3R - 1001

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May 27, 2015

Submitted via e-mail to the NMOCD FTP website

Mr. Glenn von Gonten New Mexico Energy, Minerals & Natural Resources Department - Oil Conservation Division 1220 South St. Francis Drive Santa Fe. New Mexico 87505

RE: Annual Groundwater Monitoring Report (April and October 2014 Sampling Events) and Supplemental Site Investigation Report

Enterprise Field Services, LLC – Largo Compressor Station

Rio Arriba County, New Mexico Groundwater Discharge Plan GW-211 OCD RP: 3R-1001 (older number)

Dear Mr. von Gonten:

Please find attached an electronic copy of the above-referenced report prepared by Apex TITAN, LLC (Apex). The report is associated with the Enterprise Field Services. LLC (Enterprise) Largo Compressor Station condensate storage tank releases and historical impacts.

The activities detailed in the attached Annual Groundwater Monitoring Report (April and October 2014 Sampling Events) and Supplemental Site Investigation Report include the two (2) semiannual groundwater monitoring events completed at the site during April and October 2014, to further evaluate the concentrations of constituents of concern (COCs) in groundwater at the site. In addition, the report includes details on the installation of three (3) new monitoring wells to further evaluate the extent of COCs in groundwater in the northwestern portion of the Site. Enterprise will continue to perform semi-annual groundwater monitoring activities and corrective actions at the facility in accordance with the Corrective Action Work Plan (Area 1 and Area 3 -Soils) dated March 11, 2013.

Enterprise appreciates the OCD's continued assistance and guidance with this project. Should you have any questions, comments or concerns, or require additional information, please feel free to contact me any time at 713-381-8780, or at gemiller@eprod.com.

Rodney M. Sartor, REM

Director, Environmental

Sincerely.

Gregory E. Miller, P.G.

Supervisor, Environmental

/dep Attachment

ec:

Liz Scaggs - Apex Kyle Summers - Apex



ANNUAL GROUNDWATER MONITORING (April and October 2014 Sampling Events) AND SUPPLEMENTAL SITE INVESTIGATION REPORT GROUNDWATER DISCHARGE PLAN GW-211 3R-1001 (older number)

Property:

Largo Compressor Station NE ¼ and SE ¼, S15 T26N R7W Rio Arriba County, New Mexico

April 13, 2015 Apex Project No. 7030410G002

Prepared for:

Enterprise Field Services, LLC P.O. Box 4324 Houston, Texas 77210-4324 Attn: Mr. Greg E. Miller, P.G.

Prepared by:

Ranee Deechilly Environmental Scientist

Elizabeth Scaggs, P.G. Division Manager



Largo Compressor Station – Annual Groundwater Monitoring Report (April and October 2014 Sampling Events) Executive Summary

During August 2014, Apex TITAN, Inc. (Apex) performed a supplemental site investigation, and during April and October 2014, Apex conducted semi-annual groundwater monitoring events at the Largo Compressor Station. 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 mid-1960s, and is located off of CR 379 in Section 15, Township 26N, Range 7W in Rio Arriba County, New Mexico. The objectives of the supplemental site investigation and groundwater monitoring events were to further evaluate the concentrations of constituents of concern (COCs) in groundwater at the Site and to further define the apparent downgradient extent of the Area 1 dissolved-phase COC plume in the northwest portion of the Site.

- Apex advanced three (3) soil borings (MW-88 through MW-90) in the northwest portion (Area
 1) of the site, which were completed as groundwater monitoring wells. The monitoring wells
 were developed by surging and removing groundwater until the fluid appeared relatively free
 of fine-grained sediment. Soil samples collected during the monitoring well installation did
 not exhibit COC concentrations above the applicable Oil Conservation Division (OCD)
 Remediation Action Levels.
- During completion of the April and October 2014 sampling events, monitoring wells MW-33 and MW-35 exhibited non-aqueous phase liquids (NAPL) and were not sampled.
- During the completion of the sampling events, one (1) groundwater sample was collected from each monitoring well not exhibiting NAPL utilizing low-flow sampling techniques. MW-42 was not sampled due to insufficient water.
- During the April sampling event, the groundwater samples collected from monitoring wells MW-7, MW-37, and MW-47 exhibited benzene concentrations ranging from 43 μg/L to 740 μg/L, which exceed the Water Quality Control Commission (WQCC) Groundwater Quality Standard. During the October sampling event, the groundwater samples collected from monitoring wells MW-37, MW-47, and MW-48 exhibited benzene concentrations ranging from 48 μg/L to 770 μg/L, which exceed the WQCC Groundwater Quality Standard.
- Monitoring wells MW-37 and MW-47 exhibited an increase in benzene concentrations from 2013. However, monitoring wells MW-7, MW-16, MW-39, MW-48, and MW-51 exhibited a general decrease in benzene concentrations from 2013. The notable decrease at monitoring well MW-7 may in part be due to the removal of the nearby source material and a portion of the associated groundwater during 2014 excavation activities at the former tank battery location.

Apex has the following recommendations:

- Continue semi-annual groundwater sampling events; and
- Continue the execution of corrective actions to: 1) Reduce the concentrations of COCs in soil to below the OCD Remediation Action Levels in Area 3 and; 2) Remove NAPL from groundwater at the Site to the extent practical, and continue to develop and execute groundwater remediation strategies once the bulk of the soils have been removed/remediated.

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ANNUAL GROUNDWATER MONITORING REPORT (April and October 2014 Sampling Events) AND SUPPLEMENTAL SITE INVESTIGATION GROUNDWATER DISCHARGE PLAN GW-211

Largo Compressor Station
NE ¼ and SE ¼, S15 T26N R7W
Rio Arriba County, New Mexico

Apex Project No. 7030410G002

1.0 INTRODUCTION

1.1 Site Description & Background

The Enterprise Field Services, LLC (Enterprise) Largo Compressor Station is located off of County Road (CR) 379 in Section 15, Township 26N, Range 7W in Rio Arriba County, New Mexico (36.4855N, 107.5578W), 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 mid-1960s and currently includes two (2) compressor engines, a dehydration unit and related treater, one (1) bullet storage tank, a new condensate storage tank battery, which includes seven (7) new condensate storage tanks, inlet scrubbers, a control room, and an office/shop building.

The Site is subject to regulatory oversight by the New Mexico Energy, Minerals, and Natural Resources Department (EMNRD), Oil Conservation Division (OCD). To address activities related to crude oil/condensate related releases, the New Mexico EMNRD OCD utilizes the *Guidelines for Remediation of Leaks, Spills and Releases* as guidance, in addition to the EMNRD/OCD rules, specifically New Mexico Administrative Code (NMAC) 19.15.29 *Release Notification*. These guidance documents establish investigation and abatement action requirements for sites subject to reporting and/or corrective action.

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, created from an aerial photograph, is provided as Figure 2 of Appendix A.

The areas of known or potential impact at the Site have been previously identified as Areas 1 through 4 in OCD correspondence. Each of the areas is depicted on Figure 3 in relation to pertinent Site features and general Site boundaries. These areas are briefly described below:

<u>Area 1 (Former Condensate Storage Tank Area)</u>

Area 1 is defined as the northwestern portion of the Site and includes the former condensate storage tank battery associated with on-going investigation and/or corrective actions since a release from a condensate storage tank valve was reported to the OCD in January 2008. Additional detail regarding the investigative and corrective activities at Area 1 are provided in the Environmental Site Investigation – Largo Compressor Station (GW-211) (Southwest Geoscience (SWG) - March 24, 2011), and the Corrective Action Pilot Study Report (SWG – October 10,

Enterprise Field Services, LLC Annual Groundwater Monitoring (April and October 2014 Events) and Supplemental Site Investigation Report Largo Compressor Station April 13, 2015



2011). The old condensate storage tanks were physically removed from Area 1 during July/August 2012.

Based on the analytical results from the October 2013 and April 2014 sampling events monitoring well MW-47 exhibited benzene concentrations in exceedance with the *New Mexico* WQCC *Groundwater Quality Standard*. In August 2014 three (3) groundwater monitoring wells (MW-88, MW-89, and MW-90) were installed to further evaluate the extent of constituents of concern (COCs) in groundwater downgradient of MW-47.

Area 2 (Valve Box Area)

Area 2 includes the new condensate storage tank battery and the immediately surrounding area. This area is in the north central portion of the Site, immediately south of CR 379. During the construction of the new tank battery in June 2009, petroleum hydrocarbon impacted soils and groundwater were encountered in association with a former valve box and related appurtenances. Additional detail regarding the investigative and corrective activities at Area 2 are provided in the Environmental Site Investigation – Largo Compressor Station (GW-211) (SWG - March 24, 2011).

Area 3 (Retention Pond Area)

Area 3 encompasses the northeast portion of the Site including the storm-water retention pond. Historical petroleum hydrocarbon affected soil and groundwater were identified during the construction of the retention pond in July of 2009, which apparently originated from historic oil and contact water treatment and storage in the area of the current retention pond. Additional detail regarding the investigative and corrective activities at Area 3 are provided in the Environmental Site Investigation – Largo Compressor Station (GW-211) (SWG - March 24, 2011), and the Supplemental Site Investigation & Quarterly Groundwater Monitoring Report (April 2012) (SWG – June 31, 2012).

