.

NG - Well not gauged, or Errant Gauge.

* - corrected for presence of phase-separated hydrocarbon using a site-specific density correction factor of 0.63

NA - not applicable

1 - MW-1R re-surveyed 09/01/11



TABLE 4A Lindrith Compressor Station MDPE Controller Data - Area 1						
Time Stamp	CPU Status	BTU/Hr (estimated)	Process Vacuum (Inches-H ₂ O)	Process Flow (SCFM)	ICE Air Flow (SCFM)	Propane Fuel Flow (SCFM)
10-07-2013 19:09	Calibration	0	0	0	83	1.933
10-07-2013 20:09	Running	266000	60.23	11	78	0.133
10-07-2013 21:09	Running	234000	62.38	13	80	0.4
10-07-2013 22:09	Running	202000	81.75	13	78	0.4
10-07-2013 23:09	Running	94000	86.05	5	85	1.333
10-08-2013 00:09	Running	60000	114.01	10	77	1.533
10-08-2013 01:08	Running	66000	116.16	12	79	1.467
10-08-2013 02:08	Running	74000	118.32	12	80	1.467
10-08-2013 03:08	Running	72000	118.32	12	77	1.467
10-08-2013 04:08	Running	72000	116.16	12	80	1.467
10-08-2013 05:08	Running	88000	116.16	11	80	1.333
10-08-2013 06:08	Running	88000	118.32	12	78	1.333
10-08-2013 07:08	Running	78000	118.32	12	79	1.4
10-08-2013 08:07	Running	82000	120.47	12	80	1.4
10-08-2013 09:07	Running	90000	116.16	13	77	1.333
10-08-2013 10:07	Running	80000	111.86	12	78	1.4
10-08-2013 11:07	Running	78000	109.71	12	79	1.4
10-08-2013 12:07	Running	78000	107.56	13	77	1.4
10-08-2013 12:10	Shutdown	78000	25.81	0	80	1.533
10-08-2013 12:20	Shutdown	78000	0	0	82	2.067
10-08-2013 13:06	Calibration	78000	73.14	9	81	1.333
10-08-2013 13:22	Shutdown	0	25.81	0	79	1.6
10-08-2013 14:22	Shutdown	0	0	0	88	1.867
10-08-2013 14:39	Calibration	0	0	0	80	1.8
10-08-2013 15:39	Running	44000	107.56	8	77	1.467
10-08-2013 16:38	Running	24000	109.71	11	78	1.6
10-08-2013 17:38	Running	46000	114.01	12	78	1.467
10-08-2013 18:38	Running	36000	120.47	13	78	1.533
10-08-2013 19:38	Running	38000	124.77	14	75	1.533
10-08-2013 20:38	Running	88000	124.77	14	76	1.2
10-08-2013 21:38	Running	80000	129.07	15	76	1.267
10-08-2013 22:38	Running	70000	131.22	15	75	1.333
10-08-2013 23:37	Running	76000	131.22	15	76	1.267
10-09-2013 00:37	Running	82000	135.53	15	75	1.267
10-09-2013 01:37	Running	56000	135.53	15	76	1.4
10-09-2013 02:37	Running	44000	139.83	15	76	1.467
10-09-2013 03:37	Running	36000	144.13	15	75	1.533
10-09-2013 04:37	Running	36000	146.28	16	73	1.533
10-09-2013 05:37	Running	40000	146.28	16	75	1.533
10-09-2013 06:36	Running	40000	148.43	16	74	1.533
10-09-2013 07:36	Running	40000	159.19	8	80	1.533
10-09-2013 08:36	Running	0	191.46	0	79	1.933
10-09-2013 08:47	Shutdown	0	0	0	79	1.867

SCFM - Standard Cubic Feet per Minute



TABLE 4B Lindrith Compressor Station MDPE Controller Data - Area 2						
Time Stamp	CPU Status	BTU/Hr (estimated)	Process Vacuum (Inches-H₂O)	Process Flow (SCFM)	ICE Air Flow (SCFM)	Propane Fuel Flow (SCFM)
10-09-2013 11:19	Calibration	0	0	0	81	1.8
10-09-2013 12:19	Running	242000	124.77	3	91	0.133
10-09-2013 12:23	Calibration	242000	0	0	80	1.8
10-09-2013 13:23	Running	206000	131.22	3	90	0.4
10-09-2013 14:23	Running	174000	135.53	4	86	0.533
10-09-2013 15:23	Running	194000	139.83	4	88	0.2
10-09-2013 16:22	Running	188000	141.98	4	88	0.133
10-09-2013 17:07	Shutdown	170000	15.06	0	81	1.2
10-09-2013 17:23	Calibration	170000	0	0	81	1.8
10-09-2013 18:23	Running	106000	139.83	5	83	1.067
10-09-2013 19:22	Running	118000	144.13	6	86	1
10-09-2013 20:22	Running	104000	141.98	7	84	1.067
10-09-2013 21:22	Running	104000	144.13	8	84	1.067
10-09-2013 22:22	Running	76000	144.13	8	83	1.267
10-09-2013 23:22	Running	48000	148.43	8	83	1.467
10-10-2013 00:22	Running	54000	154.89	6	85	1.4
10-10-2013 01:22	Running	42000	157.04	6	82	1.467
10-10-2013 02:21	Running	46000	157.04	7	80	1.467
10-10-2013 03:21	Running	44000	157.04	7	84	1.467
10-10-2013 04:21	Running	42000	157.04	7	84	1.533
10-10-2013 05:21	Running	40000	159.19	7	81	1.533
10-10-2013 06:21	Running	40000	159.19	7	81	1.533
10-10-2013 07:21	Running	36000	157.04	8	82	1.533
10-10-2013 08:21	Running	38000	157.04	8	81	1.533
10-10-2013 08:41	Shutdown	38000	19.36	0	81	1.6

SCFM - Standard Cubic Feet per Minute



TABLE 4C Lindrith Compressor Station MDPE Controller Data - Area 3						
Time Stamp	CPU Status	BTU/Hr (estimated)	Process Vacuum (Inches-H₂O)	Process Flow (SCFM)	ICE Air Flow (SCFM)	Propane Fuel Flow (SCFM)
10-10-2013 10:16	Calibration	38000	0	0	79	1.8
10-10-2013 10:45	Shutdown	4000	0	0	81	1.733
10-10-2013 11:07	Calibration	4000	0	0	80	1.8
10-10-2013 12:06	Running	2000	58.08	0	88	1.8
10-10-2013 13:06	Running	0	47.33	0	90	1.867
10-10-2013 14:06	Running	0	34.42	0	89	1.867
10-10-2013 14:37	Shutdown	0	0	0	81	1.8
10-10-2013 15:44	Calibration	0	0	0	79	1.8
10-10-2013 15:46	Shutdown	0	0	0	79	1.8
10-10-2013 15:56	Calibration	0	0	0	80	1.8
10-10-2013 16:20	Shutdown	0	0	0	80	1.867
10-10-2013 16:29	Calibration	0	0	0	79	1.8
10-10-2013 17:29	Running	0	30.12	3	89	1.867
10-10-2013 18:28	Running	0	38.72	2	89	1.8
10-10-2013 19:28	Running	0	47.33	3	88	1.8
10-10-2013 20:28	Running	0	64.54	4	86	1.867
10-10-2013 21:28	Running	0	47.33	3	88	1.867
10-10-2013 22:28	Running	0	45.18	3	88	1.867
10-10-2013 23:28	Running	0	70.99	11	90	1.933
10-11-2013 00:28	Running	0	62.38	6	86	1.867
10-11-2013 01:27	Running	0	60.23	6	84	1.933
10-11-2013 02:27	Running	0	62.38	6	84	1.933
10-11-2013 03:27	Running	0	105.41	15	81	2
10-11-2013 04:27	Running	0	66.69	7	84	1.933
10-11-2013 05:27	Running	0	68.84	8	83	1.933
10-11-2013 06:27	Running	0	81.75	11	79	1.933

SCFM - Standard Cubic Feet per Minute



TABLE 5A Lindrith Compressor Station Radius of Influence - MW-1R								
Time (10/7/14 - 10/7/14)	MW-1R (inches H ₂ O)	EP-43			EP-44 (inches H ₂ O)	EP-45		
		PSHL (ft)	WL (ft)	PSH Thickness (ft)		PSHL (ft)	WL (ft)	PSH Thickness (ft)
1840	MW-1R, MW-6, & MW-9							
1845	5	33.70	38.44	4.74	0.5 0.3 0.4 0.7 0.5 0.8	34.20	35.01	0.81
1915	4	33.70	38.45	4.75		34.20	35.02	0.82
1935	5	33.70	38.47	4.77		34.20	35.02	0.82
2020	8.5	33.71	38.49	4.78		34.22	35.04	0.82
2105	7	33.73	38.50	4.77		34.22	35.06	0.84
2135	10	33.74	38.53	4.79	0.8	34.22	35.06	0.84
2200	MW-1R & MW-9							
2240	12	33.76	38.56	4.80	1.0 0.8 1.0 1.0 1.0 1.1 1.1 1.2 1.1 1.2 1.2 1.1 0.8	34.22	35.06	0.84
2339	12	33.77	38.54	4.77		34.21	35.07	0.86
0040	14.5	33.78	38.53	4.75		34.21	35.05	0.84
0140	15	33.78	38.53	4.75		34.22	35.06	0.84
0240	15	33.78	38.53	4.75		34.22	35.06	0.84
0340	15.5	33.79	38.52	4.73		34.22	35.06	0.84
0440	16	33.80	38.51	4.71		34.22	35.06	0.84
0540	16	33.80	38.50	4.70		34.22	35.05	0.83
0640	15.5	33.80	38.50	4.70		34.22	35.05	0.83
0740	15	33.81	38.51	4.70		34.22	35.07	0.85
0840	15	33.83	38.51	4.68		34.22	35.07	0.85
0940	13.5	33.82	38.49	4.67		34.21	35.07	0.86
1040	10	33.82	38.46	4.64		34.22	35.06	0.84

Notes:

- 1) Distance between MW-1R and EP-43 is 6.75 FT
- 2) Distance between MW-1R and EP-44 is 10.8 FT
- 3) Distance between MW-1R and EP-45 is 16.25 FT
- 4) MW-1R: 150 FT hose length, MW-6: 150 FT hose length, MW-9: 350 FT hose length



TABLE 5B Lindrith Compressor Station Radius of Influence - MW-9								
Time (10/7/14 - 10/7/14)	MW-9 (inches H2O)	EP-46			EP-47 (inches H2O)	EP-48		
		PSHL (ft)	WL (ft)	PSH Thickness (ft)		PSHL (ft)	WL (ft)	PSH Thickness (ft)
1840	MW-1R, MW-6, & MW-9							
1900	12.5	30.32	32.62	2.30	0.6	29.81	32.21	2.40
1930	13	30.36	32.64	2.28		29.84	32.26	2.42
2015	12.5	30.39	32.68	2.29		29.85	32.29	2.44
2055	12.5	30.39	32.68	2.29	0.6	29.85	32.27	2.42
2200	MW-1R & MW-9							
2225	12	30.38	32.68	2.30	0.6	29.86	32.28	2.42
2245	10	30.40	32.71	2.31	0.4	29.90	32.36	2.46
2351	12	30.44	32.86	2.42	0.6	29.98	32.51	2.53
0050	12	30.47	32.96	2.49	0.6	30.01	32.57	2.56
0150	12	30.49	33.04	2.55	0.6	30.02	32.61	2.59
0250	12	30.51	33.06	2.55	0.6	30.02	32.63	2.61
0350	12	30.51	33.07	2.56	0.6	30.02	32.68	2.66
0450	12	30.51	33.11	2.60	0.6	30.03	32.70	2.67
0550	12	30.51	33.20	2.69	0.6	30.03	32.74	2.71
0650	13	30.52	33.24	2.72	0.7	30.02	32.76	2.74
0750	13.5	30.53	33.27	2.74	0.7	30.04	32.80	2.76
0850	12	30.54	33.32	2.78	0.6	30.04	32.84	2.80
0950	11	30.53	33.33	2.80	0.6	30.03	32.84	2.81
1050	13	30.55	33.32	2.77	0.7	30.03	32.85	2.82

Notes:

- 1) Distance between MW-9 and EP-46 is 6.25 FT
- 2) Distance between MW-9 and EP-47 is 11.4 FT
- 3) Distance between MW-9 and EP-48 is 15.8 FT
- 4) MW-1R: 150 FT hose length, MW-6: 150 FT hose length, MW-9: 350 FT hose length

APPENDIX C

Soil Boring/Monitoring Well Logs

**Apex TITAN, Inc.**606 S. Rio Grande, Suite A
Aztec, New Mexico 87410
Phone: (505) 334-5200www.apexcoss.com

A Subsidiary of Apex Companies, LLC

Client: Enterprise Field ServicesProject Name: Lindrith Compressor StationProject Location: Rio Arriba County, New MexicoProject Manager: Kyle Summers

BORING LOG NUMBER

EP-43Project # 7030410G006Date Sampled: April 23, 2013
Drilled by: Enviro-Drill
Driller: _____
Logged by: K. Summers
Sampler: K. SummersGround Surface Elevation: N/A
Top of Casing Elevation: -
North Coordinate: -
West Coordinate: -
Bench Mark Elevation: N/A
 At Completion
 At Well StabilizationBorehole Diameter: 8"
Casing Diameter: N/A
Well Materials: PVC
Surface Completion: Above Ground
Boring Method: Hollow Stem Augers

DEPTH (ft)	SAMPLE INTERVAL	SAMPLE ID	RECOVERY (%)	FID/IPID READING (ppm)	POTENTIAL- METERIC SURFACE	GEOLOGIC LOG SYMBOL	GEOLOGIC DESCRIPTION	BORING / WELL COMPLETION (GRAPHIC DEPICTION)
0							SILTY SAND: mod yellowish brown	<p>Grouted Casing</p> <p>Hydrated Bentonite Seal</p> <p>Flush threaded 2" ID Schedule 40 PVC casing</p> <p>Filter pack (20-40 clean silica sand)</p> <p>Flush threaded 1" ID Schedule 40 PVC with 0.010" machine slotted openings (24- 39 feet)</p>
5							SILTY SAND: moderate to pale yellowish brown	
10								
15							SANDY SILT: dark yellowish brown	
20							SILTY SAND: moderate yellowish brown	
22.0'							WEATHER SANDSTONE: pale to moderate yellowish brown	
24.0'							SANDSTONE: pale to moderate yellowish brown	
25								
30								
35								
40							TOTAL DEPTH OF BORING - 39.0 feet BGS	

**Apex TITAN, Inc.**

606 S. Rio Grande, Suite A
Aztec, New Mexico 87410
Phone: (505) 334-5200
www.apexcoss.com

A Subsidiary of Apex Companies, LLC

Client: Enterprise Field Services

Project Name: Lindrith Compressor Station

Project Location: Rio Arriba County, New Mexico

Project Manager: Kyle Summers

BORING LOG NUMBER

EP-44

Project # 7030410G006

Date Sampled: April 23, 2013
Drilled by: Enviro-Drill
Driller: _____
Logged by: K. Summers
Sampler: K. Summers

Ground Surface Elevation: N/A
Top of Casing Elevation: -
North Coordinate: -
West Coordinate: -
Bench Mark Elevation: N/A
At Completion
At Well Stabilization

Borehole Diameter: 8"
Casing Diameter: N/A
Well Materials: PVC
Surface Completion: Above Ground
Boring Method: Hollow Stem Augers

DEPTH (ft)	SAMPLE INTERVAL	SAMPLE ID	RECOVERY (%)	FID/IPID READING (ppm)	POTENTIAL- METERIC SURFACE	GEOLOGIC LOG SYMBOL	GEOLOGIC DESCRIPTION	BORING / WELL COMPLETION (GRAPHIC DEPICTION)
0							SILTY SAND: mod yellowish brown	<p>Grouted Casing</p> <p>Hydrated Bentonite Seal</p> <p>Flush threaded 2" ID Schedule 40 PVC casing</p> <p>Filter pack (20-40 clean silica sand)</p> <p>Flush threaded 1" ID Schedule 40 PVC with 0.010" machine slotted openings (24- 39 feet)</p>
5							SILTY SAND: moderate to pale yellowish brown	
10								
15							SANDY SILT: dark yellowish brown	
20							SILTY SAND: moderate yellowish brown	
22.0'							WEATHER SANDSTONE: pale to moderate yellowish brown	
24.0'							SANDSTONE: pale to moderate yellowish brown	
25								
30								
35								
40							TOTAL DEPTH OF BORING - 39.0 feet BGS	

**Apex TITAN, Inc.**606 S. Rio Grande, Suite A
Aztec, New Mexico 87410
Phone: (505) 334-5200www.apexcoss.com

A Subsidiary of Apex Companies, LLC

Client: Enterprise Field ServicesProject Name: Lindrith Compressor StationProject Location: Rio Arriba County, New MexicoProject Manager: Kyle Summers

BORING LOG NUMBER

EP-45Project # 7030410G006Date Sampled: April 23, 2013
Drilled by: Enviro-Drill
Driller: _____
Logged by: K. Summers
Sampler: K. SummersGround Surface Elevation: N/A
Top of Casing Elevation: -
North Coordinate: -
West Coordinate: -
Bench Mark Elevation: N/A
At Completion
At Well StabilizationBorehole Diameter: 8"
Casing Diameter: N/A
Well Materials: PVC
Surface Completion: Above Ground
Boring Method: Hollow Stem Augers

DEPTH (ft)	SAMPLE INTERVAL	SAMPLE ID	RECOVERY (%)	FID/IPID READING (ppm)	POTENTIAL- METERIC SURFACE	GEOLOGIC LOG SYMBOL	GEOLOGIC DESCRIPTION	BORING / WELL COMPLETION (GRAPHIC DEPICTION)
0							SILTY SAND: mod yellowish brown	<p>Grouted Casing</p> <p>Hydrated Bentonite Seal</p> <p>Flush threaded 2" ID Schedule 40 PVC casing</p> <p>Filter pack (20-40 clean silica sand)</p> <p>Flush threaded 1" ID Schedule 40 PVC with 0.010" machine slotted openings (24- 39 feet)</p>
5							SILTY SAND: moderate to pale yellowish brown	
10								
15							SANDY SILT: dark yellowish brown	
20							SILTY SAND: moderate yellowish brown	
22.0'							WEATHER SANDSTONE: pale to moderate yellowish brown	
24.0'							SANDSTONE: pale to moderate yellowish brown	
25								
30								
35								
40							TOTAL DEPTH OF BORING - 39.0 feet BGS	

**Apex TITAN, Inc.**

606 S. Rio Grande, Suite A
Aztec, New Mexico 87410
Phone: (505) 334-5200
www.apexcscos.com

A Subsidiary of Apex Companies, LLC

Client: Enterprise Field Services

Project Name: Lindrith Compressor Station

Project Location: Rio Arriba County, New Mexico

Project Manager: Kyle Summers

BORING LOG NUMBER

EP-46

Project # 7030410G006

Date Sampled: April 23, 2013
Drilled by: Enviro-Drill
Driller: _____
Logged by: K. Summers
Sampler: K. Summers

Ground Surface Elevation: N/A
Top of Casing Elevation: -
North Coordinate: -
West Coordinate: -
Bench Mark Elevation: N/A
At Completion
At Well Stabilization

Borehole Diameter: 8"
Casing Diameter: N/A
Well Materials: PVC
Surface Completion: Above Ground
Boring Method: Hollow Stem Augers

DEPTH (ft)	SAMPLE INTERVAL	SAMPLE ID	RECOVERY (%)	FID/PID READING (ppm)	POTENTIAL METRIC SURFACE	GEOLOGIC LOG SYMBOL	GEOLOGIC DESCRIPTION	BORING / WELL COMPLETION (GRAPHIC DEPICTION)
0							SAND SILT: moderate yellowish brown to moderate brown	
5							SILTY SAND: pale to moderate yellowish brown, very fine grained, loose, increasing firmness with depth	
10								
15							SAND: pale yellowish brown, very fine to fine grained	
20							SILTY SAND: moderate yellowish brown	
22.0'							SAND/SANDSTONE: pale to dark yellowish orange	
25							SHALEY SANDSTONE: dark yellowish brown to olive gray	
30							SHALEY SANDSTONE: dark yellowish brown	
35							SANDSTONE: moderate yellowish brown	
40							TOTAL DEPTH OF BORING - 37.0 feet BGS	

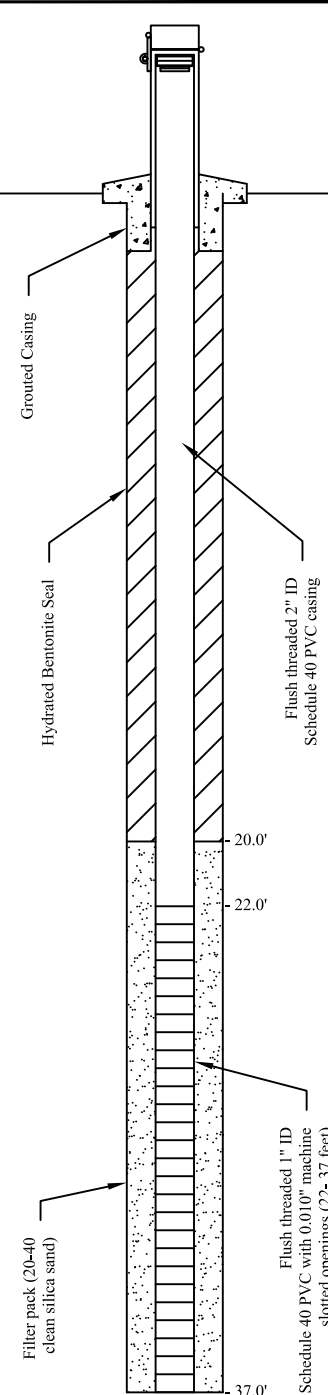
**Apex TITAN, Inc.**606 S. Rio Grande, Suite A
Aztec, New Mexico 87410
Phone: (505) 334-5200www.apexcscs.com

A Subsidiary of Apex Companies, LLC

Client: Enterprise Field ServicesProject Name: Lindrith Compressor StationProject Location: Rio Arriba County, New MexicoProject Manager: Kyle Summers

BORING LOG NUMBER

EP-47Project # 7030410G006Date Sampled: April 23, 2013
Drilled by: Enviro-Drill
Driller: _____
Logged by: K. Summers
Sampler: K. SummersGround Surface Elevation: N/A
Top of Casing Elevation: -
North Coordinate: -
West Coordinate: -
Bench Mark Elevation: N/A
At Completion
At Well StabilizationBorehole Diameter: 8"
Casing Diameter: N/A
Well Materials: PVC
Surface Completion: Above Ground
Boring Method: Hollow Stem Augers

DEPTH (ft)	SAMPLE INTERVAL	SAMPLE ID	RECOVERY (%)	FID/PID READING (ppm)	POTENTIAL METRIC SURFACE	GEOLOGIC LOG SYMBOL	GEOLOGIC DESCRIPTION	BORING / WELL COMPLETION (GRAPHIC DEPICTION)
0							SAND SILT: moderate yellowish brown to moderate brown	
5							SILTY SAND: pale to moderate yellowish brown, very fine grained, loose, increasing firmness with depth	
10								
15							SAND: pale yellowish brown, very fine to fine grained	
20							SILTY SAND: moderate yellowish brown	
22.0'							SAND/SANDSTONE: pale to dark yellowish orange	
25							SHALEY SANDSTONE: dark yellowish brown to olive gray	
30							SHALEY SANDSTONE: dark yellowish brown	
35							SANDSTONE: moderate yellowish brown	
40							TOTAL DEPTH OF BORING - 37.0 feet BGS	

**Apex TITAN, Inc.**606 S. Rio Grande, Suite A
Aztec, New Mexico 87410
Phone: (505) 334-5200www.apexcos.com

A Subsidiary of Apex Companies, LLC

Client: Enterprise Field ServicesProject Name: Lindrith Compressor StationProject Location: Rio Arriba County, New MexicoProject Manager: Kyle Summers

BORING LOG NUMBER

EP-48Project # 7030410G006Date Sampled: April 23-24, 2013Drilled by: Enviro-Drill

Driller: _____

Logged by: K. SummersSampler: K. SummersGround Surface Elevation: N/ATop of Casing Elevation: -North Coordinate: -West Coordinate: -Bench Mark Elevation: N/A

At Completion

At Well Stabilization

Borehole Diameter: 8"Casing Diameter: N/AWell Materials: PVCSurface Completion: Above GroundBoring Method: Hollow Stem Augers

DEPTH (ft)	SAMPLE INTERVAL	SAMPLE ID	RECOVERY (%)	FID/PID READING (ppm)	POTENTIAL METRIC SURFACE	GEOLOGIC LOG SYMBOL	GEOLOGIC DESCRIPTION	BORING / WELL COMPLETION (GRAPHIC DEPICTION)
0							SAND SILT: moderate yellowish brown to moderate brown	
5							SILTY SAND: pale to moderate yellowish brown, very fine grained, loose, increasing firmness with depth	
10								
15							SAND: pale yellowish brown, very fine to fine grained	
20							SILTY SAND: moderate yellowish brown	
21.0'							SAND/SANDSTONE: pale to dark yellowish orange	
25							SHALEY SANDSTONE: dark yellowish brown to olive gray	
30							SHALEY SANDSTONE: dark yellowish brown	
36.0'							SANDSTONE: moderate yellowish brown	
40							TOTAL DEPTH OF BORING - 36.0 feet BGS	

**Apex TITAN, Inc.**606 S. Rio Grande, Suite A
Aztec, New Mexico 87410
Phone: (505) 334-5200www.apexcscos.com

A Subsidiary of Apex Companies, LLC

Client: Enterprise Field ServicesProject Name: Lindrith Compressor StationProject Location: Rio Arriba County, New MexicoProject Manager: Kyle Summers

BORING LOG NUMBER

MW-49Project # 7030410G006Date Sampled: April 24, 2013
Drilled by: Enviro-Drill
Driller: _____
Logged by: K. Summers
Sampler: K. SummersGround Surface Elevation: N/A
Top of Casing Elevation: 6486.04
North Coordinate: -
West Coordinate: -
Bench Mark Elevation: N/A
At Completion
At Well StabilizationBorehole Diameter: 8"
Casing Diameter: 4"
Well Materials: PVC
Surface Completion: Above Ground
Boring Method: Hollow Stem Augers

DEPTH (ft)	SAMPLE INTERVAL	SAMPLE ID	RECOVERY (%)	FID/PID READING (ppm)	POTENTIAL METRIC SURFACE	GEOLOGIC LOG SYMBOL	GEOLOGIC DESCRIPTION	BORING / WELL COMPLETION (GRAPHIC DEPICTION)
0				1			SILTY SAND: mod yellowish brown, dry, no odor	<p>Grouted Casing</p> <p>Hydrated Bentonite Seal</p> <p>Flush threaded 2" ID Schedule 40 PVC casing</p> <p>20.0'</p> <p>22.0'</p> <p>Filter pack (20-40 clean silica sand)</p> <p>Flush threaded 1" ID Schedule 40 PVC with 0.010" machine slotted openings (22- 37 feet)</p> <p>37.0'</p>
				1				
				0			SILTY SAND: inter bedded silts and very fine sands, dry, no odor	
				NR				
				NR				
				0				
				0				
				NR				
				NR				
				NR				
				0				
				0				
				NR				
				NR				
				NR				
				0				
				0				
				0				
				NR				
				1				
				1			SILTY SAND: mod yellowish brown, dry to wet, no odor	
				1				
				1				
				1				
				1				
				2				
				2				
				2			-possible staining	
				23				
				8				
				1				
				0			-possible staining	
				1				
				NR				
				0				
				0				
TOTAL DEPTH OF BORING - 37.0 feet BGS								



Project Manager: Kyle Summers

Project # 7030410G006

Sampler:	K. Summers
----------	------------

At Well Stabilization

Boring Method: Hollow Stem Augers

Z:\Houston South\Drafting\New Mexico 04\2010\7030410G006\logs\Boring Logs.dwg 10/08/14

APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation



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

July 05, 2013

Kyle Summers

Southwest Geoscience
606 S. Rio Grande Unit A
Aztec, NM 87410
TEL: (903) 821-5603
FAX (214) 350-2914

RE: Lindrith CS

OrderNo.: 1306B71

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 19 sample(s) on 6/27/2013 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 www.hallenvironmental.com 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,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306B71

Date Reported: 7/5/2013

CLIENT: Southwest Geoscience

Client Sample ID: MW-5

Project: Lindrith CS

Collection Date: 6/25/2013 8:35:00 AM

Lab ID: 1306B71-001

Matrix: AQUEOUS

Received Date: 6/27/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	1.1	1.0		mg/L	1	6/27/2013 7:48:01 PM	8135
Surr: DNOP	133	75.4-146		%REC	1	6/27/2013 7:48:01 PM	8135
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.28	0.25		mg/L	5	6/27/2013 7:44:51 PM	R11626
Surr: BFB	97.4	51.5-151		%REC	5	6/27/2013 7:44:51 PM	R11626
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	5.0		µg/L	5	6/27/2013 7:44:51 PM	R11626
Toluene	ND	5.0		µg/L	5	6/27/2013 7:44:51 PM	R11626
Ethylbenzene	ND	5.0		µg/L	5	6/27/2013 7:44:51 PM	R11626
Xylenes, Total	ND	10		µg/L	5	6/27/2013 7:44:51 PM	R11626
Surr: 4-Bromofluorobenzene	98.5	69.4-129		%REC	5	6/27/2013 7:44:51 PM	R11626

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 1 of 24

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306B71

Date Reported: 7/5/2013

CLIENT: Southwest Geoscience

Client Sample ID: MW-4

Project: Lindrith CS

Collection Date: 6/25/2013 9:10:00 AM

Lab ID: 1306B71-002

Matrix: AQUEOUS

Received Date: 6/27/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	1.2	1.0		mg/L	1	6/27/2013 8:10:04 PM	8135
Surr: DNOP	125	75.4-146		%REC	1	6/27/2013 8:10:04 PM	8135
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	34	2.5		mg/L	50	6/27/2013 8:13:34 PM	R11626
Surr: BFB	96.9	51.5-151		%REC	50	6/27/2013 8:13:34 PM	R11626
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	4300	50		µg/L	50	6/27/2013 8:13:34 PM	R11626
Toluene	1800	50		µg/L	50	6/27/2013 8:13:34 PM	R11626
Ethylbenzene	250	50		µg/L	50	6/27/2013 8:13:34 PM	R11626
Xylenes, Total	1700	100		µg/L	50	6/27/2013 8:13:34 PM	R11626
Surr: 4-Bromofluorobenzene	104	69.4-129		%REC	50	6/27/2013 8:13:34 PM	R11626

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 2 of 24

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306B71

Date Reported: 7/5/2013

CLIENT: Southwest Geoscience

Client Sample ID: MW-38

Project: Lindrith CS

Collection Date: 6/25/2013 9:45:00 AM

Lab ID: 1306B71-003

Matrix: AQUEOUS

Received Date: 6/27/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	1.1	1.0		mg/L	1	6/27/2013 8:32:15 PM	8135
Surr: DNOP	124	75.4-146		%REC	1	6/27/2013 8:32:15 PM	8135
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	17	2.5		mg/L	50	6/28/2013 12:31:04 AM	R11626
Surr: BFB	93.7	51.5-151		%REC	50	6/28/2013 12:31:04 AM	R11626
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	1200	50		µg/L	50	6/28/2013 12:31:04 AM	R11626
Toluene	62	50		µg/L	50	6/28/2013 12:31:04 AM	R11626
Ethylbenzene	170	50		µg/L	50	6/28/2013 12:31:04 AM	R11626
Xylenes, Total	800	100		µg/L	50	6/28/2013 12:31:04 AM	R11626
Surr: 4-Bromofluorobenzene	98.0	69.4-129		%REC	50	6/28/2013 12:31:04 AM	R11626

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 3 of 24

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306B71

Date Reported: 7/5/2013

CLIENT: Southwest Geoscience

Client Sample ID: MW-36

Project: Lindrith CS

Collection Date: 6/25/2013 10:25:00 AM

Lab ID: 1306B71-004

Matrix: AQUEOUS

Received Date: 6/27/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/27/2013 8:54:13 PM	8135
Surr: DNOP	124	75.4-146		%REC	1	6/27/2013 8:54:13 PM	8135
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.065	0.050		mg/L	1	6/28/2013 12:59:43 AM	R11626
Surr: BFB	91.0	51.5-151		%REC	1	6/28/2013 12:59:43 AM	R11626
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	6/28/2013 12:59:43 AM	R11626
Toluene	ND	1.0		µg/L	1	6/28/2013 12:59:43 AM	R11626
Ethylbenzene	ND	1.0		µg/L	1	6/28/2013 12:59:43 AM	R11626
Xylenes, Total	ND	2.0		µg/L	1	6/28/2013 12:59:43 AM	R11626
Surr: 4-Bromofluorobenzene	95.3	69.4-129		%REC	1	6/28/2013 12:59:43 AM	R11626