Area 4 (Compression & Dehydration Area)

Area 4 includes the remainder of the Site, which includes the active compression and treatment area comprised of two (2) compressor engines, a dehydration unit and related inlet scrubbers. Soil and groundwater investigation activities pertaining to Area 4 are provided in the Environmental Site Investigation – Largo Compressor Station (GW-211) (SWG - March 24, 2011), and the Supplemental Site Investigation & Quarterly Groundwater Monitoring Report (April 2012) (SWG – June 31, 2012).

1.2 Chronology of Events

Significant events and related activities associated with the Site, including the results of Site investigation activities and corrective action completed prior to activities described within this report, are provided in the following summary:

January 4, 2008 Area 1: Release was discovered resulting from frozen valve failure on a

condensate storage tank. The release flowed into the below-grade drain tanks, which subsequently overflowed to surrounding containment. The

release was subsequently reported to the OCD.

March/April 2008

<u>Area 1:</u> Geoprobe Investigation at Largo Compressor Station (Lodestar – May 16, 2008): Initial field investigation activities were performed by Lodestar

Services, LLC (Lodestar) during March and April of 2008. Nineteen (19) soil borings (B-1 through B-19) were advanced at the Site with total depths ranging



from 14.5 feet below grade surface (bgs) to 21 feet bgs. Subsurface soils were identified as Quaternary alluvium consisting of unconsolidated silts, sands, and clays. Groundwater was reported in each of the soil borings with static levels ranging from 13.15 to 19.5 feet bgs. Five (5) of the nineteen (19) soil borings were subsequently converted to 1-inch piezometers (P-1 though P-5) with screened intervals ranging from 9.5 feet bgs to 21 feet bgs. Based on the depth to groundwater and proximity to a surface water body, the Site was classified with a total ranking score greater than 19.

Lodestar collected twenty nine (29) soil samples from the nineteen (19) soil borings and submitted the samples to Hall Environmental Analytical Laboratory (HEAL) in Albuquerque, NM for total petroleum hydrocarbons (TPH) as gasoline range organics (GRO) and diesel range organics (DRO) and benzene, toluene, ethylbenzene, and xylenes (BTEX) analysis utilizing Environmental Protection Agency (EPA) method SW-846 #8015M and #8021B, respectively. In addition, five (5) groundwater samples collected from the piezometers were submitted for TPH GRO/DRO and BTEX analysis. Based on the laboratory analytical results, soil samples collected from soil borings B-1 at 4 feet bgs, B-2 at 12.5 feet bgs, B-5 at 17.5 feet bgs, and B-14 at 17.5 feet bgs exhibited TPH GRO/DRO concentrations above the OCD Remediation Action Level. The groundwater samples collected from piezometers P-1, P-2, and P-3 exhibited benzene, toluene, and/or total xylene concentrations above the WQCC Groundwater Quality Standards.

August/September 2008

<u>Area 1:</u> Enterprise submits notice that the condensate storage tank system is scheduled to be upgraded/replaced. Enterprise intends to update the Groundwater Discharge Plan upon completion of these activities.

September/October 2008

<u>Areas 1 through 4:</u> The OCD approves the planned storage tank modification from Enterprise with the condition that Enterprise files an appropriate closure plan for the old tank battery.

June/July 2009

Area 2: An area of concern is discovered during construction activities at the new condensate storage tank battery. Source of impact presumed to be valve box from a storage tank formerly utilized at this location. Souder, Miller, & Associates (SMA) assisted with the assessment activities and Foutz & Bursum (F&B) performed the excavation activities. Prior to fully excavating the affected soils, exploratory "potholes" were advanced to investigate the extent of subsurface contamination. Groundwater was encountered at approximately 13 feet bgs during these activities. On June 26, 2009, SMA collected one soil confirmation sample from pothole #6 (PH# 6), and submitted it for analysis of TPH GRO/DRO. Based on the laboratory analytical data, the soil confirmation sample PH# 6 did not exhibit TPH GRO/DRO concentrations in exceeding the OCD Remediation Action Levels. SMA also collected a groundwater sample from pothole# 1 (PH# 1). Based on the laboratory analytical data, a benzene concentration was identified in excess of the WQCC Water Quality Standards. Based on field observations, soil screening data, and laboratory analytical data, F&B excavated the visually impacted soils at which the final excavation was reported to be approximately 100 feet long by 30 feet wide and 13 feet deep. SMA collected a total of four (4) soil confirmation samples on July 1, 2009 from the sidewalls of the Area 2 excavation and one (1) soil confirmation sample from the excavated soils and submitted them for analysis of TPH GRO/DRO. The confirmation soil samples did not exhibit COC concentrations



above the OCD Remediation Action Levels. SWG subsequently collected groundwater samples from this approximate area (TSW-44 and TSW-45) and no groundwater impacts were observed (Environmental Site Investigation (SWG – March 24, 2011)).

The excavated soils were transported off-site and disposed of at the Envirotech landfarm near Angel Peak, New Mexico. In addition, a vacuum truck was utilized to remove approximately 2,000 barrels of groundwater from the excavation prior to backfill. The Area 2 excavation was backfilled in July of 2009 with unaffected soil and gravel.

July 2009

<u>Area 1:</u> Inspection Report – New Mexico OCD (July 9, 2009): Onsite inspection by OCD requires tank integrity testing, improvement on leak detection monitoring, liner repair, soil and groundwater remediation, system repair or replacement.

July 2009

<u>Area 1:</u> Response to Inspection Report – Enterprise (July 23, 2009): Enterprise submits a work plan to perform additional investigation activities at the Site.

July/August 2009

<u>Area 3:</u> Historical petroleum hydrocarbon impact is discovered during the construction of a storm-water retention pond at the facility. SMA was retained to sample the excavation. Initial Form C-141 was submitted to OCD on July 6, 2009.

On July 15, 2009, a cement tank containing water (apparently an old cistern) was unearthed in the vicinity of the planned storm-water retention pond. SMA collected a water sample from the tank, and subsequent BTEX analyses indicate the tank water did not exhibit BTEX concentration in excess of the WQCC *Groundwater Quality Standards*. Soil confirmation samples were collected below the water table (BWT) on the north side of the retention pond excavation and on the northeast wall (NE Wall) of the retention pond excavation. Analytical results indicate the soil confirmation samples BWT and NE Wall contain TPH GRO/DRO, benzene, and/or total BTEX concentrations in excess of the OCD *Remediation Action Levels*. Groundwater which was present at the BWT soil sample location was collected (GE) and submitted for analysis of BTEX. Based on the laboratory analytical results, the GE groundwater sample exhibited benzene, toluene and xylene concentrations in excess of the WQCC *Groundwater Quality Standards*.

On July 16, 2009, SMA evaluated a total of four (4) test pits, each with a total depth of approximately 13 feet bgs, to the north and east of the retention pond excavation. Groundwater was encountered in each of the test pits at approximately 13 feet bgs. SMA collected one (1) soil sample just above the water table in each of the test pits to field screen for the presence of volatile organic compounds (VOCs). Based on visual observations within the test pits and the field screening results of the collected soils samples, It was concluded that "soil impacts likely extended beyond a reasonable area for excavation" within Area 3. The decision was made to stop extending the excavation and to remove any visibly contaminated soil remaining in the existing excavation of Area 3. SMA subsequently collected a groundwater sample from the southwest corner of the retention pond excavation (SWCRP) and submitted it for analysis of BTEX. Based on the laboratory analytical results, the SWCRP groundwater sample exhibited benzene and xylene concentrations above the



WQCC Groundwater Quality Standards.

The excavated soils, approximately 1,701 cubic yards in total (one source indicates 3,000 cubic yards), were transported off-site and disposed of at the Envirotech landfarm near Angel Peak, New Mexico. In addition, a vacuum truck was utilized to remove approximately 1,120 barrels of hydrocarbon impacted groundwater from the excavation prior to backfill. The excavation was backfilled with approximately 1,360 cubic yards of unaffected material, leaving a four (4) to five (5) foot depression to utilize as the storm-water retention pond.

August 2009

Area 1: Report of Subsurface Investigation at Largo Compressor Station (Lodestar – November 30, 2009): During August 2009, Lodestar performed a supplemental subsurface field investigation at the Site. Ten (10) additional soil borings (B-21 through B-30) were advanced at the Site with total depths ranging from 22 to 42 feet bgs. In addition, two (2) hand auger borings (HA-1 and HA-2) were advanced within the former condensate storage tank containment berm with total depths ranging from 8 to 17 feet bgs. Groundwater was reported in each of the soil borings with static levels ranging from 17.5 to 20.5 feet bgs. Four (4) of the ten (10) soil borings were subsequently converted to permanent 2-inch groundwater monitoring wells (MW-6 through MW-9) with screened intervals ranging from 12 to 25 feet bgs.