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 4 of 24

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306B71

Date Reported: 7/5/2013

CLIENT: Southwest Geoscience

Client Sample ID: MW-7

Project: Lindrith CS

Collection Date: 6/25/2013 11:00:00 AM

Lab ID: 1306B71-005

Matrix: AQUEOUS

Received Date: 6/27/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/27/2013 9:16:17 PM	8135
Surr: DNOP	124	75.4-146		%REC	1	6/27/2013 9:16:17 PM	8135
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.25	0.050		mg/L	1	6/28/2013 1:28:20 AM	R11626
Surr: BFB	101	51.5-151		%REC	1	6/28/2013 1:28:20 AM	R11626
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	4.1	1.0		µg/L	1	6/28/2013 1:28:20 AM	R11626
Toluene	ND	1.0		µg/L	1	6/28/2013 1:28:20 AM	R11626
Ethylbenzene	1.2	1.0		µg/L	1	6/28/2013 1:28:20 AM	R11626
Xylenes, Total	2.8	2.0		µg/L	1	6/28/2013 1:28:20 AM	R11626
Surr: 4-Bromofluorobenzene	97.6	69.4-129		%REC	1	6/28/2013 1:28:20 AM	R11626

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 5 of 24

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306B71

Date Reported: 7/5/2013

CLIENT: Southwest Geoscience

Client Sample ID: MW-2

Project: Lindrith CS

Collection Date: 6/25/2013 11:35:00 AM

Lab ID: 1306B71-006

Matrix: AQUEOUS

Received Date: 6/27/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/27/2013 10:00:09 PM	8135
Surr: DNOP	133	75.4-146		%REC	1	6/27/2013 10:00:09 PM	8135
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	24	1.0		mg/L	20	6/28/2013 1:56:55 AM	R11626
Surr: BFB	96.7	51.5-151		%REC	20	6/28/2013 1:56:55 AM	R11626
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	2700	100		µg/L	100	7/1/2013 1:55:39 PM	R11689
Toluene	ND	20		µg/L	20	6/28/2013 1:56:55 AM	R11626
Ethylbenzene	110	20		µg/L	20	6/28/2013 1:56:55 AM	R11626
Xylenes, Total	1100	40		µg/L	20	6/28/2013 1:56:55 AM	R11626
Surr: 4-Bromofluorobenzene	104	69.4-129		%REC	20	6/28/2013 1:56:55 AM	R11626

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 6 of 24

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306B71

Date Reported: 7/5/2013

CLIENT: Southwest Geoscience

Client Sample ID: MW-40

Project: Lindrith CS

Collection Date: 6/25/2013 12:35:00 PM

Lab ID: 1306B71-007

Matrix: AQUEOUS

Received Date: 6/27/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/27/2013 10:21:58 PM	8135
Surr: DNOP	131	75.4-146		%REC	1	6/27/2013 10:21:58 PM	8135
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.45	0.050		mg/L	1	6/28/2013 2:25:28 AM	R11626
Surr: BFB	98.8	51.5-151		%REC	1	6/28/2013 2:25:28 AM	R11626
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	2.3	1.0		µg/L	1	6/28/2013 2:25:28 AM	R11626
Toluene	ND	1.0		µg/L	1	6/28/2013 2:25:28 AM	R11626
Ethylbenzene	ND	1.0		µg/L	1	6/28/2013 2:25:28 AM	R11626
Xylenes, Total	ND	2.0		µg/L	1	6/28/2013 2:25:28 AM	R11626
Surr: 4-Bromofluorobenzene	98.5	69.4-129		%REC	1	6/28/2013 2:25:28 AM	R11626

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 7 of 24

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306B71

Date Reported: 7/5/2013

CLIENT: Southwest Geoscience

Client Sample ID: MW-31

Project: Lindrith CS

Collection Date: 6/25/2013 1:30:00 PM

Lab ID: 1306B71-008

Matrix: AQUEOUS

Received Date: 6/27/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/27/2013 10:43:55 PM	8135
Surr: DNOP	142	75.4-146		%REC	1	6/27/2013 10:43:55 PM	8135
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/28/2013 2:54:02 AM	R11626
Surr: BFB	91.7	51.5-151		%REC	1	6/28/2013 2:54:02 AM	R11626
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	6/28/2013 2:54:02 AM	R11626
Toluene	ND	1.0		µg/L	1	6/28/2013 2:54:02 AM	R11626
Ethylbenzene	ND	1.0		µg/L	1	6/28/2013 2:54:02 AM	R11626
Xylenes, Total	ND	2.0		µg/L	1	6/28/2013 2:54:02 AM	R11626
Surr: 4-Bromofluorobenzene	97.1	69.4-129		%REC	1	6/28/2013 2:54:02 AM	R11626

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 8 of 24

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306B71

Date Reported: 7/5/2013

CLIENT: Southwest Geoscience

Client Sample ID: MW-33

Project: Lindrith CS

Collection Date: 6/25/2013 2:25:00 PM

Lab ID: 1306B71-009

Matrix: AQUEOUS

Received Date: 6/27/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/27/2013 11:05:46 PM	8135
Surr: DNOP	135	75.4-146		%REC	1	6/27/2013 11:05:46 PM	8135
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/28/2013 3:22:34 AM	R11626
Surr: BFB	90.3	51.5-151		%REC	1	6/28/2013 3:22:34 AM	R11626
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	6/28/2013 3:22:34 AM	R11626
Toluene	ND	1.0		µg/L	1	6/28/2013 3:22:34 AM	R11626
Ethylbenzene	ND	1.0		µg/L	1	6/28/2013 3:22:34 AM	R11626
Xylenes, Total	ND	2.0		µg/L	1	6/28/2013 3:22:34 AM	R11626
Surr: 4-Bromofluorobenzene	95.2	69.4-129		%REC	1	6/28/2013 3:22:34 AM	R11626

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 9 of 24

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1306B71**

Date Reported: **7/5/2013**

CLIENT: Southwest Geoscience

Client Sample ID: MW-8

Project: Lindrith CS

Collection Date: 6/25/2013 3:00:00 PM

Lab ID: 1306B71-010

Matrix: AQUEOUS

Received Date: 6/27/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/27/2013 11:27:40 PM	8135
Surr: DNOP	145	75.4-146		%REC	1	6/27/2013 11:27:40 PM	8135
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/28/2013 3:51:11 AM	R11626
Surr: BFB	93.3	51.5-151		%REC	1	6/28/2013 3:51:11 AM	R11626
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	6/28/2013 3:51:11 AM	R11626
Toluene	ND	1.0		µg/L	1	6/28/2013 3:51:11 AM	R11626
Ethylbenzene	ND	1.0		µg/L	1	6/28/2013 3:51:11 AM	R11626
Xylenes, Total	ND	2.0		µg/L	1	6/28/2013 3:51:11 AM	R11626
Surr: 4-Bromofluorobenzene	97.8	69.4-129		%REC	1	6/28/2013 3:51:11 AM	R11626

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 10 of 24

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306B71

Date Reported: 7/5/2013

CLIENT: Southwest Geoscience

Client Sample ID: MW-3

Project: Lindrith CS

Collection Date: 6/25/2013 3:35:00 PM

Lab ID: 1306B71-011

Matrix: AQUEOUS

Received Date: 6/27/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/27/2013 11:49:33 PM	8135
Surr: DNOP	152	75.4-146	S	%REC	1	6/27/2013 11:49:33 PM	8135
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.78	0.25		mg/L	5	6/28/2013 4:19:46 AM	R11626
Surr: BFB	95.2	51.5-151		%REC	5	6/28/2013 4:19:46 AM	R11626
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	76	5.0		µg/L	5	6/28/2013 4:19:46 AM	R11626
Toluene	ND	5.0		µg/L	5	6/28/2013 4:19:46 AM	R11626
Ethylbenzene	46	5.0		µg/L	5	6/28/2013 4:19:46 AM	R11626
Xylenes, Total	16	10		µg/L	5	6/28/2013 4:19:46 AM	R11626
Surr: 4-Bromofluorobenzene	97.5	69.4-129		%REC	5	6/28/2013 4:19:46 AM	R11626

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 11 of 24

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306B71

Date Reported: 7/5/2013

CLIENT: Southwest Geoscience

Client Sample ID: MW-10

Project: Lindrith CS

Collection Date: 6/25/2013 4:15:00 PM

Lab ID: 1306B71-012

Matrix: AQUEOUS

Received Date: 6/27/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/28/2013 12:11:27 AM	8135
Surr: DNOP	120	75.4-146		%REC	1	6/28/2013 12:11:27 AM	8135
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/1/2013 2:24:18 PM	R11689
Surr: BFB	92.5	51.5-151		%REC	1	7/1/2013 2:24:18 PM	R11689
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	7/1/2013 2:24:18 PM	R11689
Toluene	ND	1.0		µg/L	1	7/1/2013 2:24:18 PM	R11689
Ethylbenzene	ND	1.0		µg/L	1	7/1/2013 2:24:18 PM	R11689
Xylenes, Total	ND	2.0		µg/L	1	7/1/2013 2:24:18 PM	R11689
Surr: 4-Bromofluorobenzene	95.9	69.4-129		%REC	1	7/1/2013 2:24:18 PM	R11689

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 12 of 24

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306B71

Date Reported: 7/5/2013

CLIENT: Southwest Geoscience

Client Sample ID: MW-42

Project: Lindrith CS

Collection Date: 6/26/2013 8:55:00 AM

Lab ID: 1306B71-013

Matrix: AQUEOUS

Received Date: 6/27/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/28/2013 12:54:58 AM	8135
Surr: DNOP	114	75.4-146		%REC	1	6/28/2013 12:54:58 AM	8135
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/1/2013 2:53:00 PM	R11689
Surr: BFB	94.7	51.5-151		%REC	1	7/1/2013 2:53:00 PM	R11689
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	7/1/2013 2:53:00 PM	R11689
Toluene	ND	1.0		µg/L	1	7/1/2013 2:53:00 PM	R11689
Ethylbenzene	ND	1.0		µg/L	1	7/1/2013 2:53:00 PM	R11689
Xylenes, Total	ND	2.0		µg/L	1	7/1/2013 2:53:00 PM	R11689
Surr: 4-Bromofluorobenzene	95.9	69.4-129		%REC	1	7/1/2013 2:53:00 PM	R11689

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 13 of 24

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306B71

Date Reported: 7/5/2013

CLIENT: Southwest Geoscience

Client Sample ID: MW-34

Project: Lindrith CS

Collection Date: 6/26/2013 9:40:00 AM

Lab ID: 1306B71-014

Matrix: AQUEOUS

Received Date: 6/27/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/28/2013 1:16:42 AM	8135
Surr: DNOP	120	75.4-146		%REC	1	6/28/2013 1:16:42 AM	8135
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/1/2013 3:21:43 PM	R11689
Surr: BFB	92.1	51.5-151		%REC	1	7/1/2013 3:21:43 PM	R11689
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	7/1/2013 3:21:43 PM	R11689
Toluene	ND	1.0		µg/L	1	7/1/2013 3:21:43 PM	R11689
Ethylbenzene	ND	1.0		µg/L	1	7/1/2013 3:21:43 PM	R11689
Xylenes, Total	ND	2.0		µg/L	1	7/1/2013 3:21:43 PM	R11689
Surr: 4-Bromofluorobenzene	95.3	69.4-129		%REC	1	7/1/2013 3:21:43 PM	R11689

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 14 of 24

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306B71

Date Reported: 7/5/2013

CLIENT: Southwest Geoscience

Client Sample ID: MW-11

Project: Lindrith CS

Collection Date: 6/26/2013 10:15:00 AM

Lab ID: 1306B71-015

Matrix: AQUEOUS

Received Date: 6/27/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/28/2013 1:38:38 AM	8135
Surr: DNOP	121	75.4-146		%REC	1	6/28/2013 1:38:38 AM	8135
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/1/2013 4:47:44 PM	R11689
Surr: BFB	93.4	51.5-151		%REC	1	7/1/2013 4:47:44 PM	R11689
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	7/1/2013 4:47:44 PM	R11689
Toluene	ND	1.0		µg/L	1	7/1/2013 4:47:44 PM	R11689
Ethylbenzene	ND	1.0		µg/L	1	7/1/2013 4:47:44 PM	R11689
Xylenes, Total	ND	2.0		µg/L	1	7/1/2013 4:47:44 PM	R11689
Surr: 4-Bromofluorobenzene	97.0	69.4-129		%REC	1	7/1/2013 4:47:44 PM	R11689

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 15 of 24

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306B71

Date Reported: 7/5/2013

CLIENT: Southwest Geoscience

Client Sample ID: MW-12

Project: Lindrith CS

Collection Date: 6/26/2013 10:45:00 AM

Lab ID: 1306B71-016

Matrix: AQUEOUS

Received Date: 6/27/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/28/2013 2:00:19 AM	8135
Surr: DNOP	120	75.4-146		%REC	1	6/28/2013 2:00:19 AM	8135
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.41	0.050		mg/L	1	7/1/2013 5:16:17 PM	R11689
Surr: BFB	113	51.5-151		%REC	1	7/1/2013 5:16:17 PM	R11689
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	71	1.0		µg/L	1	7/1/2013 5:16:17 PM	R11689
Toluene	ND	1.0		µg/L	1	7/1/2013 5:16:17 PM	R11689
Ethylbenzene	5.8	1.0		µg/L	1	7/1/2013 5:16:17 PM	R11689
Xylenes, Total	10	2.0		µg/L	1	7/1/2013 5:16:17 PM	R11689
Surr: 4-Bromofluorobenzene	101	69.4-129		%REC	1	7/1/2013 5:16:17 PM	R11689

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 16 of 24

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306B71

Date Reported: 7/5/2013

CLIENT: Southwest Geoscience

Client Sample ID: MW-35

Project: Lindrith CS

Collection Date: 6/26/2013 11:20:00 AM

Lab ID: 1306B71-017

Matrix: AQUEOUS

Received Date: 6/27/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/28/2013 2:22:08 AM	8135
Surr: DNOP	122	75.4-146		%REC	1	6/28/2013 2:22:08 AM	8135
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/1/2013 5:44:59 PM	R11689
Surr: BFB	93.1	51.5-151		%REC	1	7/1/2013 5:44:59 PM	R11689
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	7/1/2013 5:44:59 PM	R11689
Toluene	ND	1.0		µg/L	1	7/1/2013 5:44:59 PM	R11689
Ethylbenzene	ND	1.0		µg/L	1	7/1/2013 5:44:59 PM	R11689
Xylenes, Total	ND	2.0		µg/L	1	7/1/2013 5:44:59 PM	R11689
Surr: 4-Bromofluorobenzene	96.6	69.4-129		%REC	1	7/1/2013 5:44:59 PM	R11689

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 17 of 24

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306B71

Date Reported: 7/5/2013

CLIENT: Southwest Geoscience

Client Sample ID: MW-49

Project: Lindrith CS

Collection Date: 6/26/2013 11:50:00 AM

Lab ID: 1306B71-018

Matrix: AQUEOUS

Received Date: 6/27/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/28/2013 2:43:52 AM	8135
Surr: DNOP	124	75.4-146		%REC	1	6/28/2013 2:43:52 AM	8135
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	8.8	0.50		mg/L	10	7/2/2013 5:42:50 PM	R11718
Surr: BFB	108	51.5-151		%REC	10	7/2/2013 5:42:50 PM	R11718
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	2200	50		µg/L	50	7/2/2013 5:14:10 PM	R11718
Toluene	ND	10		µg/L	10	7/2/2013 5:42:50 PM	R11718
Ethylbenzene	210	10		µg/L	10	7/2/2013 5:42:50 PM	R11718
Xylenes, Total	810	20		µg/L	10	7/2/2013 5:42:50 PM	R11718
Surr: 4-Bromofluorobenzene	110	69.4-129		%REC	10	7/2/2013 5:42:50 PM	R11718