Lodestar collected nineteen (19) soil samples from the ten (10) soil borings and two (2) hand auger borings and submitted them for TPH GRO/DRO and BTEX analysis. In addition, nine (9) groundwater samples were collected from the previously installed piezometers (P-1 through P-5) and the newly installed monitoring wells (MW-6 through MW-9) and submitted for TPH GRO/DRO and BTEX analysis. Based on the laboratory analytical results, soil samples collected from soil borings B-22 at 15 feet bgs, B-23 at 15 feet bgs, B-24 at 15 feet bgs, B-29 at 18 feet bgs, and Hand Auger-1 at 14 feet bgs exhibited total BTEX and/or TPH GRO/DRO concentrations above OCD *Remediation Action Levels*. The groundwater samples collected from piezometers P-2 and P-3 and monitoring well MW-7 exhibited benzene, toluene, and/or total xylene concentrations above the WQCC *Groundwater Quality Standards*. In addition, non-aqueous phase liquid (NAPL) was present in piezometer P-1.

Lodestar concluded that soil and groundwater impact was limited to the bermed area and slightly outside of the bermed area in the down gradient (northwest) direction. Furthermore, the dissolved-phase contamination of the groundwater underlying the Site was migrating slightly to the north-northwest.

November 2009/February 2010

Area 1: November 2009 Groundwater Sampling (Lodestar – December 17, 2009), Quarterly Groundwater Monitoring Report (Lodestar – April 20, 2010): Quarterly groundwater monitoring events were performed in November of 2009 and February of 2010. Groundwater samples were collected from each of the monitoring wells at the Site and submitted for BTEX analysis. Based on the laboratory analytical results, the groundwater samples collected from the groundwater monitoring wells MW-7 and P-2 (now referred to as MW-11) exhibited benzene and/or total xylene concentrations above the WQCC Groundwater Quality Standards. However, the concentrations of COCs appeared to be decreasing in some areas between these monitoring events. NAPL was present in piezometer P-1 during each of these two groundwater



monitoring events.

January 2010

<u>Area 1:</u> Largo Compressor Station Work Plan for Groundwater Remediation GW-211 (Lodestar – December 31, 2009): Enterprise submits a groundwater remediation work plan for the Site detailing the proposed injection of Oxygen Release Compound (ORC) and utilization of sorbent socks to the OCD.

February 2010

- <u>Area 1:</u> The OCD approves the December 31, 2009 work plan with the following conditions:
- "1. Enterprise will continue to conduct quarterly groundwater monitoring events at the facility including an episode of groundwater sampling once the new recovery well is installed and prior to the introduction of the oxygen release compound."
- "2. After installation and proper development of the 4-inch recovery well to replace existing well P-1, Enterprise will allow approximately 48 hrs for the apparent thickness of non-aqueous phase liquid to stabilize before its thickness is measured. If that apparent thickness is 10 inches or greater, then a condensate baildown/recovery test will be undertaken to better understand the thickness of condensate in-situ as well as determine what the yield of condensate might be. Only after such testing, shall the proposed oil-adsorbent sock(s) be placed in the well."
- "3. On at least a one-monthly basis thereafter (rather that the oncequarterly schedule proposed in the workplan), the adsorbent sock(s) shall be removed from the well and the apparent product thickness again be allowed to stabilize and measured. If the apparent thickness remains 10 inches or greater, another baildown/recovery test will be undertaken. Some method should be implemented to determine the volume of condensate retained by the adsorbent socks."
- "4. Analysis of all water samples will be undertaken by a qualified laboratory using either Methods 8260 (VOCs) or 8021 (BTEX), and 8015 (GRO/DRO)."
- "5. All unearthed soils, development water, water purged prior to sampling, and recovered condensate shall be properly handled, contained, transported, and disposed."
- "6. All reports concerning implementation of the workplan, condensate recovery and testing, and quarterly monitoring shall be provided to the OCD no more than 45 days after completion of any field activities."

March/April 2010

Area 1: Interim Remedial Investigation Report (LTE – May 15, 2010): During March of 2010, LT Environmental, Inc. (LTE), formerly known as Lodestar, advanced two (2) additional soil borings at the Site with total depths ranging from approximately 31 to 32 feet bgs. Groundwater was encountered in both soil borings with static levels ranging from 20 to 22 feet bgs. The two (2) soil borings were subsequently converted to 2-inch groundwater monitoring wells (MW-15 and MW-16). LTE also replaced piezometer P-1 with a 4-inch groundwater monitoring well (MW-12) which was proposed to be utilized in recovering NAPL by introducing adsorbent socks via the well casing. Piezometers P-2, P-3, P-4, and P-5 were also replaced with 2-inch groundwater monitoring wells MW-11, MW-3R, MW-14, and MW-13, respectively.

Area 1: During April 2010, LTE collected eleven (11) groundwater samples from the on-Site groundwater monitoring wells for TPH GRO/DRO and BTEX



analysis. Based on the laboratory analytical results, the groundwater samples collected from groundwater monitoring wells MW-7 and MW-12 exhibited benzene, toluene, and/or xylenes concentrations above the WQCC *Water Quality Standards*. However, concentrations of COCs appeared to be decreasing from the previous monitoring event in February 2010.

May 2010

Area 1: A final C-141 was submitted to the OCD, indicating the need for additional studies.

<u>Areas 1 through 4:</u> On May 27, 2010, Enterprise submits an extension request to the OCD pertaining to investigation activities at the Largo Compressor Station, citing a planned facility-wide investigation.

June 2010

<u>Area 1:</u> The OCD requests clarifications on the *Interim Remedial Investigation Report dated May 15, 2010.*

<u>Areas 1 through 4:</u> Proposed Facility-Wide Soil and Groundwater Investigation (LTE – June 8, 2010): Enterprise submits a work plan to provide a Site-wide assessment of the Largo Compressor Station.

Areas 1 through 4: The OCD approves the proposed work plan submitted on June 10, 2010 with conditions.

June/July 2010

<u>Area 1:</u> Groundwater Sampling Report (LTE – September 10, 2010): During June of 2010, LTE advanced ten (10) 4-inch boreholes utilizing hollow stem augers to a total depth of approximately 20 feet bgs. The boreholes were advanced to the north and north-northwest of the containment berm. A slurry of 65% ORC solids and water was poured directly into the hollow stem at each borehole (approximately 30 pounds of ORC per borehole) to create a plug of ORC covering approximately five vertical feet throughout the smear zone. A 2-foot thick bentonite seal was installed above the ORC slurry and the remainder of the borehole was backfilled with clean soil. LTE applied the ORC slurry to assist in biodegradation of COCs in groundwater and with the intention of limiting further down-gradient migration of the groundwater plume.

<u>Area 1:</u> During July 2010, LTE collected eleven (11) groundwater samples from the on-Site groundwater monitoring wells and submitted them for TPH GRO/DRO and BTEX analysis. Based on the laboratory analytical results, the groundwater samples collected from groundwater monitoring wells MW-3R, MW-7, MW-11, MW-12, MW-15, and MW-16 exhibited benzene and/or xylenes concentrations above the WQCC *Water Quality Standards*. Contrary to the prior analytical trend indicating decreasing COC concentrations, the concentrations of COCs now appeared to be rebounding. Elevated benzene concentrations were detected in monitoring wells MW-15 and MW-16 for the first time.

November 2010

Areas 1 through 4: During November 2010, Southwest Geoscience (SWG) advanced seventeen (17) soil borings across the facility as part of the facility-wide Site investigation. Four (4) of these soil borings were completed as temporary sampling wells to allow the collection of a single groundwater sample prior to plugging and abandonment. The remaining thirteen (13) soil borings were completed as permanent monitoring wells.



February/March 2011

<u>Area 1:</u> Corrective Action Work Plan (SWG – February 18, 2011): Enterprise proposes an in-situ chemical oxidation (ISCO) pilot study at the condensate storage tank area.

<u>Areas 1 through 4:</u> Environmental Site Investigation (SWG – March 24, 2011): Enterprise submits a report to the OCD documenting the facility-wide investigation findings and subsequent groundwater monitoring results. Analytical results from the investigation confirm the presence of hydrocarbon affected soil and groundwater in the vicinity of the retention pond (Area 3). Additionally, benzene is identified at concentrations above the WQCC Groundwater Quality Standards in groundwater from monitoring well MW-39, in the vicinity of the current compressors (Area 4).

The groundwater sample collected from monitoring well MW-42, which is located on the hydrogeologically up-gradient boundary of the Site, exhibited a total dissolved solids (TDS) concentration of 75,400 mg/L. Based on the absence of beneficial use of the initial groundwater-bearing unit in the Site vicinity and the identified TDS concentration, the initial groundwater-bearing unit would not be considered an "Underground Source of Drinking Water" in accordance with 19.15.30 NMAC *Remediation*.

May 2011

<u>Area 1:</u> Enterprise performs "pilot study" ISCO activities at the condensate storage tank release area. Approximately 3,500 gallons of injectate were introduced to the substrate near monitoring well MW-12.

October 2011

<u>Area 1:</u> Corrective Action Pilot Study Report (SWG – October 10, 2012): Enterprise submits a report to the OCD documenting the "pilot study" implementation. Field observations during ISCO activities indicate remaining historically impacted soils.