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 18 of 24

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306B71

Date Reported: 7/5/2013

CLIENT: Southwest Geoscience

Client Sample ID: MW-41

Project: Lindrith CS

Collection Date: 6/26/2013 12:25:00 PM

Lab ID: 1306B71-019

Matrix: AQUEOUS

Received Date: 6/27/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	1.2	1.0		mg/L	1	6/28/2013 10:07:51 AM	8135
Surr: DNOP	145	75.4-146		%REC	1	6/28/2013 10:07:51 AM	8135
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/2/2013 2:05:29 PM	R11718
Surr: BFB	94.2	51.5-151		%REC	1	7/2/2013 2:05:29 PM	R11718
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	2.0	1.0		µg/L	1	7/2/2013 2:05:29 PM	R11718
Toluene	ND	1.0		µg/L	1	7/2/2013 2:05:29 PM	R11718
Ethylbenzene	ND	1.0		µg/L	1	7/2/2013 2:05:29 PM	R11718
Xylenes, Total	ND	2.0		µg/L	1	7/2/2013 2:05:29 PM	R11718
Surr: 4-Bromofluorobenzene	98.5	69.4-129		%REC	1	7/2/2013 2:05:29 PM	R11718

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 19 of 24

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1306B71

05-Jul-13

Client: Southwest Geoscience

Project: Lindrith CS

Sample ID	MB-8135		SampType: MBLK		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	PBW		Batch ID: 8135		RunNo: 11587					
Prep Date:	6/27/2013		Analysis Date: 6/27/2013		SeqNo: 329609		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Surr: DNOP	1.2		1.000		116	75.4	146			

Sample ID	LCS-8135		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	LCSW		Batch ID: 8135		RunNo: 11587					
Prep Date:	6/27/2013		Analysis Date: 6/27/2013		SeqNo: 329610		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.9	1.0	5.000	0	98.1	89.1	151			
Surr: DNOP	0.57		0.5000		113	75.4	146			

Sample ID	LCSD-8135		SampType: LCSD		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	LCSS02		Batch ID: 8135		RunNo: 11587					
Prep Date:	6/27/2013		Analysis Date: 6/27/2013		SeqNo: 329611		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.8	1.0	5.000	0	95.9	89.1	151	2.34	20	
Surr: DNOP	0.57		0.5000		114	75.4	146	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1306B71

05-Jul-13

Client: Southwest Geoscience

Project: Lindrith CS

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID:	R11626	RunNo:	11626					
Prep Date:		Analysis Date:	6/27/2013	SeqNo:	329725	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		91.4	51.5	151			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	R11626	RunNo:	11626					
Prep Date:		Analysis Date:	6/27/2013	SeqNo:	329727	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.50	0.050	0.5000	0	101	73.2	124			
Surr: BFB	20		20.00		99.0	51.5	151			

Sample ID	1306B71-002AMS	SampType:	MS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	MW-4	Batch ID:	R11626	RunNo:	11626					
Prep Date:		Analysis Date:	6/27/2013	SeqNo:	329748	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	58	2.5	25.00	33.92	94.3	65.2	137			
Surr: BFB	1000		1000		102	51.5	151			

Sample ID	1306B71-002AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	MW-4	Batch ID:	R11626	RunNo:	11626					
Prep Date:		Analysis Date:	6/27/2013	SeqNo:	329750	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	55	2.5	25.00	33.92	82.4	65.2	137	5.32	20	
Surr: BFB	1000		1000		105	51.5	151	0	0	

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID:	R11689	RunNo:	11689					
Prep Date:		Analysis Date:	7/1/2013	SeqNo:	331709	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		92.3	51.5	151			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	R11689	RunNo:	11689					
Prep Date:		Analysis Date:	7/1/2013	SeqNo:	331710	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.51	0.050	0.5000	0	102	73.2	124			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1306B71

05-Jul-13

Client: Southwest Geoscience

Project: Lindrith CS

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	R11689	RunNo:	11689					
Prep Date:		Analysis Date:	7/1/2013	SeqNo:	331710	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	20		20.00		99.9	51.5	151			

Sample ID	1306B71-014AMS	SampType:	MS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	MW-34	Batch ID:	R11689	RunNo:	11689					
Prep Date:		Analysis Date:	7/1/2013	SeqNo:	331714	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.50	0.050	0.5000	0	99.4	65.2	137			
Surr: BFB	20		20.00		101	51.5	151			

Sample ID	1306B71-014AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	MW-34	Batch ID:	R11689	RunNo:	11689					
Prep Date:		Analysis Date:	7/1/2013	SeqNo:	331715	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.48	0.050	0.5000	0	95.4	65.2	137	4.06	20	
Surr: BFB	20		20.00		102	51.5	151	0	0	

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID:	R11718	RunNo:	11718					
Prep Date:		Analysis Date:	7/2/2013	SeqNo:	332806	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	19		20.00		93.9	51.5	151			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	R11718	RunNo:	11718					
Prep Date:		Analysis Date:	7/2/2013	SeqNo:	332807	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.51	0.050	0.5000	0	101	73.2	124			
Surr: BFB	20		20.00		101	51.5	151			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1306B71

05-Jul-13

Client: Southwest Geoscience

Project: Lindrith CS

Sample ID 5ML RB	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBW	Batch ID: R11626		RunNo: 11626							
Prep Date:	Analysis Date: 6/27/2013		SeqNo: 329768		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	2.0								
Surr: 4-Bromofluorobenzene	19		20.00		95.7	69.4	129			

Sample ID 100NG BTEX LCS	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSW	Batch ID: R11626		RunNo: 11626							
Prep Date:	Analysis Date: 6/27/2013		SeqNo: 329770		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	107	80	120			
Toluene	22	1.0	20.00	0	109	80	120			
Ethylbenzene	22	1.0	20.00	0	108	80	120			
Xylenes, Total	65	2.0	60.00	0	108	80	120			
Surr: 4-Bromofluorobenzene	20		20.00		101	69.4	129			

Sample ID 1306B71-003AMS	SampType: MS		TestCode: EPA Method 8021B: Volatiles							
Client ID: MW-38	Batch ID: R11626		RunNo: 11626							
Prep Date:	Analysis Date: 6/27/2013		SeqNo: 329780		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	2200	50	1000	1170	102	80	120			
Toluene	1100	50	1000	62.38	104	80	120			
Ethylbenzene	1200	50	1000	173.6	103	80	120			
Xylenes, Total	3800	100	3000	797.2	102	80	120			
Surr: 4-Bromofluorobenzene	1000		1000		103	69.4	129			

Sample ID 1306B71-003AMSD	SampType: MSD		TestCode: EPA Method 8021B: Volatiles							
Client ID: MW-38	Batch ID: R11626		RunNo: 11626							
Prep Date:	Analysis Date: 6/27/2013		SeqNo: 329785		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	2100	50	1000	1170	96.1	80	120	2.61	20	
Toluene	1100	50	1000	62.38	99.7	80	120	3.52	20	
Ethylbenzene	1100	50	1000	173.6	97.5	80	120	4.34	20	
Xylenes, Total	3700	100	3000	797.2	97.7	80	120	3.19	20	
Surr: 4-Bromofluorobenzene	1000		1000		103	69.4	129	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
 E Value above quantitation range
 J Analyte detected below quantitation limits
 O RSD is greater than RSDlimit
 R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 P Sample pH greater than 2 for VOA and TOC only.
 RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1306B71

05-Jul-13

Client: Southwest Geoscience

Project: Lindrith CS

Sample ID	5ML RB	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles						
Client ID:	PBW	Batch ID: R11689		RunNo: 11689						
Prep Date:	Analysis Date: 7/1/2013		SeqNo: 331731		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	2.0								
Surr: 4-Bromofluorobenzene	19		20.00		96.4	69.4	129			

Sample ID	100NG BTEX LCS		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSW		Batch ID: R11689		RunNo: 11689					
Prep Date:			Analysis Date: 7/1/2013		SeqNo: 331732		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	80	120			
Toluene	20	1.0	20.00	0	102	80	120			
Ethylbenzene	20	1.0	20.00	0	99.8	80	120			
Xylenes, Total	61	2.0	60.00	0	101	80	120			
Surr: 4-Bromofluorobenzene	20		20.00		101	69.4	129			

Sample ID	5ML RB		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBW		Batch ID: R11718		RunNo: 11718					
Prep Date:			Analysis Date: 7/2/2013		SeqNo: 332833		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	2.0								
Surr: 4-Bromofluorobenzene	19		20.00		97.5	69.4	129			

Sample ID	100NG BTEX LCS		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSW		Batch ID: R11718		RunNo: 11718					
Prep Date:			Analysis Date: 7/2/2013		SeqNo: 332834		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.4	80	120			
Toluene	20	1.0	20.00	0	99.1	80	120			
Ethylbenzene	20	1.0	20.00	0	99.5	80	120			
Xylenes, Total	60	2.0	60.00	0	99.6	80	120			
Surr: 4-Bromofluorobenzene	20		20.00		102	69.4	129			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

Sample Log-In Check List

Client Name: Southwest Geoscience

Work Order Number: 1306B71

RcptNo: 1

Received by/date:

Logged By: Lindsay Mangin

6/27/2013 10:00:00 AM

Completed By: Lindsay Mangin

6/27/2013 12:55:27 PM

Reviewed By:

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☒ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.3	Good	Yes			

CHAIN OF CUSTODY RECORD

Southwest GEOSCIENCE Environmental & Hydrogeologic Consultants		Laboratory: <u>HALL</u> Address: <u>Albq</u> Contact: <u>Andy Freeman</u> Phone: _____		ANALYSIS REQUESTED		Lab use only Due Date: _____ Temp. of coolers when received (C°): <u>1.3</u>					
Office Location <u>Aztec, NM</u>		PO/ISO #: <u>0410006</u>		Page <u>1</u> of <u>2</u>							
Project Manager <u>Kyle Summers</u>		Sampler's Signature <u>Aaron Bentley</u>									
Proj. No. <u>0410006</u>		Project Name <u>Lincoln CS</u>		No/Type of Containers		Lab Sample ID (Lab Use Only)					
Matrix	Date	Time	Identifying Marks of Sample(s)	Start	End	VOA	A/G	250 ml	P/O		
W	6/25/13	0835	MW-5			5					
		0910	MW-4								
		0945	MW-38								
		1025	MW-36								
		1100	MW-7								
		1135	MW-2								
		1235	MW-40								
		1330	MW-31								
		1425	MW-33								
		1500	MW-8								
Turn around time <input checked="" type="checkbox"/> Normal <input type="checkbox"/> 25% Rush <input type="checkbox"/> 50% Rush <input type="checkbox"/> 100% Rush											
Relinquished by (Signature) <u>Aaron Bentley</u>		Date: <u>6/26/13</u> Time: <u>1553</u>		Received by: (Signature) <u>Charlie Walter</u>		Date: <u>6/26/13</u> Time: <u>1553</u>		NOTES:			
Relinquished by (Signature) <u>Walter Walter</u>		Date: <u>6/26/13</u> Time: <u>1757</u>		Received by: (Signature)		Date: <u>6/27/13</u> Time: <u>1100</u>					
Relinquished by (Signature)		Date: _____ Time: _____		Received by: (Signature)		Date: _____ Time: _____					
Relinquished by (Signature)		Date: _____ Time: _____		Received by: (Signature)		Date: _____ Time: _____					
Matrix Container	WW - Wastewater VOA - 40 ml vial		W - Water A/G - Amber / Or Glass 1 Liter		S - Soil SD - Solid 250 ml - Glass wide mouth		L - Liquid 250 ml - Glass wide mouth		C - Charcoal tube P/O - Plastic or other		
								SL - sludge		O - Oil	

CHAIN OF CUSTODY RECORD

Southwest GEO SCIENCE Environmental & Hydrogeologic Consultants				Laboratory: <u>HALL</u> Address: <u>Abq</u> Contact: <u>Andy Freeman</u> Phone: _____ PO/SO #: <u>0410006</u> Sampler's Signature: <u>Auton Bentley</u>				ANALYSIS REQUESTED <u>BTEX 8001 TPH GRC/DRC 8015</u>				Lab use only Due Date: _____ Temp. of coolers when received (C°): <u>1.3</u> 1 2 3 4 5 Page <u>2</u> of <u>2</u>			
Office Location <u>Aztec, NM</u> Project Manager <u>Kyle Summers</u> Sampler's Name _____		Project Name <u>Auton Bentley</u>		No/Type of Containers		Identifying Marks of Sample(s)		Start Depth End Depth VOA A/G 1 L. 250 ml		Lab Sample ID (Lab Use Only)					
Matrix	Date	Time	C o m p	G r a b	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 L.	250 ml	Lab Sample ID (Lab Use Only)				
W	6/25/13	1535	✓	✓	MW-3			5			1300B71 -011				
	↓	1615	✓	✓	MW-10						-012				
	6/26/13	0855	✓	✓	MW-42						-013				
		0940	✓	✓	MW-34						-014				
		1015	✓	✓	MW-11						-015				
		1045	✓	✓	MW-12						-016				
		1120	✓	✓	MW-35						-017				
		1150	✓	✓	MW-49						-018				
✓	↓	1205	✓	✓	MW-41						-019				
					NFE										
Turn around time <input checked="" type="checkbox"/> Normal <input type="checkbox"/> 25% Rush <input type="checkbox"/> 50% Rush <input type="checkbox"/> 100% Rush															
Relinquished by (Signature) <u>Auton Bentley</u>		Date: <u>6/26</u>		Time: <u>1553</u>		Received by (Signature) <u>Andy Freeman</u>		Date: <u>6/26/13</u>		Time: <u>1553</u>					
Relinquished by (Signature) <u>Auton Bentley</u>		Date: <u>6/26/13</u>		Time: <u>1757</u>		Received by (Signature) <u>Andy Freeman</u>		Date: <u>6/26/13</u>		Time: <u>1000</u>					
Relinquished by (Signature)		Date:		Time:		Received by (Signature)		Date:		Time:					
Relinquished by (Signature)		Date:		Time:		Received by (Signature)		Date:		Time:					



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

January 02, 2014

Kyle Summers
Southwest Geoscience
606 S. Rio Grande Unit A
Aztec, NM 87410
TEL: (903) 821-5603
FAX (214) 350-2914

RE: Lindreth CS

OrderNo.: 1312A03

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 9 sample(s) on 12/20/2013 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 www.hallenvironmental.com 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,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1312A03

Date Reported: 1/2/2014

CLIENT: Southwest Geoscience

Client Sample ID: MW-40

Project: Lindreth CS

Collection Date: 12/17/2013 12:25:00 PM

Lab ID: 1312A03-001

Matrix: AQUEOUS

Received Date: 12/20/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	12/23/2013 11:57:54 AM	10914
Surr: DNOP	134	70.1-140		%REC	1	12/23/2013 11:57:54 AM	10914
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	12/22/2013 1:59:44 PM	R15678
Surr: BFB	87.8	80.4-118		%REC	1	12/22/2013 1:59:44 PM	R15678
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	12/22/2013 1:59:44 PM	R15678
Toluene	ND	1.0		µg/L	1	12/22/2013 1:59:44 PM	R15678
Ethylbenzene	ND	1.0		µg/L	1	12/22/2013 1:59:44 PM	R15678
Xylenes, Total	ND	2.0		µg/L	1	12/22/2013 1:59:44 PM	R15678
Surr: 4-Bromofluorobenzene	96.2	85-136		%REC	1	12/22/2013 1:59:44 PM	R15678

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1312A03

Date Reported: 1/2/2014

CLIENT: Southwest Geoscience

Client Sample ID: MW-31

Project: Lindreth CS

Collection Date: 12/17/2013 3:10:00 PM

Lab ID: 1312A03-002

Matrix: AQUEOUS

Received Date: 12/20/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	12/23/2013 12:19:56 PM	10914
Surr: DNOP	124	70.1-140		%REC	1	12/23/2013 12:19:56 PM	10914
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.10		mg/L	2	12/22/2013 3:30:22 PM	R15678
Surr: BFB	85.7	80.4-118		%REC	2	12/22/2013 3:30:22 PM	R15678
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	2.0		µg/L	2	12/22/2013 3:30:22 PM	R15678
Toluene	ND	2.0		µg/L	2	12/22/2013 3:30:22 PM	R15678
Ethylbenzene	ND	2.0		µg/L	2	12/22/2013 3:30:22 PM	R15678
Xylenes, Total	ND	4.0		µg/L	2	12/22/2013 3:30:22 PM	R15678
Surr: 4-Bromofluorobenzene	100	85-136		%REC	2	12/22/2013 3:30:22 PM	R15678