March 2012

<u>Areas 3 and 4:</u> SSI Work Plan (SWG January 12, 2012): Enterprise proposes additional field activities to further delineate dissolve-phase groundwater impact in Areas 3 and 4. Enterprise initiates the proposed investigative activities by installing six (6) monitoring wells to further evaluate COCs at the Site.

June 2012

<u>Areas 3 and 4:</u> Supplemental Site Investigation & Quarterly Groundwater Monitoring Report (SWG - June 31, 2012): Enterprise submits a report to the OCD which documents the initial SSI activities for Areas 3 and 4. The report includes results from the quarterly monitoring event that was performed following the installation of the six (6) additional monitoring wells.

November 2012

<u>Area 3:</u> Enterprise resumes the supplemental investigation, focusing on additional soil and groundwater COC delineation in Area 3.

March 2013

<u>Area 3:</u> Enterprise submits the *Supplemental Site Investigation Report – (November 2012 and January 2013) (SWG – February 22, 2013)* to the OCD documenting SSI activities for Area 3. The report documents soil and groundwater sampling performed during the SSI activities, and identifies a potential second source of impact at the retention pond area. Enterprise proposes corrective actions for remediation of soils from Areas 1 and 3 in the *Corrective Action Work Plan (Area 1 and Area 3 – Soils) (SWG – March 11,*



2013.)

May 2013

<u>Areas 1 and 3:</u> Largo Compressor Station – Background Sampling (SWG – June 18, 2013): Enterprise performs sampling in the southeast portion of the Site to evaluate current background soil and groundwater conditions. These activities were performed in advance of the proposed acquisition of backfill material from the area, and in advance of the proposed use of the area for soil treatment.

September through November 2013

<u>Area 1:</u> Corrective Action Status Report (Area 1 – Soils) (SWG – March 19, 2014): Enterprise submits a report to the OCD documenting the construction of the treatment cell area and corrective action activities performed in Area 1.

1.3 Scope of Work

The objectives of the supplemental site investigation and groundwater monitoring events were to further evaluate the concentrations of COCs in groundwater at the Site and to further define the apparent downgradient extent of the Area 1 dissolved-phase COC plume in the northwest portion of the Site.

1.4 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.

2.0 Supplemental Site Investigation

As part of the continuing delineation activities, three (3) soil borings (MW-88 through MW-90) were advanced in the northwest portion (Area 1) of the site, hydrologically down-gradient and/or cross-gradient of monitoring well MW-47.



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

2.1 Soil Boring and Monitoring Well Installations

Soil samples from the three (3) monitoring well soil borings were collected continuously, utilizing four-foot core barrel samplers to the termination depth of each soil boring. Soil samples were observed 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 above the sample, 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.

During the completion 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 from each boring location were visually inspected and classified in the field. The lithology observed during the advancement of the soil borings generally consisted of moderate yellowish brown silty sand from the ground surface to approximately 16 to 18 feet below grade surface (bgs), underlain by moderate yellowish brown clayey silty sand to the boring terminus. Detailed lithologic descriptions are presented on the soil boring logs included in Appendix C.

PID headspace readings ranged from zero (0) parts per million (ppm) to two (2) ppm. Field screening results are presented on soil boring logs included in Appendix C.

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

- Installation of 10 feet of 2-inch inside diameter, 0.010-inch machine slotted schedule 40 polyvinyl chloride (PVC) well screen with a threaded bottom plug;
- Installation of 2-inch inside diameter, threaded flush joint, schedule 40 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;
- Placement of hydrated bentonite seal above the sand pack filter zone to the surface; and
- Installation of an above-grade steel riser with an integrated padlock hasp.

The monitoring wells were developed by surging and removing groundwater until the fluid appeared relatively free of fine-grained sediment. Monitoring well construction details are presented on the soil boring/monitoring well logs provided in Appendix C.

2.1.1 Soil Boring Sampling Program

Up to two (2) soil samples were collected from each soil boring from one or more of the following locations:

- The depth interval exhibiting the highest concentration of VOCs based on PID evidence;
- An interval exhibiting visual/olfactory evidence of impairment;
- The capillary fringe zone;
- From a change in lithology; or
- From the bottom of the boring.



The soil samples were collected in laboratory prepared glassware and placed on ice in a cooler, which was secured with a custody seal. The samples were then transported to HEAL along with a completed chain-of-custody form.

Soil sample intervals are presented with the soil sample analytical results (Table 1) in Appendix R

2.2 Soil Laboratory Analytical Program

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.

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

Analysis	Sample Type	No. of Samples	EPA Method
TPH GRO/DRO	Soil	4	SW-846 8015
втех	Soil	4	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.

2.3 Soil Data Evaluation

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. To address activities related to crude oil/condensate related releases, the New Mexico EMNRD OCD utilizes the *Guidelines for Remediation of Leaks, Spills and Releases* as guidance, in addition to the EMNRD/OCD rules, specifically NMAC 19.15.30 Remediation. These guidance documents establish investigation and abatement action requirements for sites subject to reporting and/or corrective time.

In accordance with the OCD's *Guidelines for Remediation of Leaks, Spills and Releases*, Apex utilized the general site characteristics obtained during the completion of corrective action activities and information available from the Office of the New Mexico State Engineer (OSE) to determine the appropriate "ranking" for the Site. The ranking criteria and associated scoring are provided in the table below:



Rankir	Ranking Criteria							
	<50 feet	20						
Depth to Groundwater	50 to 99 feet	10	20					
	>100 feet	0						
Wellhead Protection Area ● <1,000 feet from a water	Yes	20						
source, or; <200 feet from private domestic water source.	No	No 0						
Distance to Surface Water	<200 feet	20						
Body	200 to 1,000 feet	10	10					
Воду	>1,000 feet 0							
Total Ra	30							

Based on Apex's evaluation of the scoring criteria, the Site would have a maximum Total Ranking Score of "30". This ranking is based on the following:

- The depth to the initial groundwater-bearing zone is <50 feet at the Site.
- Nearby drinking water sources were not identified within 1,000 feet of the Site.
- Largo Wash is located approximately 320 feet from the nearest affected monitoring well.
- Two (2) Out-of-Service water wells are located up- and/or cross-gradient from the areas of impact, greater than 200 feet from delineated impact.

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 "30".

Total Petroleum Hydrocarbons

Soil samples collected from soil borings MW-88 through MW-90 did not exhibit combined TPH GRO/DRO concentrations above the laboratory RLs, which are below the OCD's *Remediation Action Level* of 100 milligrams per kilogram (mg/kg).

Benzene

The soil samples collected from soil borings MW-88 through MW-90 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-88 through MW-90 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. No data qualifier flags were associated with the soil analytical results.

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3.0 GROUNDWATER SAMPLING PROGRAM

Annual groundwater sampling events were conducted in April and October 2014 by Aaron Bryant, an Apex environmental professional.

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.

Groundwater samples were collected in laboratory supplied containers, sealed with custody tape and placed on ice in a cooler secured with a custody seal. The sample coolers and completed chain-of-custody forms were relinquished to HEAL in Albuquerque, New Mexico.

3.1 Groundwater Laboratory Analytical Program

The groundwater samples collected from the monitoring wells during the April and October 2014 groundwater sampling events were analyzed for BTEX utilizing EPA method SW-846 #8021. Additionally, groundwater samples from the April 2014 event were analyzed for TPH GRO/DRO utilizing EPA method SW-846 #8015. The containers containing the samples for organic analyses were pre-preserved with mercuric chloride (HgCl₂).

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



Analysis	Sample Type	No. of Samples (April/October)	EPA Method		
TPH GRO/DRO	Groundwater	33/0	SW-846 8015		
втех	Groundwater	33/36	SW-846 8021		

Laboratory results are summarized in Table 2 included in Appendix B. The executed chain-of-custody form and laboratory data sheets are provided in Appendix D.

3.2 Groundwater Flow Direction

Each of the monitoring wells has been surveyed for top-of-casing (TOC) elevations. Prior to sample collection, Apex gauged the depth to fluids in each monitoring well. The groundwater flow direction (gradient) at the Site is generally toward the northwest, with a gradient that ranges from 0.003 ft/ft to 0.007 ft/ft across the Site.

Groundwater measurements collected during the April and October 2014 events are presented with TOC elevations in Table 3 (Appendix B). Groundwater gradient maps for the April and October 2014 events are included as Figure 4A and 4B (Appendix A), respectively.

3.3 Groundwater Data Evaluation

Apex compared BTEX concentrations or laboratory reporting limits (RLs) associated with the groundwater samples collected from monitoring wells during the April and October 2014 sampling events to the New Mexico Water Quality Control Commission (WQCC) *Groundwater Quality Standards*; however, the New Mexico WQCC *Groundwater Quality Standards* may not be applicable since the initial groundwater-bearing unit may not qualify as an "Underground Source of Drinking Water" in accordance with 19.15.30 NMAC *Remediation* due to elevated Total Dissolved Solids concentrations. The results of the groundwater sample analyses are summarized in Table 2 of Appendix B. Groundwater Quality Standard Exceedance Zone maps are provided as Figures 5A and 5B of Appendix A.