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1312A03

Date Reported: 1/2/2014

CLIENT: Southwest Geoscience

Client Sample ID: MW-33

Project: Lindreth CS

Collection Date: 12/18/2013 9:50:00 AM

Lab ID: 1312A03-003

Matrix: AQUEOUS

Received Date: 12/20/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	12/23/2013 12:41:54 PM	10914
Surr: DNOP	138	70.1-140		%REC	1	12/23/2013 12:41:54 PM	10914
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	12/22/2013 5:01:27 PM	R15678
Surr: BFB	86.2	80.4-118		%REC	1	12/22/2013 5:01:27 PM	R15678
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	12/22/2013 5:01:27 PM	R15678
Toluene	ND	1.0		µg/L	1	12/22/2013 5:01:27 PM	R15678
Ethylbenzene	ND	1.0		µg/L	1	12/22/2013 5:01:27 PM	R15678
Xylenes, Total	ND	2.0		µg/L	1	12/22/2013 5:01:27 PM	R15678
Surr: 4-Bromofluorobenzene	97.8	85-136		%REC	1	12/22/2013 5:01:27 PM	R15678

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1312A03

Date Reported: 1/2/2014

CLIENT: Southwest Geoscience

Client Sample ID: MW-8

Project: Lindreth CS

Collection Date: 12/18/2013 10:50:00 AM

Lab ID: 1312A03-004

Matrix: AQUEOUS

Received Date: 12/20/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	12/23/2013 1:03:55 PM	10914
Surr: DNOP	131	70.1-140		%REC	1	12/23/2013 1:03:55 PM	10914
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	12/22/2013 5:31:42 PM	R15678
Surr: BFB	86.2	80.4-118		%REC	1	12/22/2013 5:31:42 PM	R15678
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	12/22/2013 5:31:42 PM	R15678
Toluene	ND	1.0		µg/L	1	12/22/2013 5:31:42 PM	R15678
Ethylbenzene	ND	1.0		µg/L	1	12/22/2013 5:31:42 PM	R15678
Xylenes, Total	ND	2.0		µg/L	1	12/22/2013 5:31:42 PM	R15678
Surr: 4-Bromofluorobenzene	101	85-136		%REC	1	12/22/2013 5:31:42 PM	R15678

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1312A03

Date Reported: 1/2/2014

CLIENT: Southwest Geoscience

Client Sample ID: MW-3

Project: Lindreth CS

Collection Date: 12/18/2013 12:00:00 PM

Lab ID: 1312A03-005

Matrix: AQUEOUS

Received Date: 12/20/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	12/23/2013 1:25:54 PM	10914
Surr: DNOP	129	70.1-140		%REC	1	12/23/2013 1:25:54 PM	10914
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.12	0.050		mg/L	1	12/24/2013 2:24:14 PM	R15714
Surr: BFB	92.6	80.4-118		%REC	1	12/24/2013 2:24:14 PM	R15714
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	2.5	1.0		µg/L	1	12/24/2013 2:24:14 PM	R15714
Toluene	ND	1.0		µg/L	1	12/24/2013 2:24:14 PM	R15714
Ethylbenzene	6.2	1.0		µg/L	1	12/24/2013 2:24:14 PM	R15714
Xylenes, Total	2.2	2.0		µg/L	1	12/24/2013 2:24:14 PM	R15714
Surr: 4-Bromofluorobenzene	103	85-136		%REC	1	12/24/2013 2:24:14 PM	R15714

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1312A03

Date Reported: 1/2/2014

CLIENT: Southwest Geoscience

Client Sample ID: MW-10

Project: Lindreth CS

Collection Date: 12/18/2013 1:20:00 PM

Lab ID: 1312A03-006

Matrix: AQUEOUS

Received Date: 12/20/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	12/23/2013 1:48:01 PM	10914
Surr: DNOP	130	70.1-140		%REC	1	12/23/2013 1:48:01 PM	10914
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	12/22/2013 6:31:59 PM	R15678
Surr: BFB	86.3	80.4-118		%REC	1	12/22/2013 6:31:59 PM	R15678
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	12/22/2013 6:31:59 PM	R15678
Toluene	ND	1.0		µg/L	1	12/22/2013 6:31:59 PM	R15678
Ethylbenzene	ND	1.0		µg/L	1	12/22/2013 6:31:59 PM	R15678
Xylenes, Total	ND	2.0		µg/L	1	12/22/2013 6:31:59 PM	R15678
Surr: 4-Bromofluorobenzene	100	85-136		%REC	1	12/22/2013 6:31:59 PM	R15678

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1312A03

Date Reported: 1/2/2014

CLIENT: Southwest Geoscience

Client Sample ID: MW-42

Project: Lindreth CS

Collection Date: 12/18/2013 1:55:00 PM

Lab ID: 1312A03-007

Matrix: AQUEOUS

Received Date: 12/20/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	12/23/2013 2:09:53 PM	10914
Surr: DNOP	142	70.1-140	S	%REC	1	12/23/2013 2:09:53 PM	10914
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.063	0.050		mg/L	1	12/22/2013 9:03:04 PM	R15678
Surr: BFB	95.6	80.4-118		%REC	1	12/22/2013 9:03:04 PM	R15678
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	12/22/2013 9:03:04 PM	R15678
Toluene	ND	1.0		µg/L	1	12/22/2013 9:03:04 PM	R15678
Ethylbenzene	ND	1.0		µg/L	1	12/22/2013 9:03:04 PM	R15678
Xylenes, Total	ND	2.0		µg/L	1	12/22/2013 9:03:04 PM	R15678
Surr: 4-Bromofluorobenzene	101	85-136		%REC	1	12/22/2013 9:03:04 PM	R15678

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1312A03

Date Reported: 1/2/2014

CLIENT: Southwest Geoscience

Client Sample ID: MW-34

Project: Lindreth CS

Collection Date: 12/18/2013 2:50:00 PM

Lab ID: 1312A03-008

Matrix: AQUEOUS

Received Date: 12/20/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	12/23/2013 2:32:01 PM	10914
Surr: DNOP	133	70.1-140		%REC	1	12/23/2013 2:32:01 PM	10914
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	12/22/2013 9:33:15 PM	R15678
Surr: BFB	83.9	80.4-118		%REC	1	12/22/2013 9:33:15 PM	R15678
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	12/22/2013 9:33:15 PM	R15678
Toluene	ND	1.0		µg/L	1	12/22/2013 9:33:15 PM	R15678
Ethylbenzene	ND	1.0		µg/L	1	12/22/2013 9:33:15 PM	R15678
Xylenes, Total	ND	2.0		µg/L	1	12/22/2013 9:33:15 PM	R15678
Surr: 4-Bromofluorobenzene	95.8	85-136		%REC	1	12/22/2013 9:33:15 PM	R15678

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1312A03

Date Reported: 1/2/2014

CLIENT: Southwest Geoscience

Client Sample ID: MW-11

Project: Lindreth CS

Collection Date: 12/18/2013 3:45:00 PM

Lab ID: 1312A03-009

Matrix: AQUEOUS

Received Date: 12/20/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	12/23/2013 2:54:03 PM	10914
Surr: DNOP	132	70.1-140		%REC	1	12/23/2013 2:54:03 PM	10914
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	12/22/2013 10:03:07 PM	R15678
Surr: BFB	83.0	80.4-118		%REC	1	12/22/2013 10:03:07 PM	R15678
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	12/22/2013 10:03:07 PM	R15678
Toluene	ND	1.0		µg/L	1	12/22/2013 10:03:07 PM	R15678
Ethylbenzene	ND	1.0		µg/L	1	12/22/2013 10:03:07 PM	R15678
Xylenes, Total	ND	2.0		µg/L	1	12/22/2013 10:03:07 PM	R15678
Surr: 4-Bromofluorobenzene	93.3	85-136		%REC	1	12/22/2013 10:03:07 PM	R15678

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1312A03

02-Jan-14

Client: Southwest Geoscience

Project: Lindreth CS

Sample ID	MB-10914		SampType: MBLK		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	PBW		Batch ID: 10914		RunNo: 15679					
Prep Date:	12/20/2013		Analysis Date: 12/23/2013		SeqNo: 452255		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Surr: DNOP	1.2		1.000		120	70.1	140			

Sample ID	LCS-10914		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	LCSW		Batch ID: 10914		RunNo: 15679					
Prep Date:	12/20/2013		Analysis Date: 12/23/2013		SeqNo: 452256		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.5	1.0	5.000	0	130	73.3	145			
Surr: DNOP	0.66		0.5000		132	70.1	140			

Sample ID	LCSD-10914		SampType: LCSD		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	LCSS02		Batch ID: 10914		RunNo: 15679					
Prep Date:	12/20/2013		Analysis Date: 12/23/2013		SeqNo: 452257		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.7	1.0	5.000	0	134	73.3	145	3.33	20	
Surr: DNOP	0.66		0.5000		132	70.1	140	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1312A03

02-Jan-14

Client: Southwest Geoscience

Project: Lindreth CS

Sample ID 5ML RB	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBW	Batch ID: R15678		RunNo: 15678							
Prep Date:	Analysis Date: 12/22/2013		SeqNo: 452030		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		83.7	80.4	118			

Sample ID 2.5UG GRO LCS	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSW	Batch ID: R15678		RunNo: 15678							
Prep Date:	Analysis Date: 12/22/2013		SeqNo: 452031		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.51	0.050	0.5000	0	102	80	120			
Surr: BFB	18		20.00		90.2	80.4	118			

Sample ID 1312A03-001AMS	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: MW-40	Batch ID: R15678		RunNo: 15678							
Prep Date:	Analysis Date: 12/22/2013		SeqNo: 452033		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.55	0.050	0.5000	0.03540	103	67.7	128			
Surr: BFB	19		20.00		96.4	80.4	118			

Sample ID 1312A03-001AMSD	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: MW-40	Batch ID: R15678		RunNo: 15678							
Prep Date:	Analysis Date: 12/22/2013		SeqNo: 452034		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.54	0.050	0.5000	0.03540	100	67.7	128	2.03	20	
Surr: BFB	18		20.00		92.3	80.4	118	0	0	

Sample ID 5ML RB	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBW	Batch ID: R15714		RunNo: 15714							
Prep Date:	Analysis Date: 12/24/2013		SeqNo: 453801		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		84.1	80.4	118			

Sample ID 2.5UG GRO LCS	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSW	Batch ID: R15714		RunNo: 15714							
Prep Date:	Analysis Date: 12/24/2013		SeqNo: 453802		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits | ND Not Detected at the Reporting Limit |
| O RSD is greater than RSDlimit | P Sample pH greater than 2 for VOA and TOC only. |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1312A03

02-Jan-14

Client: Southwest Geoscience

Project: Lindreth CS

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	R15714	RunNo:	15714					
Prep Date:		Analysis Date:	12/24/2013	SeqNo:	453802	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.54	0.050	0.5000	0	108	80	120			
Surr: BFB	18		20.00		91.4	80.4	118			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1312A03

02-Jan-14

Client: Southwest Geoscience

Project: Lindreth CS

Sample ID	5ML RB		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBW		Batch ID:	R15678		RunNo:	15678			
Prep Date:			Analysis Date:	12/22/2013		SeqNo:	452046	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	2.0								
Surr: 4-Bromofluorobenzene	19		20.00		96.0	85	136			

Sample ID	1312A03-002AMS		SampType:	MS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	MW-31		Batch ID:	R15678		RunNo:	15678			
Prep Date:			Analysis Date:	12/22/2013		SeqNo:	452053	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	42	2.0	40.00	0.6040	103	73.4	119			
Toluene	42	2.0	40.00	1.012	101	80	120			
Ethylbenzene	42	2.0	40.00	0.6960	102	80	120			
Xylenes, Total	130	4.0	120.0	2.104	104	80	120			
Surr: 4-Bromofluorobenzene	41		40.00		104	85	136			

Sample ID	1312A03-002AMSD		SampType:	MSD		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	MW-31		Batch ID:	R15678		RunNo:	15678			
Prep Date:			Analysis Date:	12/22/2013		SeqNo:	452054	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	43	2.0	40.00	0.6040	107	73.4	119	3.23	20	
Toluene	43	2.0	40.00	1.012	105	80	120	3.29	20	
Ethylbenzene	42	2.0	40.00	0.6960	103	80	120	1.22	20	
Xylenes, Total	130	4.0	120.0	2.104	106	80	120	1.76	20	
Surr: 4-Bromofluorobenzene	36		40.00		90.1	85	136	0	0	

Sample ID	100NG BTEX LCS		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSW		Batch ID:	R15678		RunNo:	15678			
Prep Date:			Analysis Date:	12/22/2013		SeqNo:	452230	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	80	120			
Toluene	21	1.0	20.00	0	104	80	120			
Ethylbenzene	20	1.0	20.00	0	102	80	120			
Xylenes, Total	62	2.0	60.00	0	104	80	120			
Surr: 4-Bromofluorobenzene	20		20.00		99.7	85	136			

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits | ND Not Detected at the Reporting Limit |
| O RSD is greater than RSDlimit | P Sample pH greater than 2 for VOA and TOC only. |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1312A03

02-Jan-14

Client: Southwest Geoscience

Project: Lindreth CS

Sample ID	5ML RB	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBW	Batch ID: R15714			RunNo: 15714					
Prep Date:		Analysis Date: 12/24/2013			SeqNo: 453829		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	2.0								
Surr: 4-Bromofluorobenzene	20		20.00		98.0	85	136			

Sample ID	100NG BTEX LCS		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSW		Batch ID: R15714		RunNo: 15714					
Prep Date:			Analysis Date: 12/24/2013		SeqNo: 453830		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	80	120			
Toluene	21	1.0	20.00	0	104	80	120			
Ethylbenzene	20	1.0	20.00	0	101	80	120			
Xylenes, Total	62	2.0	60.00	0	103	80	120			
Surr: 4-Bromofluorobenzene	20		20.00		98.7	85	136			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87105
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Southwest Geoscience

Work Order Number: 1312A03

RcptNo: 1

Received by/date:

AG 12/20/13

Logged By: Lindsay Mangin

12/20/2013 10:00:00 AM

Lindsay Mangin

Completed By: Lindsay Mangin

12/20/2013 1:42:43 PM

Lindsay Mangin

Reviewed By:

DF

12/20/2013

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☒ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Southwest GEOSCIENCE

Environmental & Hydrogeologic Consultants

Office Location Aztec, NM

Project Manager Kyle Summers

Sampler's Name

Mahya Abaya
Aaron Bryant

Proj. No.

0410004

Project Name

Lindreth CS

Matrix	Date	Time	Identifying Marks of Sample(s)	No/Type of Containers
W	12/17/13	1225	MW-40	5
	12/17/13	1510	MW-31	
	12/18/13	0950	MW-33	
		1050	MW-8	
		1200	MW-3	
		1320	MW-10	
		1355	MW-42	
		1450	MW-34	
W	12/18/13	1545	MW-11	5
NFE				

Depth	Depth	Depth	VOA	A/G	250	P/O
1	2	3	4	5		

Turn around time ☒ Normal ☐ 25% Rush ☐ 50% Rush ☐ 100% Rush

Relinquished by (Signature) [Signature] Date: 12/19/13 Time: 1510

Relinquished by (Signature) [Signature] Date: 12/19/13 Time: 1700

Relinquished by (Signature) [Signature] Date: 12/19/13 Time: 1700

Relinquished by (Signature) [Signature] Date: 12/19/13 Time: 1700

Relinquished by (Signature) [Signature] Date: 12/19/13 Time: 1700

Relinquished by (Signature) [Signature] Date: 12/19/13 Time: 1700

Relinquished by (Signature) [Signature] Date: 12/19/13 Time: 1700

Relinquished by (Signature) [Signature] Date: 12/19/13 Time: 1700

Relinquished by (Signature) [Signature] Date: 12/19/13 Time: 1700

Relinquished by (Signature) [Signature] Date: 12/19/13 Time: 1700

Relinquished by (Signature) [Signature] Date: 12/19/13 Time: 1700

Relinquished by (Signature) [Signature] Date: 12/19/13 Time: 1700

Relinquished by (Signature) [Signature] Date: 12/19/13 Time: 1700

Relinquished by (Signature) [Signature] Date: 12/19/13 Time: 1700

Relinquished by (Signature) [Signature] Date: 12/19/13 Time: 1700

Relinquished by (Signature) [Signature] Date: 12/19/13 Time: 1700

Relinquished by (Signature) [Signature] Date: 12/19/13 Time: 1700

Relinquished by (Signature) [Signature] Date: 12/19/13 Time: 1700

Relinquished by (Signature) [Signature] Date: 12/19/13 Time: 1700

Relinquished by (Signature) [Signature] Date: 12/19/13 Time: 1700

Relinquished by (Signature) [Signature] Date: 12/19/13 Time: 1700

Relinquished by (Signature) [Signature] Date: 12/19/13 Time: 1700

Relinquished by (Signature) [Signature] Date: 12/19/13 Time: 1700

CHAIN OF CUSTODY RECORD

Lab use only
Due Date:

Temp. of coolers
when received (C°): 10

1 2 3 4 5

Page 1 of 1

ANALYSIS REQUESTED

Lab Sample ID (Lab Use Only)

1312A03-001

-002

-003

-004

-005

-006

-007

-008

-009

TPH GRO/DRO 8015

8021

BTEX

X X

X X

X X

X X

X X

X X

X X

X X

X X

X X

X X

X X

X X

SOUTHWEST GEOSCIENCE • 2351 W. Northwest Hwy., Suite 3321 • Dallas, Texas 75220 • Office: 214-350-5469 • Fax 214-350-2914



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

January 10, 2014

Kyle Summers

Southwest Geoscience
606 S. Rio Grande Unit A
Aztec, NM 87410
TEL: (903) 821-5603
FAX

RE: Lindrith CS

OrderNo.: 1401053

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 10 sample(s) on 1/2/2014 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 www.hallenvironmental.com 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,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401053**

Date Reported: **1/10/2014**

CLIENT: Southwest Geoscience

Client Sample ID: MW-36

Project: Lindrith CS

Collection Date: 12/31/2013 12:30:00 PM

Lab ID: 1401053-001

Matrix: AQUEOUS

Received Date: 1/2/2014 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	1/3/2014 2:03:50 PM	11062
Surr: DNOP	96.6	70.1-140		%REC	1	1/3/2014 2:03:50 PM	11062
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.11	0.050		mg/L	1	1/3/2014 3:32:34 PM	R15889
Surr: BFB	90.4	80.4-118		%REC	1	1/3/2014 3:32:34 PM	R15889
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	1/3/2014 3:32:34 PM	R15889
Toluene	ND	1.0		µg/L	1	1/3/2014 3:32:34 PM	R15889
Ethylbenzene	ND	1.0		µg/L	1	1/3/2014 3:32:34 PM	R15889
Xylenes, Total	ND	2.0		µg/L	1	1/3/2014 3:32:34 PM	R15889
Surr: 4-Bromofluorobenzene	96.3	85-136		%REC	1	1/3/2014 3:32:34 PM	R15889

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401053**

Date Reported: **1/10/2014**

CLIENT: Southwest Geoscience

Client Sample ID: MW-5

Project: Lindrith CS

Collection Date: 12/31/2013 11:45:00 AM

Lab ID: 1401053-002

Matrix: AQUEOUS

Received Date: 1/2/2014 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	1/3/2014 2:25:57 PM	11062
Surr: DNOP	93.8	70.1-140		%REC	1	1/3/2014 2:25:57 PM	11062
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.47	0.25		mg/L	5	1/3/2014 5:03:20 PM	R15889
Surr: BFB	90.3	80.4-118		%REC	5	1/3/2014 5:03:20 PM	R15889
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	5.0		µg/L	5	1/3/2014 5:03:20 PM	R15889
Toluene	ND	5.0		µg/L	5	1/3/2014 5:03:20 PM	R15889
Ethylbenzene	ND	5.0		µg/L	5	1/3/2014 5:03:20 PM	R15889
Xylenes, Total	ND	10		µg/L	5	1/3/2014 5:03:20 PM	R15889
Surr: 4-Bromofluorobenzene	99.6	85-136		%REC	5	1/3/2014 5:03:20 PM	R15889

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401053**

Date Reported: **1/10/2014**

CLIENT: Southwest Geoscience

Client Sample ID: MW-4

Project: Lindrith CS

Collection Date: 12/31/2013 10:40:00 AM

Lab ID: 1401053-003

Matrix: AQUEOUS

Received Date: 1/2/2014 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	1.2	1.0		mg/L	1	1/3/2014 2:48:12 PM	11062
Surr: DNOP	95.7	70.1-140		%REC	1	1/3/2014 2:48:12 PM	11062
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	20	2.5		mg/L	50	1/3/2014 6:34:02 PM	R15889
Surr: BFB	84.8	80.4-118		%REC	50	1/3/2014 6:34:02 PM	R15889
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	3900	50		µg/L	50	1/3/2014 6:34:02 PM	R15889
Toluene	1500	50		µg/L	50	1/3/2014 6:34:02 PM	R15889
Ethylbenzene	190	50		µg/L	50	1/3/2014 6:34:02 PM	R15889
Xylenes, Total	1300	100		µg/L	50	1/3/2014 6:34:02 PM	R15889
Surr: 4-Bromofluorobenzene	98.6	85-136		%REC	50	1/3/2014 6:34:02 PM	R15889

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401053**

Date Reported: **1/10/2014**

CLIENT: Southwest Geoscience

Client Sample ID: MW-38

Project: Lindrith CS

Collection Date: 12/31/2013 9:45:00 AM

Lab ID: 1401053-004

Matrix: AQUEOUS

Received Date: 1/2/2014 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	1.0	1.0		mg/L	1	1/3/2014 3:10:11 PM	11062
Surr: DNOP	98.1	70.1-140		%REC	1	1/3/2014 3:10:11 PM	11062
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	15	1.0		mg/L	20	1/3/2014 7:04:16 PM	R15889
Surr: BFB	93.9	80.4-118		%REC	20	1/3/2014 7:04:16 PM	R15889
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	1400	20		µg/L	20	1/3/2014 7:04:16 PM	R15889
Toluene	32	20		µg/L	20	1/3/2014 7:04:16 PM	R15889
Ethylbenzene	190	20		µg/L	20	1/3/2014 7:04:16 PM	R15889
Xylenes, Total	1100	40		µg/L	20	1/3/2014 7:04:16 PM	R15889
Surr: 4-Bromofluorobenzene	108	85-136		%REC	20	1/3/2014 7:04:16 PM	R15889

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401053**

Date Reported: **1/10/2014**

CLIENT: Southwest Geoscience

Client Sample ID: MW-7

Project: Lindrith CS

Collection Date: 12/30/2013 3:45:00 PM

Lab ID: 1401053-005

Matrix: AQUEOUS

Received Date: 1/2/2014 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	1/3/2014 3:55:07 PM	11062
Surr: DNOP	96.0	70.1-140		%REC	1	1/3/2014 3:55:07 PM	11062
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.47	0.050		mg/L	1	1/3/2014 7:34:29 PM	R15889
Surr: BFB	93.3	80.4-118		%REC	1	1/3/2014 7:34:29 PM	R15889
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	3.4	1.0		µg/L	1	1/3/2014 7:34:29 PM	R15889
Toluene	ND	1.0		µg/L	1	1/3/2014 7:34:29 PM	R15889
Ethylbenzene	1.6	1.0		µg/L	1	1/3/2014 7:34:29 PM	R15889
Xylenes, Total	8.3	2.0		µg/L	1	1/3/2014 7:34:29 PM	R15889
Surr: 4-Bromofluorobenzene	101	85-136		%REC	1	1/3/2014 7:34:29 PM	R15889

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401053**

Date Reported: **1/10/2014**

CLIENT: Southwest Geoscience

Client Sample ID: MW-41

Project: Lindrith CS

Collection Date: 12/30/2013 2:45:00 PM

Lab ID: 1401053-006

Matrix: AQUEOUS

Received Date: 1/2/2014 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	1/6/2014 9:58:49 AM	11062
Surr: DNOP	105	70.1-140		%REC	1	1/6/2014 9:58:49 AM	11062
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	1/3/2014 10:05:31 PM	R15889
Surr: BFB	92.0	80.4-118		%REC	1	1/3/2014 10:05:31 PM	R15889
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	1/3/2014 10:05:31 PM	R15889
Toluene	ND	1.0		µg/L	1	1/3/2014 10:05:31 PM	R15889
Ethylbenzene	ND	1.0		µg/L	1	1/3/2014 10:05:31 PM	R15889
Xylenes, Total	2.1	2.0		µg/L	1	1/3/2014 10:05:31 PM	R15889
Surr: 4-Bromofluorobenzene	99.7	85-136		%REC	1	1/3/2014 10:05:31 PM	R15889

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401053**

Date Reported: **1/10/2014**

CLIENT: Southwest Geoscience

Client Sample ID: MW-39

Project: Lindrith CS

Collection Date: 12/30/2013 1:20:00 PM

Lab ID: 1401053-007

Matrix: AQUEOUS

Received Date: 1/2/2014 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	1/3/2014 4:39:10 PM	11062
Surr: DNOP	95.9	70.1-140		%REC	1	1/3/2014 4:39:10 PM	11062
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	5.9	1.0		mg/L	20	1/3/2014 10:35:42 PM	R15889
Surr: BFB	102	80.4-118		%REC	20	1/3/2014 10:35:42 PM	R15889
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	110	20		µg/L	20	1/3/2014 10:35:42 PM	R15889
Toluene	ND	20		µg/L	20	1/3/2014 10:35:42 PM	R15889
Ethylbenzene	220	20		µg/L	20	1/3/2014 10:35:42 PM	R15889
Xylenes, Total	1100	40		µg/L	20	1/3/2014 10:35:42 PM	R15889
Surr: 4-Bromofluorobenzene	112	85-136		%REC	20	1/3/2014 10:35:42 PM	R15889

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401053**

Date Reported: **1/10/2014**

CLIENT: Southwest Geoscience

Client Sample ID: MW-35

Project: Lindrith CS

Collection Date: 12/30/2013 12:20:00 PM

Lab ID: 1401053-008

Matrix: AQUEOUS

Received Date: 1/2/2014 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	1/3/2014 5:01:08 PM	11062
Surr: DNOP	98.3	70.1-140		%REC	1	1/3/2014 5:01:08 PM	11062
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	1/3/2014 11:35:53 PM	R15889
Surr: BFB	84.4	80.4-118		%REC	1	1/3/2014 11:35:53 PM	R15889
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	1/3/2014 11:35:53 PM	R15889
Toluene	ND	1.0		µg/L	1	1/3/2014 11:35:53 PM	R15889
Ethylbenzene	ND	1.0		µg/L	1	1/3/2014 11:35:53 PM	R15889
Xylenes, Total	ND	2.0		µg/L	1	1/3/2014 11:35:53 PM	R15889
Surr: 4-Bromofluorobenzene	92.8	85-136		%REC	1	1/3/2014 11:35:53 PM	R15889

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401053**

Date Reported: **1/10/2014**

CLIENT: Southwest Geoscience

Client Sample ID: MW-12

Project: Lindrith CS

Collection Date: 12/30/2013 11:05:00 AM

Lab ID: 1401053-009

Matrix: AQUEOUS

Received Date: 1/2/2014 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	1/3/2014 5:23:09 PM	11062
Surr: DNOP	95.8	70.1-140		%REC	1	1/3/2014 5:23:09 PM	11062
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.52	0.050		mg/L	1	1/4/2014 12:06:01 AM	R15889
Surr: BFB	123	80.4-118	S	%REC	1	1/4/2014 12:06:01 AM	R15889
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	70	1.0		µg/L	1	1/4/2014 12:06:01 AM	R15889
Toluene	ND	1.0		µg/L	1	1/4/2014 12:06:01 AM	R15889
Ethylbenzene	5.1	1.0		µg/L	1	1/4/2014 12:06:01 AM	R15889
Xylenes, Total	5.8	2.0		µg/L	1	1/4/2014 12:06:01 AM	R15889
Surr: 4-Bromofluorobenzene	106	85-136		%REC	1	1/4/2014 12:06:01 AM	R15889

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1401053**

Date Reported: **1/10/2014**

CLIENT: Southwest Geoscience

Client Sample ID: MW-2

Project: Lindrith CS

Collection Date: 12/31/2013 1:10:00 PM

Lab ID: 1401053-010

Matrix: AQUEOUS

Received Date: 1/2/2014 4:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	1/3/2014 5:44:59 PM	11062
Surr: DNOP	101	70.1-140		%REC	1	1/3/2014 5:44:59 PM	11062
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	13	0.50		mg/L	10	1/4/2014 1:06:07 AM	R15889
Surr: BFB	99.1	80.4-118		%REC	10	1/4/2014 1:06:07 AM	R15889
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	1900	100		µg/L	100	1/4/2014 12:36:00 AM	R15889
Toluene	ND	10		µg/L	10	1/4/2014 1:06:07 AM	R15889
Ethylbenzene	120	10		µg/L	10	1/4/2014 1:06:07 AM	R15889
Xylenes, Total	930	20		µg/L	10	1/4/2014 1:06:07 AM	R15889
Surr: 4-Bromofluorobenzene	112	85-136		%REC	10	1/4/2014 1:06:07 AM	R15889

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401053

10-Jan-14

Client: Southwest Geoscience

Project: Lindrith CS

Sample ID	LCS-11062		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	LCSW		Batch ID: 11062		RunNo: 15875					
Prep Date:	1/3/2014		Analysis Date: 1/3/2014		SeqNo: 458013		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.9	1.0	5.000	0	117	73.3	145			
Surr: DNOP	0.40		0.5000		79.9	70.1	140			

Sample ID	LCSD-11062		SampType: LCSD		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	LCSS02		Batch ID: 11062		RunNo: 15875					
Prep Date:	1/3/2014		Analysis Date: 1/3/2014		SeqNo: 458018		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.2	1.0	5.000	0	124	73.3	145	5.08	20	
Surr: DNOP	0.46		0.5000		91.1	70.1	140	0	0	

Sample ID	MB-11062		SampType: MBLK		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	PBW		Batch ID: 11062		RunNo: 15875					
Prep Date:	1/3/2014		Analysis Date: 1/3/2014		SeqNo: 458019		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Surr: DNOP	0.93		1.000		93.3	70.1	140			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401053

10-Jan-14

Client: Southwest Geoscience

Project: Lindrith CS

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID:	R15889	RunNo:	15889					
Prep Date:		Analysis Date:	1/3/2014	SeqNo:	458213	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		86.4	80.4	118			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	R15889	RunNo:	15889					
Prep Date:		Analysis Date:	1/3/2014	SeqNo:	458214	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.50	0.050	0.5000	0	99.3	80	120			
Surr: BFB	18		20.00		90.1	80.4	118			

Sample ID	1401053-001AMS	SampType:	MS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	MW-36	Batch ID:	R15889	RunNo:	15889					
Prep Date:		Analysis Date:	1/3/2014	SeqNo:	458217	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.65	0.050	0.5000	0.1056	109	67.7	128			
Surr: BFB	19		20.00		96.9	80.4	118			

Sample ID	1401053-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	MW-36	Batch ID:	R15889	RunNo:	15889					
Prep Date:		Analysis Date:	1/3/2014	SeqNo:	458218	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.63	0.050	0.5000	0.1056	106	67.7	128	2.65	20	
Surr: BFB	20		20.00		97.5	80.4	118	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401053

10-Jan-14

Client: Southwest Geoscience

Project: Lindrith CS

Sample ID	5ML RB	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles						
Client ID:	PBW	Batch ID: R15889		RunNo: 15889						
Prep Date:	Analysis Date: 1/3/2014		SeqNo: 458232		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	2.0								
Surr: 4-Bromofluorobenzene	20		20.00		99.1	85	136			

Sample ID	100NG BTEX LCS		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSW		Batch ID: R15889		RunNo: 15889					
Prep Date:			Analysis Date: 1/3/2014		SeqNo: 458233		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	97.8	80	120			
Toluene	20	1.0	20.00	0	99.4	80	120			
Ethylbenzene	19	1.0	20.00	0	97.1	80	120			
Xylenes, Total	62	2.0	60.00	0	103	80	120			
Surr: 4-Bromofluorobenzene	21		20.00		103	85	136			

Sample ID	1401053-002AMS		SampType: MS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	MW-5		Batch ID: R15889		RunNo: 15889					
Prep Date:			Analysis Date: 1/3/2014		SeqNo: 458242		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	100	5.0	100.0	3.880	95.7	73.4	119			
Toluene	99	5.0	100.0	3.120	95.6	80	120			
Ethylbenzene	98	5.0	100.0	2.580	95.8	80	120			
Xylenes, Total	310	10	300.0	6.240	99.9	80	120			
Surr: 4-Bromofluorobenzene	100		100.0		103	85	136			