April 2014

Benzene, Toluene, Ethylbenzene, and Xylenes

Due to the presence of NAPL hydrocarbons in association with the initial groundwater-bearing unit, monitoring wells MW-33 and MW-35 were not sampled during the completion of field activities. Monitoring well MW-42 was not sampled due to insufficient water.

The groundwater samples collected from monitoring wells MW-7, MW-37, and MW-47 exhibited benzene concentrations ranging from 43 micrograms per liter (μ g/L) (MW-7) to 740 μ g/L (MW-37), which exceed the WQCC *Groundwater Quality Standard* of 10 μ g/L. The groundwater samples collected from monitoring wells MW-39, MW-48, and MW-51 exhibited benzene concentrations ranging from 1.1 μ g/L (MW-51) to 9.6 μ g/L (MW-39), which are below the WQCC *Groundwater Quality Standard* of 10 μ g/L. The groundwater samples collected from the remaining monitoring wells did not exhibit benzene concentrations above the laboratory RLs, which are below the WQCC *Groundwater Quality Standard* of 10 μ g/L.

The groundwater sample collected from monitoring well MW-37 exhibited a toluene concentration

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of 49 μ g/L, which is below the WQCC *Groundwater Quality Standard* of 750 μ g/L. The groundwater samples collected from the remaining monitoring wells did not exhibit toluene concentrations above the laboratory RLs, which are below the WQCC *Groundwater Quality Standard* of 750 μ g/L.

The groundwater samples collected from monitoring wells MW-37, MW-47, and MW-48 exhibited ethylbenzene concentrations ranging from 7.8 μ g/L (MW-48) to 120 μ g/L (MW-37), which are below the WQCC *Groundwater Quality Standard* of 750 μ g/L. The groundwater samples collected from the remaining monitoring wells did not exhibit ethylbenzene concentrations above the laboratory RLs, which are below the WQCC *Groundwater Quality Standard* of 750 μ g/L.

The groundwater samples collected from monitoring wells MW-7, MW-37, and MW-48 exhibited xylenes concentrations ranging from 3.1 μ g/L (MW-7) to 450 μ g/L (MW-37), which are below the WQCC *Groundwater Quality Standard* of 620 μ g/L. The groundwater samples collected from the remaining monitoring wells did not exhibit xylenes concentrations above the laboratory RLs, which are below the WQCC *Groundwater Quality Standard* of 620 μ g/L.

TPH Gasoline Range Organics/Diesel Range Organics

The groundwater samples collected from the monitoring wells during April 2014 exhibited TPH GRO concentrations ranging from <0.050 milligrams per liter (mg/L) to 8.5 mg/L, and TPH DRO concentrations ranging from <1.0 mg/L to 4.9 mg/L. The highest GRO concentration during the April 2014 sampling event was observed in the groundwater sample from monitoring well MW-47 (8.5 mg/L) and the highest DRO concentration was observed in the groundwater sample from MW-37 (4.9 mg/L).

No data qualifier flags were associated with the April 2014 groundwater analytical results.

October 2014

Benzene, Toluene, Ethylbenzene, and Xylenes

Due to the presence of NAPL hydrocarbons in association with the initial groundwater-bearing unit, monitoring wells MW-33 and MW-35 were not sampled during the completion of field activities. Monitoring well MW-42 was not sampled due to insufficient water.

The groundwater samples collected from monitoring wells MW-37, MW-47 and MW-48 exhibited benzene concentrations ranging from 48 µg/L (MW-48) to 770 µg/L (MW-37), which exceed the WQCC *Groundwater Quality Standard* of 10 µg/L. The groundwater samples collected from monitoring wells MW-7, MW-39, and MW-51 exhibited benzene concentrations ranging from 2.3 µg/L (MW-7) to 5.5 µg/L (MW-39), which are below the WQCC *Groundwater Quality Standard* of 10 µg/L. The groundwater samples collected from the remaining monitoring wells did not exhibit benzene concentrations above the laboratory RL, which are below the WQCC *Groundwater Quality Standard* of 10 µg/L.

The groundwater samples collected from monitoring wells did not exhibit toluene concentrations above the laboratory RL, which is below the WQCC *Groundwater Quality Standard* of 750 µg/L.

The groundwater samples collected from monitoring wells MW-37, MW-47, and MW-48 exhibited ethylbenzene concentrations ranging from 29 μ g/L (MW-47) to 140 μ g/L (MW-37), which are below the WQCC *Groundwater Quality Standard* of 750 μ g/L. The groundwater samples collected from the remaining monitoring wells did not exhibit ethylbenzene concentrations above the laboratory RLs, which are below the WQCC *Groundwater Quality Standard* of 750 μ g/L.

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The groundwater samples collected from monitoring wells MW-37 and MW-48 exhibited xylenes concentrations of 60 μ g/L (MW-48) and 510 μ g/L (MW-37), respectively, which are below the WQCC *Groundwater Quality Standard* of 620 μ g/L. The groundwater samples collected from the remaining monitoring wells did not exhibit xylenes concentrations above the laboratory RLs, which are below the WQCC *Groundwater Quality Standard* of 620 μ g/L.

No data qualifier flags were associated with the October 2014 groundwater analytical results.

4.0 FINDINGS

During August 2014, Apex performed a supplemental site investigation, and during April and October 2014, Apex conducted semi-annual groundwater monitoring events at the Largo Compressor Station. 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 mid-1960s, and is located off of CR 379 in Section 15, Township 26N, Range 7W in Rio Arriba County, New Mexico. The objectives of the supplemental site investigation and groundwater monitoring events were to further evaluate the concentrations of COCs in groundwater at the Site and to further define the apparent downgradient extent of the Area 1 dissolved-phase COC plume in the northwest portion of the Site

- Apex advanced three (3) soil borings (MW-88 through MW-90) in the northwest portion (Area 1) of the site, which were completed as groundwater monitoring wells. The monitoring wells were developed by surging and removing groundwater until the fluid appeared relatively free of fine-grained sediment. Soil samples collected during the monitoring well installation of MW-88 through MW-90 did not exhibit TPH GRO/DRO, benzene, or total BTEX concentrations above the laboratory RLs, which are below the applicable OCD Remediation Action Levels.
- During completion of the April and October 2014 sampling events, Apex gauged the depth to fluids in each monitoring well using an interface probe capable of detecting NAPL prior to sample collection. Monitoring wells MW-33 and MW-35 exhibited NAPL and were not sampled.
- During the completion of the sampling events, one (1) groundwater sample was collected from each monitoring well not exhibiting NAPL utilizing low-flow sampling techniques. MW-42 was not sampled due to insufficient water.
- The groundwater flow direction at the Site is generally towards the northwest, with an approximate gradient of 0.003 to 0.007 ft/ft across the Site.
- During the April sampling event, the groundwater samples collected from monitoring wells MW-7, MW-37, and MW-47 exhibited benzene concentrations ranging from 43 µg/L to 740 µg/L, which exceed the WQCC Groundwater Quality Standard of 10 µg/L.
 During the October sampling event, the groundwater samples collected from monitoring wells MW-37, MW-47, and MW-48 exhibited benzene concentrations ranging from 48 µg/L to 770 µg/L, which exceed the WQCC Groundwater Quality Standard of 10 µg/L.
- Monitoring wells MW-37 and MW-47 exhibited an increase in benzene concentrations from 2013. However, monitoring wells MW-7, MW-16, MW-39, MW-48, and MW-51 exhibited a general decrease in benzene concentrations from 2013. The notable decrease at monitoring well MW-7 may in part be due to the removal of the nearby source material and a



portion of the associated groundwater during 2014 excavation activities at the former tank battery location.

• The groundwater samples collected from the remaining monitoring wells did not exhibit BTEX constituent concentrations above the WQCC *Groundwater Quality Standards*.

5.0 RECOMMENDATIONS

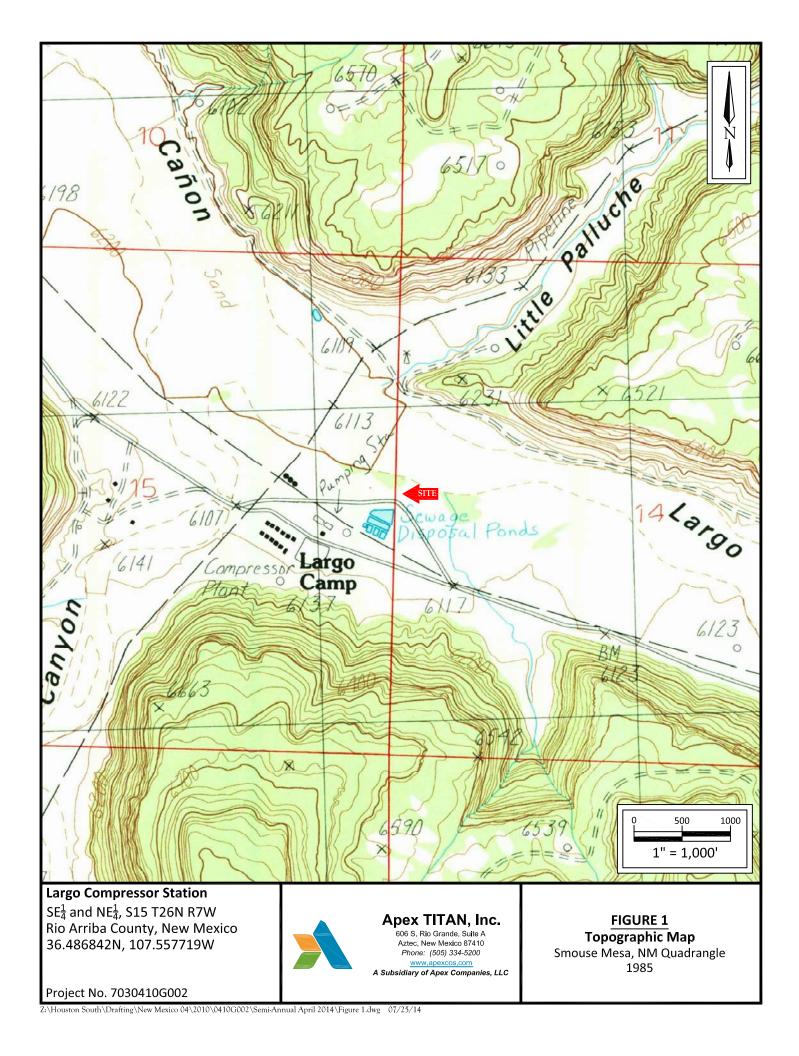
Based on the results of supplemental site investigation and groundwater monitoring activities, Apex has the following recommendations:

- Report the supplemental site investigation and groundwater monitoring results to the OCD;
- Continue semi-annual groundwater sampling events; and
- Continue the execution of corrective actions to: 1) Reduce the concentrations of COCs in soil to below the OCD Remediation Action Levels in Area 3 and; 2) Remove NAPL from groundwater at the Site to the extent practical, and continue to develop and execute groundwater remediation strategies once the bulk of the soils have been removed/remediated.

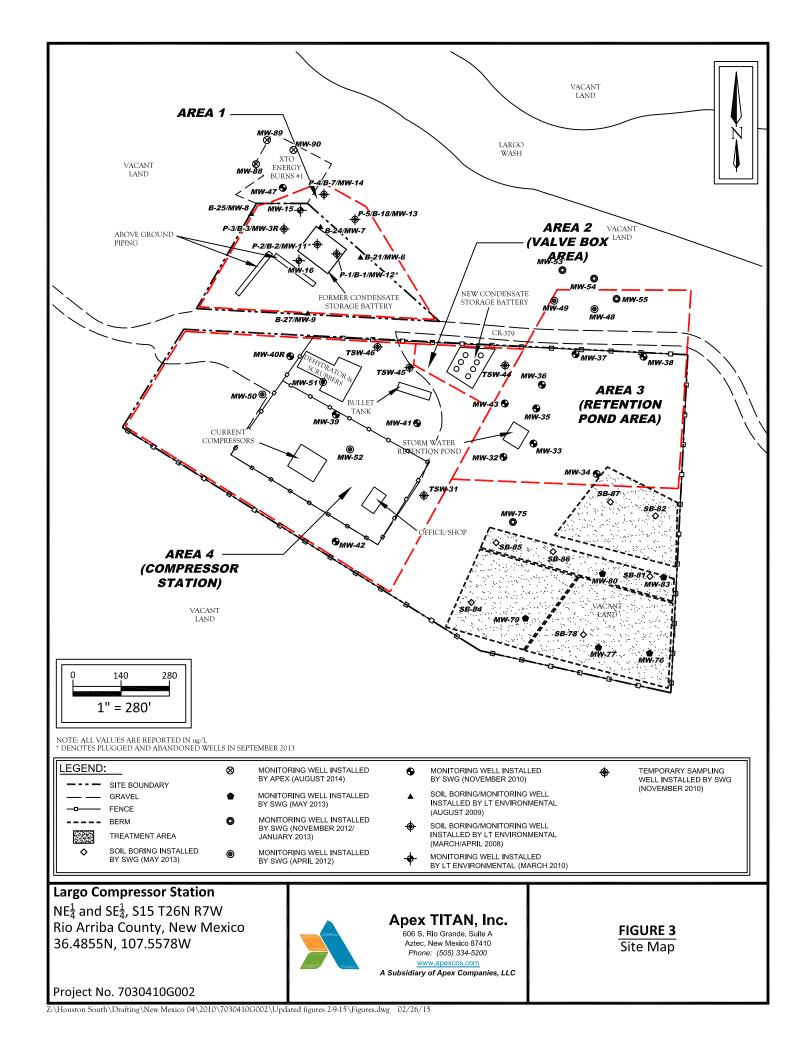


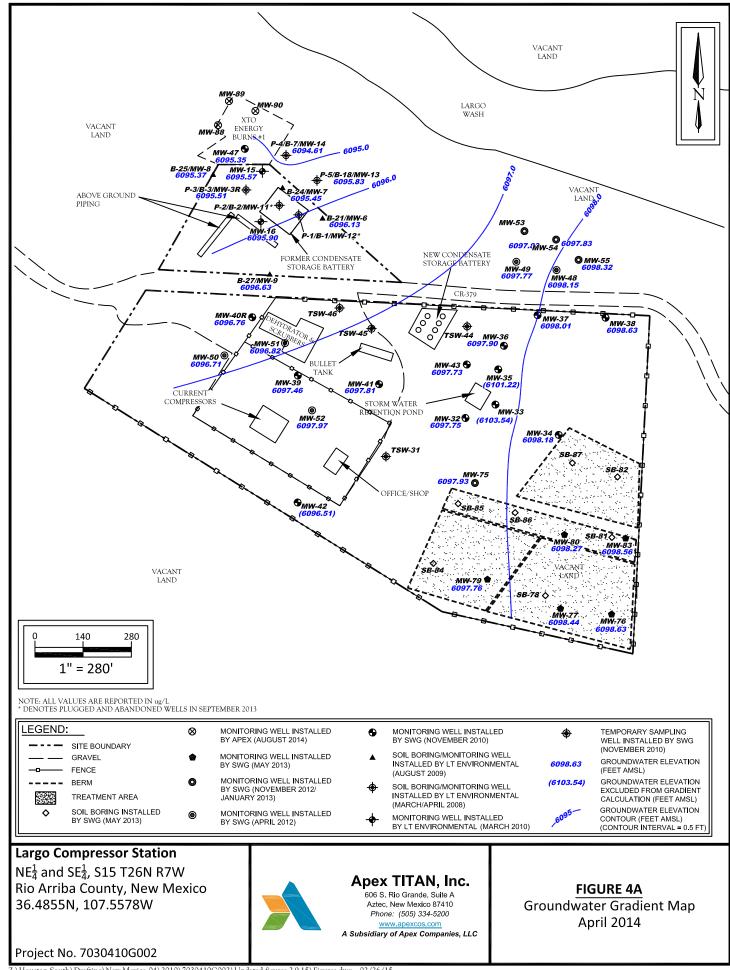
APPENDIX A

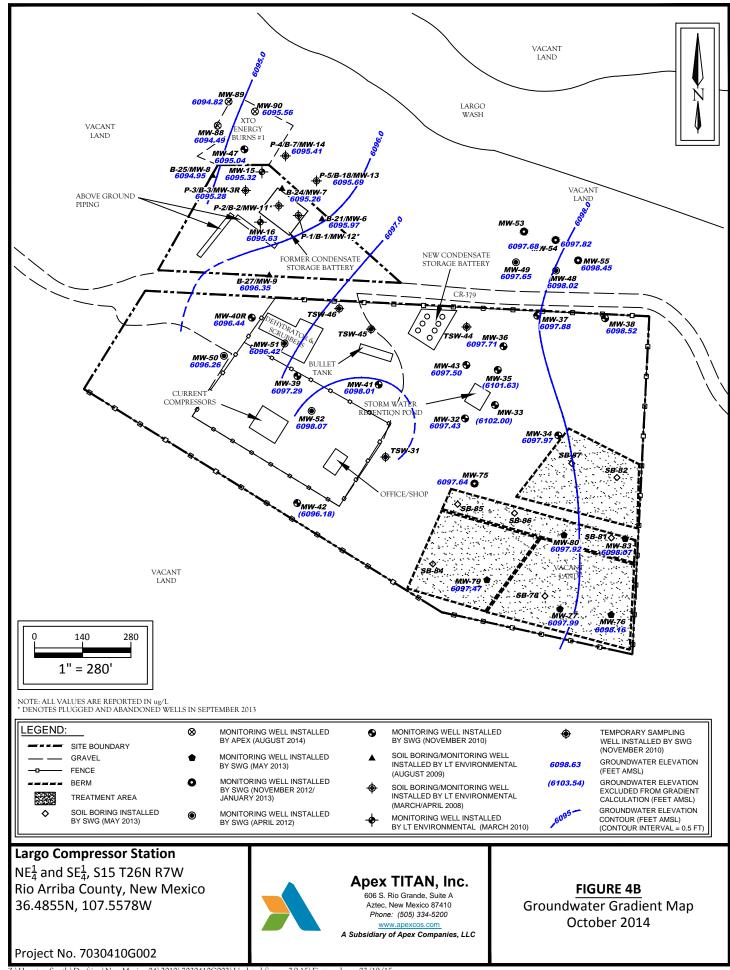
Figures

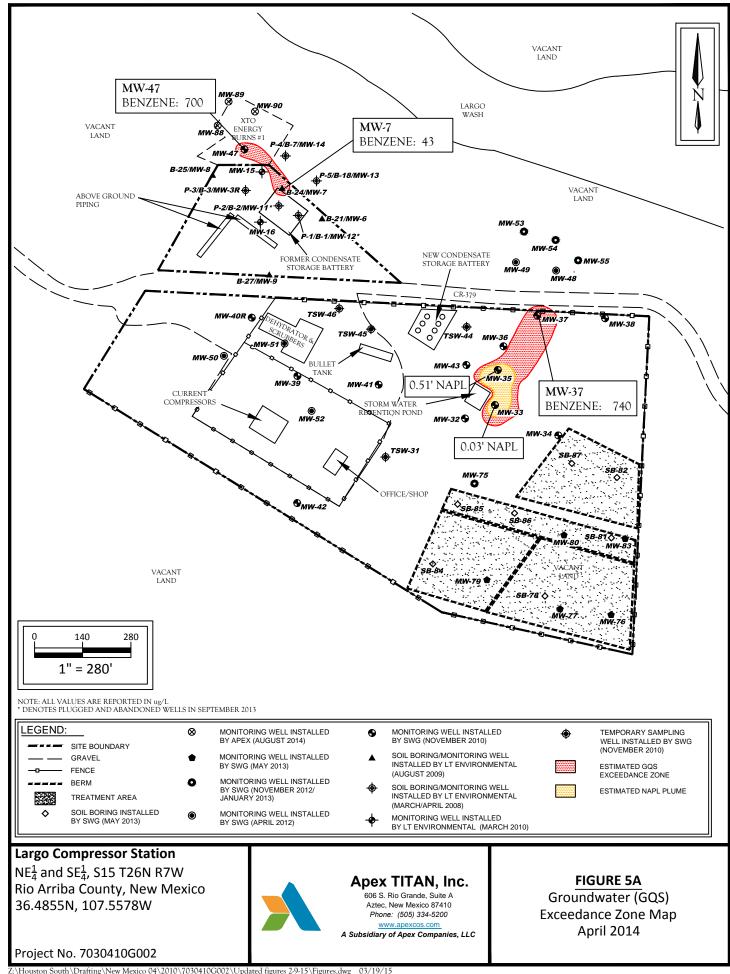


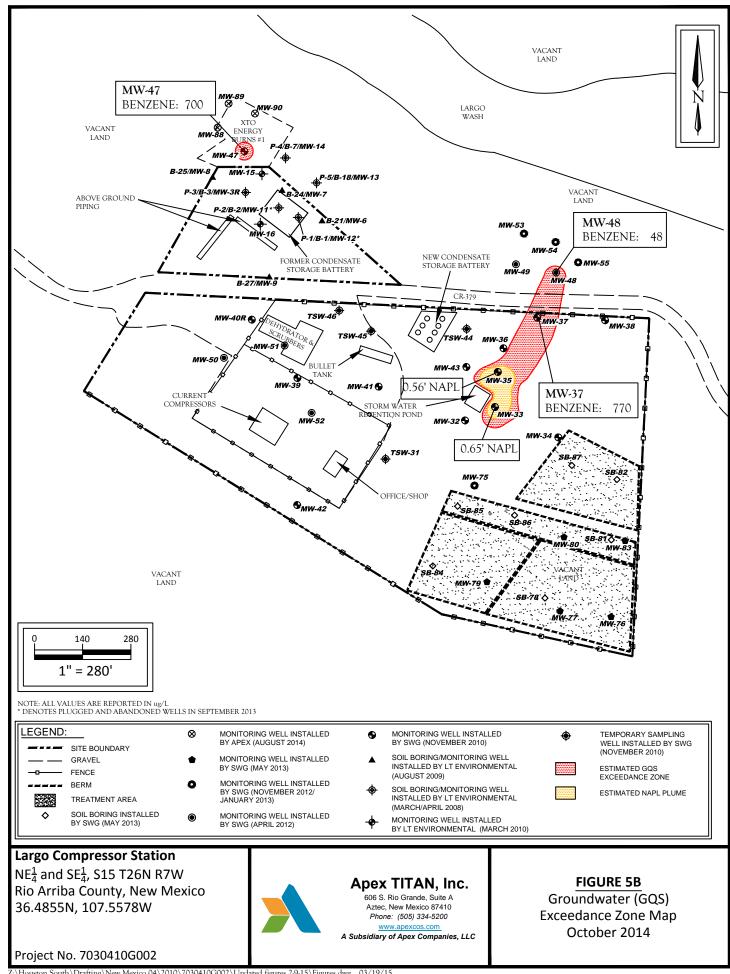














APPENDIX B

Tables



TABLE 1 Largo Compressor Station 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	TPH DRO
New Mexico Energy, Mineral & Natural Resources							(mg/kg)	(mg/kg)	
Department, Oil	Conservation Di Action Level	vision, Remediation	10	NE	NE	NE	50	10	00
				Excavation Con	firmation Samples				
MW-88	8/12/2014	18 to 20	<0.049	<0.049	<0.049	<0.098	ND	<4.9	<10
MW-89	8/12/2014	18 to 20	<0.048	<0.048	<0.048	< 0.096	ND	<4.8	<9.9
10100-09	8/12/2014	24 to 26	<0.049	<0.049	<0.049	<0.098	ND	<4.9	<10
MW-90	8/12/2014	16 to 18	<0.047	<0.047	<0.047	<0.095	ND	<4.7	<10

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

ND = Not Detected above the Laboratory Reporting Limits

NE = Not Established



Sample I.D.	Date	Total Dissolved	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH
		Solids	(µg/L)	(µg/L)	(μg/L)	(µg/L)	GRO	DRO
			(µg/=)	(µg/L)	(µg/L)	(µg/L)	OKO	DIO
		(mg/L)					(mg/L)	(mg/L)
	lity Control Commmission Quality Standards	NE	10	750	750	620	NE	NE
Crountavator	adding Glandards							
			Monitoring We	ls Installed by Lod	estar			
P-1	4.04.08	NA	5,700	2,200	310	5,500	53	<1.0
P-1	8.10.09	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
P-1	11.24.09	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
P-1	2.25.10	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-12 (P-1*)	4.05.10	NA	1,300	1,600	110	2,200	20	1.2
MW-12 (P-1*)	5.27.10	NA	3,300	1,800	180	3,200	NA	NA
MW-12 (P-1*)	7.13.10	NA	2,900	330	140	1,700	22	1.0
MW-12 (P-1*)	8.26.10	NA	1,200	420	70	1,300	13	<1.0
MW-12 (P-1*)	11.18.10	NA	1,100	69	61	720	6.3	<1.0
MW-12 (P-1*)	2.4.11	NA	5,900	<50	470	1,600	24	<1.0
MW-12 (P-1*)	4.19.11	NA	4,200	190	<100	330	14	<1.0
MW-12 (P-1*)	5.19.11	NA	1,000	520	36	660	13	15
MW-12 (P-1*)	7.28.11	NA	12,000	2,300	320	3,200	54	3.9
MW-12 (P-1*)	10.28.11	NA	4,900	59	130	3,300	29	7.3
MW-12 (P-1*)	1.31.12	NA	4,400	62	110	1,500	18	11
MW-12 (P-1*)	4.19.12	NA	4,300	53	150	930	22	5.8
MW-12 (P-1*)	7.31.12	NA	4,600	<50	160	920	17	3.3
MW-12 (P-1*)	10.19.12	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-12 (P-1*)	4.24.13	NA	6,900	150	96	850	23	5.8
MW-12 (P-1*)	9.6.13			Monitor we	I was removed during	remediation.		
P-2	4.04.08	NA	15,000	2,100	380	4,600	120	6.8
P-2	8.10.09	NA	9,800	110	170	1,400	NA	NA
P-2	11.24.09	NA	21,000	360	460	2,700	NA	NA
P-2	2.25.10	NA	19,000	380	380	2,800	NA	NA
MW-11 (P-2*)	4.05.10	NA	<1.0	<1.7	<1.0	3.3	0.22	<1.0
MW-11 (P-2*)	5.27.10	NA	4.4	<1.0	<1.0	<2.0	NA	NA
MW-11 (P-2*)	7.13.10	NA	700	4.5	11	56	3.6	1.2
MW-11 (P-2*)	8.26.10	NA	86	<1.0	1.3	4.9	0.4	<1.0
MW-11 (P-2*)	11.18.10	NA	<1.0	<1.0	<1.0	<2.0	0.14	<1.0
MW-11 (P-2*)	2.4.11	NA	21	<1.0	<1.0	<1.0	0.075	<1.0
MW-11 (P-2*)	4.19.11	NA	96	12	1.2	27	0.39	<1.0
MW-11 (P-2*)	7.28.11	NA	46	<1.0	38	76	11	1.7
MW-11 (P-2*)	10.28.11	NA	1,600	<10	31	37	4.6	2.2
MW-11 (P-2*)	1.31.12	NA	470	<10	12	<20	1.3	<1.0
MW-11 (P-2*)	4.19.12	NA	84	<1.0	3.2	<2.0	0.43	<1.0
MW-11 (P-2*)	7.31.12	NA	36	<1.0	2.6	<2.0	0.24	<1.0
MW-11 (P-2*)	10.19.12	NA	1,100	<1.0	11	41	5.3	<1.0
MW-11 (P-2*)	4.24.13	NA	40	<1.0	1.5	<2.0	0.14	<1.0
MW-11 (P-2*)	9.6.13			Monitor we	I was removed during	remediation.		