Sample ID	1401053-002AMSD		SampType: MSD		TestCode: EPA Method 8021B: Volatiles					
Client ID:	MW-5		Batch ID: R15889		RunNo: 15889					
Prep Date:			Analysis Date: 1/3/2014		SeqNo: 458243		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	110	5.0	100.0	3.880	103	73.4	119	7.02	20	
Toluene	110	5.0	100.0	3.120	103	80	120	6.85	20	
Ethylbenzene	110	5.0	100.0	2.580	103	80	120	6.62	20	
Xylenes, Total	330	10	300.0	6.240	107	80	120	6.40	20	
Surr: 4-Bromofluorobenzene	110		100.0		108	85	136	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

Sample Log-In Check List

Client Name: Southwest Geoscience A

Work Order Number: 1401053

RcptNo: 1

Received by/date: CM 01/02/14 1610

Logged By: Anne Thorne 1/2/2014 4:10:00 PM

Completed By: Anne Thorne 1/3/2014

Reviewed By: mg 01/03/14

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Client

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☒ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH: _____
(<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.8	Good	Yes			

CHAIN OF CUSTODY RECORD

<h2 style="margin: 0;">Southwest GEO SCIENCE</h2> <p style="margin: 0; font-size: small;">Environmental & Hydrogeologic Consultants</p>		Laboratory: <u>HAL</u> Address: <u>ABA</u> Contact: <u>FREEMAN</u> Phone: _____ PO/SO #: <u>041067006</u>		ANALYSIS REQUESTED <u>BTEX 8/21 DEPT 8/15</u>		Lab use only Due Date: _____ Temp. of coolers when received (C°): <u>5.8</u>	
		Office Location <u>AZTEC, NM</u> Project Manager <u>KYLE SUMMERS</u> Sampler's Name <u>ARON BRYANT</u>		Project No. <u>041067006</u> Project Name <u>LANDFILL CS</u> Sampler's Signature <u>[Signature]</u>		Page <u>1</u> of <u>1</u>	

Matrix	Date	Time	C o m p	G r a b	Identifying Marks of Sample(s)	No/Type of Containers				P/O	Lab Sample ID (Lab Use Only)	
						Dep th	Dep th	VOA	A/G 1 Lt.			250 ml
W	12/31/13	1230	X		MW-36			5				1401053-001
W	12/31/13	1145			MW-5							-002
W	12/31/13	1040			MW-4							-003
W	12/31/13	0945			MW-38							-004
W	12/30/13	1545			MW-7							-005
W	12/30/13	1445			MW-41							-006
W	12/30/13	1320			MW-39							-007
W	12/30/13	1220			MW-35							-008
W	12/30/13	1105			MW-12							-009
W	12/31/13	1318	✓		MW-2							-010

Turn around time <input checked="" type="checkbox"/> Normal <input type="checkbox"/> 25% Rush <input type="checkbox"/> 50% Rush <input type="checkbox"/> 100% Rush		NOTES:	
Relinquished by (Signature) <u>[Signature]</u>	Date: <u>1/2/14</u> Time: <u>4:15</u>	Date: <u>1/12/14</u> Time: <u>1610</u>	
Relinquished by (Signature)	Date: _____ Time: _____	Date: _____ Time: _____	
Relinquished by (Signature)	Date: _____ Time: _____	Date: _____ Time: _____	
Relinquished by (Signature)	Date: _____ Time: _____	Date: _____ Time: _____	

Matrix Container	WW - Wastewater VOA - 40 ml vial	W - Water A/G - Amber / Or Glass 1 Liter	S - Soil SD - Solid	L - Liquid 250 ml - Glass wide mouth	A - Air Bag	C - Charcoal tube P/O - Plastic or other	SL - sludge	O - Oil
------------------	-------------------------------------	---	------------------------	---	-------------	---	-------------	---------



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

July 08, 2014

Kyle Summers
APEX TITAN
606 S. Rio Grande Unit A
Aztec, NM 87410
TEL: (903) 821-5603
FAX

RE: Lindrith CS

OrderNo.: 1406C76

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 18 sample(s) on 6/27/2014 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 www.hallenvironmental.com 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,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1406C76**

Date Reported: **7/8/2014**

CLIENT: APEX TITAN

Client Sample ID: MW-7

Project: Lindrith CS

Collection Date: 6/24/2014 11:05:00 AM

Lab ID: 1406C76-001

Matrix: AQUEOUS

Received Date: 6/27/2014 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/28/2014 3:28:48 AM	13941
Surr: DNOP	133	62.7-145		%REC	1	6/28/2014 3:28:48 AM	13941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.34	0.050		mg/L	1	6/27/2014 1:04:47 PM	R19557
Surr: BFB	116	70.9-130		%REC	1	6/27/2014 1:04:47 PM	R19557
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	6/27/2014 1:04:47 PM	R19557
Toluene	ND	1.0		µg/L	1	6/27/2014 1:04:47 PM	R19557
Ethylbenzene	ND	1.0		µg/L	1	6/27/2014 1:04:47 PM	R19557
Xylenes, Total	ND	2.0		µg/L	1	6/27/2014 1:04:47 PM	R19557
Surr: 4-Bromofluorobenzene	117	82.9-139		%REC	1	6/27/2014 1:04:47 PM	R19557

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 1 of 23
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1406C76**

Date Reported: **7/8/2014**

CLIENT: APEX TITAN

Client Sample ID: MW-36

Project: Lindrith CS

Collection Date: 6/24/2014 12:15:00 PM

Lab ID: 1406C76-002

Matrix: AQUEOUS

Received Date: 6/27/2014 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/28/2014 3:50:19 AM	13941
Surr: DNOP	129	62.7-145		%REC	1	6/28/2014 3:50:19 AM	13941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.086	0.050		mg/L	1	6/27/2014 1:34:53 PM	R19557
Surr: BFB	99.1	70.9-130		%REC	1	6/27/2014 1:34:53 PM	R19557
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	6/27/2014 1:34:53 PM	R19557
Toluene	ND	1.0		µg/L	1	6/27/2014 1:34:53 PM	R19557
Ethylbenzene	ND	1.0		µg/L	1	6/27/2014 1:34:53 PM	R19557
Xylenes, Total	ND	2.0		µg/L	1	6/27/2014 1:34:53 PM	R19557
Surr: 4-Bromofluorobenzene	111	82.9-139		%REC	1	6/27/2014 1:34:53 PM	R19557

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 2 of 23
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1406C76**

Date Reported: **7/8/2014**

CLIENT: APEX TITAN

Client Sample ID: MW-5

Project: Lindrith CS

Collection Date: 6/24/2014 1:15:00 PM

Lab ID: 1406C76-003

Matrix: AQUEOUS

Received Date: 6/27/2014 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/28/2014 4:12:03 AM	13941
Surr: DNOP	127	62.7-145		%REC	1	6/28/2014 4:12:03 AM	13941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.25		mg/L	5	6/27/2014 2:05:19 PM	R19557
Surr: BFB	103	70.9-130		%REC	5	6/27/2014 2:05:19 PM	R19557
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	2.5		µg/L	5	6/27/2014 2:05:19 PM	R19557
Toluene	ND	5.0		µg/L	5	6/27/2014 2:05:19 PM	R19557
Ethylbenzene	ND	5.0		µg/L	5	6/27/2014 2:05:19 PM	R19557
Xylenes, Total	ND	10		µg/L	5	6/27/2014 2:05:19 PM	R19557
Surr: 4-Bromofluorobenzene	112	82.9-139		%REC	5	6/27/2014 2:05:19 PM	R19557

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 3 of 23
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1406C76**

Date Reported: **7/8/2014**

CLIENT: APEX TITAN

Client Sample ID: MW-41

Project: Lindrith CS

Collection Date: 6/24/2014 2:40:00 PM

Lab ID: 1406C76-004

Matrix: AQUEOUS

Received Date: 6/27/2014 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/28/2014 4:33:46 AM	13941
Surr: DNOP	121	62.7-145		%REC	1	6/28/2014 4:33:46 AM	13941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/27/2014 2:35:36 PM	R19557
Surr: BFB	84.8	70.9-130		%REC	1	6/27/2014 2:35:36 PM	R19557
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	6/27/2014 2:35:36 PM	R19557
Toluene	ND	1.0		µg/L	1	6/27/2014 2:35:36 PM	R19557
Ethylbenzene	ND	1.0		µg/L	1	6/27/2014 2:35:36 PM	R19557
Xylenes, Total	ND	2.0		µg/L	1	6/27/2014 2:35:36 PM	R19557
Surr: 4-Bromofluorobenzene	89.8	82.9-139		%REC	1	6/27/2014 2:35:36 PM	R19557

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 4 of 23
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1406C76**

Date Reported: **7/8/2014**

CLIENT: APEX TITAN

Client Sample ID: MW-35

Project: Lindrith CS

Collection Date: 6/24/2014 3:50:00 PM

Lab ID: 1406C76-005

Matrix: AQUEOUS

Received Date: 6/27/2014 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/28/2014 4:55:29 AM	13941
Surr: DNOP	116	62.7-145		%REC	1	6/28/2014 4:55:29 AM	13941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/27/2014 3:05:48 PM	R19557
Surr: BFB	96.2	70.9-130		%REC	1	6/27/2014 3:05:48 PM	R19557
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	6/27/2014 3:05:48 PM	R19557
Toluene	ND	1.0		µg/L	1	6/27/2014 3:05:48 PM	R19557
Ethylbenzene	ND	1.0		µg/L	1	6/27/2014 3:05:48 PM	R19557
Xylenes, Total	ND	2.0		µg/L	1	6/27/2014 3:05:48 PM	R19557
Surr: 4-Bromofluorobenzene	108	82.9-139		%REC	1	6/27/2014 3:05:48 PM	R19557

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 5 of 23
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1406C76**

Date Reported: **7/8/2014**

CLIENT: APEX TITAN

Client Sample ID: MW-34

Project: Lindrith CS

Collection Date: 6/25/2014 10:25:00 AM

Lab ID: 1406C76-006

Matrix: AQUEOUS

Received Date: 6/27/2014 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/28/2014 5:17:11 AM	13941
Surr: DNOP	111	62.7-145		%REC	1	6/28/2014 5:17:11 AM	13941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/27/2014 3:35:53 PM	R19557
Surr: BFB	96.9	70.9-130		%REC	1	6/27/2014 3:35:53 PM	R19557
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	6/27/2014 3:35:53 PM	R19557
Toluene	ND	1.0		µg/L	1	6/27/2014 3:35:53 PM	R19557
Ethylbenzene	ND	1.0		µg/L	1	6/27/2014 3:35:53 PM	R19557
Xylenes, Total	ND	2.0		µg/L	1	6/27/2014 3:35:53 PM	R19557
Surr: 4-Bromofluorobenzene	108	82.9-139		%REC	1	6/27/2014 3:35:53 PM	R19557

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 6 of 23
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1406C76**

Date Reported: **7/8/2014**

CLIENT: APEX TITAN

Client Sample ID: MW-11

Project: Lindrith CS

Collection Date: 6/25/2014 11:20:00 AM

Lab ID: 1406C76-007

Matrix: AQUEOUS

Received Date: 6/27/2014 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/28/2014 5:39:06 AM	13941
Surr: DNOP	111	62.7-145		%REC	1	6/28/2014 5:39:06 AM	13941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/27/2014 4:06:04 PM	R19557
Surr: BFB	96.8	70.9-130		%REC	1	6/27/2014 4:06:04 PM	R19557
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	6/27/2014 4:06:04 PM	R19557
Toluene	ND	1.0		µg/L	1	6/27/2014 4:06:04 PM	R19557
Ethylbenzene	ND	1.0		µg/L	1	6/27/2014 4:06:04 PM	R19557
Xylenes, Total	ND	2.0		µg/L	1	6/27/2014 4:06:04 PM	R19557
Surr: 4-Bromofluorobenzene	106	82.9-139		%REC	1	6/27/2014 4:06:04 PM	R19557

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 7 of 23
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1406C76**

Date Reported: **7/8/2014**

CLIENT: APEX TITAN

Client Sample ID: MW-42

Project: Lindrith CS

Collection Date: 6/25/2014 12:25:00 PM

Lab ID: 1406C76-008

Matrix: AQUEOUS

Received Date: 6/27/2014 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/28/2014 6:00:38 AM	13941
Surr: DNOP	117	62.7-145		%REC	1	6/28/2014 6:00:38 AM	13941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.063	0.050		mg/L	1	6/27/2014 4:36:04 PM	R19557
Surr: BFB	104	70.9-130		%REC	1	6/27/2014 4:36:04 PM	R19557
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	6/27/2014 4:36:04 PM	R19557
Toluene	ND	1.0		µg/L	1	6/27/2014 4:36:04 PM	R19557
Ethylbenzene	ND	1.0		µg/L	1	6/27/2014 4:36:04 PM	R19557
Xylenes, Total	ND	2.0		µg/L	1	6/27/2014 4:36:04 PM	R19557
Surr: 4-Bromofluorobenzene	109	82.9-139		%REC	1	6/27/2014 4:36:04 PM	R19557

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 8 of 23
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1406C76**Date Reported: **7/8/2014****CLIENT:** APEX TITAN**Client Sample ID:** MW-10**Project:** Lindrith CS**Collection Date:** 6/25/2014 1:20:00 PM**Lab ID:** 1406C76-009**Matrix:** AQUEOUS**Received Date:** 6/27/2014 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/28/2014 6:22:33 AM	13941
Surr: DNOP	122	62.7-145		%REC	1	6/28/2014 6:22:33 AM	13941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/27/2014 5:06:13 PM	R19557
Surr: BFB	95.2	70.9-130		%REC	1	6/27/2014 5:06:13 PM	R19557
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	6/27/2014 5:06:13 PM	R19557
Toluene	ND	1.0		µg/L	1	6/27/2014 5:06:13 PM	R19557
Ethylbenzene	ND	1.0		µg/L	1	6/27/2014 5:06:13 PM	R19557
Xylenes, Total	ND	2.0		µg/L	1	6/27/2014 5:06:13 PM	R19557
Surr: 4-Bromofluorobenzene	106	82.9-139		%REC	1	6/27/2014 5:06:13 PM	R19557

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 9 of 23
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1406C76**

Date Reported: **7/8/2014**

CLIENT: APEX TITAN

Client Sample ID: MW-3

Project: Lindrith CS

Collection Date: 6/25/2014 2:25:00 PM

Lab ID: 1406C76-010

Matrix: AQUEOUS

Received Date: 6/27/2014 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/28/2014 6:44:11 AM	13941
Surr: DNOP	115	62.7-145		%REC	1	6/28/2014 6:44:11 AM	13941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.27	0.050		mg/L	1	6/27/2014 5:36:17 PM	R19557
Surr: BFB	111	70.9-130		%REC	1	6/27/2014 5:36:17 PM	R19557
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	6.5	1.0		µg/L	1	6/27/2014 5:36:17 PM	R19557
Toluene	1.7	1.0		µg/L	1	6/27/2014 5:36:17 PM	R19557
Ethylbenzene	15	1.0		µg/L	1	6/27/2014 5:36:17 PM	R19557
Xylenes, Total	8.2	2.0		µg/L	1	6/27/2014 5:36:17 PM	R19557
Surr: 4-Bromofluorobenzene	121	82.9-139		%REC	1	6/27/2014 5:36:17 PM	R19557

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1406C76**

Date Reported: **7/8/2014**

CLIENT: APEX TITAN

Client Sample ID: MW-8

Project: Lindrith CS

Collection Date: 6/25/2014 3:55:00 PM

Lab ID: 1406C76-011

Matrix: AQUEOUS

Received Date: 6/27/2014 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/28/2014 7:27:45 AM	13941
Surr: DNOP	120	62.7-145		%REC	1	6/28/2014 7:27:45 AM	13941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/30/2014 2:22:45 PM	R19588
Surr: BFB	90.7	70.9-130		%REC	1	6/30/2014 2:22:45 PM	R19588
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	6/27/2014 10:07:53 PM	R19557
Toluene	ND	1.0		µg/L	1	6/27/2014 10:07:53 PM	R19557
Ethylbenzene	ND	1.0		µg/L	1	6/27/2014 10:07:53 PM	R19557
Xylenes, Total	ND	2.0		µg/L	1	6/27/2014 10:07:53 PM	R19557
Surr: 4-Bromofluorobenzene	110	82.9-139		%REC	1	6/27/2014 10:07:53 PM	R19557

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1406C76**

Date Reported: **7/8/2014**

CLIENT: APEX TITAN

Client Sample ID: MW-33

Project: Lindrith CS

Collection Date: 6/25/2014 4:40:00 PM

Lab ID: 1406C76-012

Matrix: AQUEOUS

Received Date: 6/27/2014 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/28/2014 7:49:35 AM	13941
Surr: DNOP	113	62.7-145		%REC	1	6/28/2014 7:49:35 AM	13941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/30/2014 2:53:02 PM	R19588
Surr: BFB	98.2	70.9-130		%REC	1	6/30/2014 2:53:02 PM	R19588
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	6/27/2014 10:37:56 PM	R19557
Toluene	ND	1.0		µg/L	1	6/27/2014 10:37:56 PM	R19557
Ethylbenzene	ND	1.0		µg/L	1	6/27/2014 10:37:56 PM	R19557
Xylenes, Total	ND	2.0		µg/L	1	6/27/2014 10:37:56 PM	R19557
Surr: 4-Bromofluorobenzene	110	82.9-139		%REC	1	6/27/2014 10:37:56 PM	R19557

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 12 of 23
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1406C76**

Date Reported: **7/8/2014**

CLIENT: APEX TITAN

Client Sample ID: MW-31

Project: Lindrith CS

Collection Date: 6/25/2014 5:30:00 PM

Lab ID: 1406C76-013

Matrix: AQUEOUS

Received Date: 6/27/2014 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/28/2014 8:11:17 AM	13941
Surr: DNOP	112	62.7-145		%REC	1	6/28/2014 8:11:17 AM	13941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/30/2014 3:23:06 PM	R19588
Surr: BFB	97.5	70.9-130		%REC	1	6/30/2014 3:23:06 PM	R19588
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	6/27/2014 11:07:56 PM	R19557
Toluene	ND	1.0		µg/L	1	6/27/2014 11:07:56 PM	R19557
Ethylbenzene	ND	1.0		µg/L	1	6/27/2014 11:07:56 PM	R19557
Xylenes, Total	ND	2.0		µg/L	1	6/27/2014 11:07:56 PM	R19557
Surr: 4-Bromofluorobenzene	93.6	82.9-139		%REC	1	6/27/2014 11:07:56 PM	R19557

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 13 of 23
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1406C76**

Date Reported: **7/8/2014**

CLIENT: APEX TITAN

Client Sample ID: MW-40

Project: Lindrith CS

Collection Date: 6/25/2014 6:10:00 PM

Lab ID: 1406C76-014

Matrix: AQUEOUS

Received Date: 6/27/2014 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/30/2014 12:54:51 PM	13941
Surr: DNOP	64.6	62.7-145		%REC	1	6/30/2014 12:54:51 PM	13941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.30	0.050		mg/L	1	6/30/2014 3:53:18 PM	R19588
Surr: BFB	120	70.9-130		%REC	1	6/30/2014 3:53:18 PM	R19588
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	6/27/2014 11:38:11 PM	R19557
Toluene	ND	1.0		µg/L	1	6/27/2014 11:38:11 PM	R19557
Ethylbenzene	1.0	1.0		µg/L	1	6/27/2014 11:38:11 PM	R19557
Xylenes, Total	ND	2.0		µg/L	1	6/27/2014 11:38:11 PM	R19557
Surr: 4-Bromofluorobenzene	110	82.9-139		%REC	1	6/27/2014 11:38:11 PM	R19557

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 14 of 23
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1406C76**

Date Reported: **7/8/2014**

CLIENT: APEX TITAN

Client Sample ID: MW-12

Project: Lindrith CS

Collection Date: 6/26/2014 9:55:00 AM

Lab ID: 1406C76-015

Matrix: AQUEOUS

Received Date: 6/27/2014 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/30/2014 1:16:42 PM	13941
Surr: DNOP	85.1	62.7-145		%REC	1	6/30/2014 1:16:42 PM	13941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.37	0.050		mg/L	1	6/30/2014 4:23:18 PM	R19588
Surr: BFB	191	70.9-130	S	%REC	1	6/30/2014 4:23:18 PM	R19588
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	46	1.0		µg/L	1	6/28/2014 12:08:14 AM	R19557
Toluene	ND	1.0		µg/L	1	6/28/2014 12:08:14 AM	R19557
Ethylbenzene	2.7	1.0		µg/L	1	6/28/2014 12:08:14 AM	R19557
Xylenes, Total	2.4	2.0		µg/L	1	6/28/2014 12:08:14 AM	R19557
Surr: 4-Bromofluorobenzene	124	82.9-139		%REC	1	6/28/2014 12:08:14 AM	R19557

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1406C76**Date Reported: **7/8/2014****CLIENT:** APEX TITAN**Client Sample ID:** MW-2**Project:** Lindrith CS**Collection Date:** 6/26/2014 11:05:00 AM**Lab ID:** 1406C76-016**Matrix:** AQUEOUS**Received Date:** 6/27/2014 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/28/2014 9:16:54 AM	13941
Surr: DNOP	187	62.7-145	S	%REC	1	6/28/2014 9:16:54 AM	13941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	8.2	0.50		mg/L	10	6/30/2014 4:53:32 PM	R19588
Surr: BFB	108	70.9-130		%REC	10	6/30/2014 4:53:32 PM	R19588
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	1400	50		µg/L	50	6/28/2014 12:38:25 AM	R19557
Toluene	ND	5.0		µg/L	5	6/28/2014 1:08:32 AM	R19557
Ethylbenzene	62	5.0		µg/L	5	6/28/2014 1:08:32 AM	R19557
Xylenes, Total	420	10		µg/L	5	6/28/2014 1:08:32 AM	R19557
Surr: 4-Bromofluorobenzene	125	82.9-139		%REC	5	6/28/2014 1:08:32 AM	R19557

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 16 of 23
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1406C76**

Date Reported: **7/8/2014**

CLIENT: APEX TITAN

Client Sample ID: MW-38

Project: Lindrith CS

Collection Date: 6/26/2014 12:10:00 PM

Lab ID: 1406C76-017

Matrix: AQUEOUS

Received Date: 6/27/2014 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	6/28/2014 9:38:44 AM	13941
Surr: DNOP	100	62.7-145		%REC	1	6/28/2014 9:38:44 AM	13941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	7.2	0.50		mg/L	10	6/30/2014 5:26:30 PM	R19588
Surr: BFB	110	70.9-130		%REC	10	6/30/2014 5:26:30 PM	R19588
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	370	20		µg/L	20	6/28/2014 2:08:59 AM	R19557
Toluene	ND	20		µg/L	20	6/28/2014 2:08:59 AM	R19557
Ethylbenzene	64	20		µg/L	20	6/28/2014 2:08:59 AM	R19557
Xylenes, Total	250	40		µg/L	20	6/28/2014 2:08:59 AM	R19557
Surr: 4-Bromofluorobenzene	114	82.9-139		%REC	20	6/28/2014 2:08:59 AM	R19557

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1406C76**

Date Reported: **7/8/2014**

CLIENT: APEX TITAN

Client Sample ID: MW-4

Project: Lindrith CS

Collection Date: 6/26/2014 1:05:00 PM

Lab ID: 1406C76-018

Matrix: AQUEOUS

Received Date: 6/27/2014 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: BCN
Diesel Range Organics (DRO)	1.1	1.0		mg/L	1	6/28/2014 10:00:30 AM	13941
Surr: DNOP	110	62.7-145		%REC	1	6/28/2014 10:00:30 AM	13941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	23	2.5		mg/L	50	6/30/2014 5:56:49 PM	R19588
Surr: BFB	101	70.9-130		%REC	50	6/30/2014 5:56:49 PM	R19588
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	4200	50		µg/L	50	6/28/2014 2:39:00 AM	R19557
Toluene	1500	50		µg/L	50	6/28/2014 2:39:00 AM	R19557
Ethylbenzene	190	50		µg/L	50	6/28/2014 2:39:00 AM	R19557
Xylenes, Total	1400	100		µg/L	50	6/28/2014 2:39:00 AM	R19557
Surr: 4-Bromofluorobenzene	118	82.9-139		%REC	50	6/28/2014 2:39:00 AM	R19557

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 18 of 23
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1406C76

08-Jul-14

Client: APEX TITAN

Project: Lindrith CS

Sample ID	MB-13941		SampType: MBLK		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	PBW		Batch ID: 13941		RunNo: 19537					
Prep Date:	6/27/2014		Analysis Date: 6/27/2014		SeqNo: 566619		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Surr: DNOP	0.97		1.000		97.2	62.7	145			

Sample ID	LCS-13941		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	LCSW		Batch ID: 13941		RunNo: 19537					
Prep Date:	6/27/2014		Analysis Date: 6/27/2014		SeqNo: 566620		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.5	1.0	5.000	0	109	78.6	146			
Surr: DNOP	0.51		0.5000		103	62.7	145			

Sample ID	LCSD-13941		SampType: LCSD		TestCode: EPA Method 8015D: Diesel Range					
Client ID:	LCSS02		Batch ID: 13941		RunNo: 19537					
Prep Date:	6/27/2014		Analysis Date: 6/27/2014		SeqNo: 566621		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.1	1.0	5.000	0	102	78.6	146	6.45	26.5	
Surr: DNOP	0.46		0.5000		92.7	62.7	145	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1406C76

08-Jul-14

Client: APEX TITAN

Project: Lindrith CS

Sample ID 5ML RB	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBW	Batch ID: R19557		RunNo: 19557							
Prep Date:	Analysis Date: 6/27/2014		SeqNo: 566650		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	19		20.00		97.4	70.9	130			

Sample ID 2.5UG GRO LCS	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSW	Batch ID: R19557		RunNo: 19557							
Prep Date:	Analysis Date: 6/27/2014		SeqNo: 566651		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.53	0.050	0.5000	0	106	80	120			
Surr: BFB	19		20.00		95.3	70.9	130			

Sample ID 1406C76-001AMS	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: MW-7	Batch ID: R19557		RunNo: 19557							
Prep Date:	Analysis Date: 6/27/2014		SeqNo: 566653		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.82	0.050	0.5000	0.3380	95.8	79	121			
Surr: BFB	24		20.00		122	70.9	130			

Sample ID 1406C76-001AMSD	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: MW-7	Batch ID: R19557		RunNo: 19557							
Prep Date:	Analysis Date: 6/27/2014		SeqNo: 566654		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.82	0.050	0.5000	0.3380	96.3	79	121	0.318	20	
Surr: BFB	25		20.00		123	70.9	130	0	0	

Sample ID 5ML RB	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBW	Batch ID: R19588		RunNo: 19588							
Prep Date:	Analysis Date: 6/30/2014		SeqNo: 567746		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	19		20.00		94.1	70.9	130			

Sample ID 2.5UG GRO LCS	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSW	Batch ID: R19588		RunNo: 19588							
Prep Date:	Analysis Date: 6/30/2014		SeqNo: 567747		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits | ND Not Detected at the Reporting Limit |
| O RSD is greater than RSDlimit | P Sample pH greater than 2. |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1406C76

08-Jul-14

Client: APEX TITAN

Project: Lindrith CS

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	R19588	RunNo:	19588					
Prep Date:		Analysis Date:	6/30/2014	SeqNo:	567747	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0	92.6	80	120			
Surr: BFB	21		20.00		106	70.9	130			

Sample ID	1406C76-016AMS	SampType:	MS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	MW-2	Batch ID:	R19588	RunNo:	19588					
Prep Date:		Analysis Date:	6/30/2014	SeqNo:	567758	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	13	0.50	5.000	8.224	96.6	79	121			
Surr: BFB	240		200.0		118	70.9	130			

Sample ID	1406C76-016AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	MW-2	Batch ID:	R19588	RunNo:	19588					
Prep Date:		Analysis Date:	6/30/2014	SeqNo:	567759	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	13	0.50	5.000	8.224	88.4	79	121	3.18	20	
Surr: BFB	230		200.0		117	70.9	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1406C76

08-Jul-14

Client: APEX TITAN

Project: Lindrith CS

Sample ID	5ML RB		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBW		Batch ID:	R19557		RunNo:	19557			
Prep Date:			Analysis Date:	6/27/2014		SeqNo:	566667		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	2.0								
Surr: 4-Bromofluorobenzene	21		20.00		106	82.9	139			

Sample ID	100NG BTEX LCS		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSW		Batch ID:	R19557		RunNo:	19557			
Prep Date:			Analysis Date:	6/27/2014		SeqNo:	566668		Units:	µg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	109	80	120			
Toluene	22	1.0	20.00	0	108	80	120			
Ethylbenzene	21	1.0	20.00	0	106	80	120			
Xylenes, Total	65	2.0	60.00	0	108	80	120			
Surr: 4-Bromofluorobenzene	21		20.00		107	82.9	139			

Sample ID	1406C76-002AMS		SampType:	MS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	MW-36		Batch ID:	R19557		RunNo:	19557			
Prep Date:			Analysis Date:	6/27/2014		SeqNo:	566671		Units:	µg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	17	1.0	20.00	0.6020	84.5	71	129			
Toluene	17	1.0	20.00	0.4060	84.3	68.4	135			
Ethylbenzene	17	1.0	20.00	0	86.4	69.4	135			
Xylenes, Total	54	2.0	60.00	1.720	87.2	72.4	135			
Surr: 4-Bromofluorobenzene	24		20.00		119	82.9	139			

Sample ID	1406C76-002AMSD		SampType:	MSD		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	MW-36		Batch ID:	R19557		RunNo:	19557			
Prep Date:			Analysis Date:	6/27/2014		SeqNo:	566672		Units:	µg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	17	1.0	20.00	0.6020	82.0	71	129	2.91	20	
Toluene	17	1.0	20.00	0.4060	82.0	68.4	135	2.65	20	
Ethylbenzene	17	1.0	20.00	0	84.2	69.4	135	2.57	20	
Xylenes, Total	53	2.0	60.00	1.720	85.0	72.4	135	2.47	20	
Surr: 4-Bromofluorobenzene	23		20.00		113	82.9	139	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
E Value above quantitation range	H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit	P Sample pH greater than 2.
R RPD outside accepted recovery limits	RL Reporting Detection Limit
S Spike Recovery outside accepted recovery limits	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1406C76

08-Jul-14

Client: APEX TITAN

Project: Lindrith CS

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBW	Batch ID:	R19588	RunNo:	19588					
Prep Date:		Analysis Date:	6/30/2014	SeqNo:	567765	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	22		20.00		109	82.9	139			

Sample ID	100NG BTEX LCS	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSW	Batch ID:	R19588	RunNo:	19588					
Prep Date:		Analysis Date:	6/30/2014	SeqNo:	567766	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	23		20.00		115	82.9	139			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2.
RL Reporting Detection Limit

Sample Log-In Check List

Client Name: APEX AZTEC

Work Order Number: 1406C76

RcptNo: 1

Received by/date:

06/27/14

Logged By: Anne Thorne

6/27/2014 7:50:00 AM

Anne Thorne

Completed By: Anne Thorne

6/27/2014

Anne Thorne

Reviewed By:

IO

06/27/2014

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0° C? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☒ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date

By Whom:

Via:

☐ eMail

☐ Phone

☐ Fax

☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.6	Good	Yes			

Chain-of-Custody Record

Client: APEX TITAN

Mailing Address: AZTEC, NM

Phone #: 903-821-5603

email or Fax#: Kyle

QA/QC Package:

☒ Standard

☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

LINDRITH CS

Project #:

703041060060

Project Manager:

Kyle Summers

Sampler: AARON BRYANT

On Ice: ☒ Yes ☐ No

Sample Temperature: 26

Container Type and #

Preservative Type

HEAL No.

58 VOA HCL

-014

-015

-016

-017

-018

NFS

AB

Date: 26-14

Time: 1525

Relinquished by: Ch

BFA

Date: 26-14

Time: 1715

Received by:

Christopher Warden

Date: 6/14/14

Time: 1525

Remarks:

Ch

AB

NFS

AB

TPH 8015B (GRO / DRO / MRO)

BTEX + MTBE + TPH (Gas only)

BTEX + MTBE + TPH (8021)

TPH (Method 418.1)

EDB (Method 504.1)

PAH's (8310 or 8270 SIMS)

RCRA 8 Metals

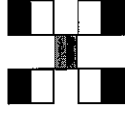
Anions (F, Cl, NO₃, NO₂, PO₄, SO₄)

8081 Pesticides / 8082 PCB's

8260B (VOA)

8270 (Semi-VOA)

Air Bubbles (Y or N)



**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request