Sample I.D.	Date	Total Dissolved	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH
Gample I.D.	Date	Solids				-		
			(µg/L)	(µg/L)	(µg/L)	(µg/L)	GRO	DRO
		(mg/L)					(mg/L)	(mg/L)
	lity Control Commmission Quality Standards	NE	10	750	750	620	NE	NE
P-3	4.04.08	NA	780	13	81	20	4.2	<1.0
P-3	8.10.09	NA	35	<1.0	3.8	<2.0	NA	NA
P-3	11.24.09	NA	1.4	<1.0	1.5	<2.0	NA	NA
P-3	2.25.10	NA	3.6	10	2	24	NA	NA
MW-3R (P-3*)	4.05.10	NA	<1.0	<1.0	<1.0	<2.0	< 0.05	<1.0
MW-3R (P-3*)	5.27.10	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-3R (P-3*)	7.13.10	NA	13	<1.0	1.3	6.4	1.4	1
MW-3R (P-3*)	8.26.10	NA	5.0	<1.0	<1.0	2.3	0.46	<1.0
MW-3R (P-3*)	11.18.10	NA	3.9	<1.0	<1.0	<2.0	0.47	<1.0
MW-3R (P-3*)	2.1.11	NA	2.0	<1.0	<1.0	<2.0	0.16	<1.0
MW-3R (P-3*)	4.18.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-3R (P-3*)	7.28.11	NA	1.5	<1.0	<1.0	7.1	1.50	<1.0
MW-3R (P-3*)	10.27.11	NA	1.1	<1.0	<1.0	<2.0	0.57	<1.0
MW-3R (P-3*)	1.30.12	NA	<1.0	<1.0	<1.0	<2.0	0.16	<1.0
MW-3R (P-3*)	4.19.12	NA	<1.0	<1.0	<1.0	<2.0	0.16	<1.0
MW-3R (P-3*)	7.31.12	NA	<1.0	<1.0	<1.0	<2.0	0.36	<1.0
MW-3R (P-3*)	10.19.12	NA	<1.0	<1.0	1.2	2.8	0.48	<1.0
MW-3R (P-3*)	4.24.13	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-3R (P-3*)	10.24.13	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-3R (P-3*)	4.21.14	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-3R (P-3*)	10.28.14	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
P-4	4.04.08	NA	<1.0	<1.0	<1.0	<2.0	0.42	<1.0
P-4	8.10.09	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
P-4	11.24.09	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
P-4	2.25.10	NA	2.5	7.5	<1.0	14	NA	NA
MW-14 (P-4*)	4.05.10	NA	<1.0	<1.0	<1.0	<2.0	< 0.05	<1.0
MW-14 (P-4*)	5.27.10	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-14 (P-4*)	7.13.10	NA	<1.0	<1.0	<1.0	<2.0	< 0.05	<1.0
MW-14 (P-4*)	8.26.10	NA	<1.0	<1.0	<1.0	<2.0	<0.05	<1.0
MW-14 (P-4*)	11.18.10	NA	<1.0	<1.0	<1.0	<2.0	<0.05	<1.0
MW-14 (P-4*)	2.1.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-14 (P-4*)	4.19.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-14 (P-4*)	7.28.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-14 (P-4*)	10.27.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-14 (P-4*)	1.30.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-14 (P-4*)	4.19.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-14 (P-4*)	7.31.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-14 (P-4*)	10.18.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-14 (P-4*)	4.24.13	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-14 (P-4*)	10.25.13	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-14 (P-4*)	4.22.14	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-14 (P-4*)	10.27.14	NA	<1.0	<1.0	<1.0	<2.0	NA	NA



Sample I.D.	Date	Total Dissolved	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH
Gampie i.b.	Date	Solids					GRO	DRO
			(µg/L)	(µg/L)	(µg/L)	(µg/L)	GRO	DRO
		(mg/L)					(mg/L)	(mg/L)
	lity Control Commmission Quality Standards	NE	10	750	750	620	NE	NE
Groundwater	quality Standards							
P-5	4.04.08	NA	<1.0	<1.0	<1.0	<2.0	0.1	<1.0
P-5	8.10.09	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
P-5	11.24.09	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
P-5	2.25.10	NA	1.8	6.1	<1.0	11	NA	NA
MW-13 (P-5*)	4.05.10	NA	<1.0	<1.0	<1.0	<2.0	< 0.05	<1.0
MW-13 (P-5*)	5.27.10	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-13 (P-5*)	7.13.10	NA	<1.0	<1.0	<1.0	<2.0	< 0.05	<1.0
MW-13 (P-5*)	8.26.10	NA	<1.0	<1.0	<1.0	<2.0	< 0.05	<1.0
MW-13 (P-5*)	11.18.10	NA	<1.0	<1.0	<1.0	<2.0	< 0.05	<1.0
MW-13 (P-5*)	2.3.11	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-13 (P-5*)	4.19.11	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-13 (P-5*)	7.28.11	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-13 (P-5*)	10.27.11	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-13 (P-5*)	1.30.12	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-13 (P-5*)	4.19.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-13 (P-5*)	7.31.12	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-13 (P-5*)	10.18.12	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-13 (P-5*)	4.24.13	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-13 (P-5*)	10.25.13	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-13 (P-5*)	4.22.14	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-13 (P-5*)	10.27.14	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-6	8.10.09	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-6	11.24.09	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-6	2.25.10	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-6	4.05.10	NA	<1.0	<1.0	<1.0	<2.0	< 0.05	<1.0
MW-6	5.27.10	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-6	7.13.10	NA	<1.0	<1.0	<1.0	<2.0	< 0.05	<1.0
MW-6	8.26.10	NA	<1.0	<1.0	<1.0	<2.0	<0.05	<1.0
MW-6	11.18.10	NA	<1.0	<1.0	<1.0	<2.0	<0.05	<1.0
MW-6	1.31.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-6	4.19.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-6	7.28.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-6	10.27.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-6	1.27.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-6	4.19.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-6	7.31.12	NA 0.400	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-6	10.18.12	8,420	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-6	4.24.13	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-6	10.24.13	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-6	4.22.14	NA NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-6	10.27.14	NA	<1.0	<1.0	<1.0	<2.0	NA	NA



Sample I.D.	Date	Total Dissolved	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH
Gumple I.D.	Duic	Solids				-	GRO	DRO
			(µg/L)	(µg/L)	(µg/L)	(µg/L)	GRO	DRO
		(mg/L)					(mg/L)	(mg/L)
	ality Control Commmission Quality Standards	NE	10	750	750	620	NE	NE
Groundwater	Quality Standards							
MW-7	8.10.09	NA	15,000	<100	380	310	NA	NA
MW-7	11.24.09	NA	13,000	<100	150	<200	NA	NA
MW-7	2.25.10	NA	3,000	<10	40	31	NA	NA
MW-7	4.05.10	NA	940	<10	<10	<20	4.2	1.3
MW-7	5.27.10	NA	700	<10	11	<20	NA	NA
MW-7	7.13.10	NA	15,000	<10	130	25	51	4.6
MW-7	8.26.10	NA	5,300	<20	35	<40	18	1.7
MW-7	11.18.10	NA	3,700	<20	62	<40	11	1.2
MW-7	2.1.11	NA	1,800	<1.0	10	4.6	2.2	<1.0
MW-7	4.19.11	NA	250	<1.0	2.9	2.4	0.75	<1.0
MW-7	5.19.11	NA	1,400	<5.0	15.0	<10	4.0	<1.0
MW-7	7.28.11	NA	75	<5.0	200	62.0	45	2.7
MW-7	10.28.11	NA	1,300	<10	140	<20	32	6.1
MW-7	1.31.12	NA	9,000	<10	110	<20	21	4.5
MW-7	4.19.12	NA	790	<10	15	<20	2.7	<1.0
MW-7	7.31.12	NA	2,500	<10	35	<20	6.4	<1.0
MW-7	10.19.12	NA	8,200	<10	130	36.0	32	2.5
MW-7	4.24.13	NA	120	<1.0	2.1	<2.0	0.60	<1.0
MW-7	10.25.13	NA	45	<1.0	<1.0	<2.0	0.19	<1.0
MW-7	4.22.14	NA	43	<1.0	<1.0	3.1	0.13	<1.0
MW-7	10.29.14	NA	2.3	<1.0	<1.0	<2.0	NA	NA
MW-8	8.10.09	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-8	11.24.09	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-8	2.25.10	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-8	4.05.10	NA	<1.0	<1.0	<1.0	<2.0	< 0.05	<1.0
MW-8	5.27.10	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-8	7.13.10	NA	<1.0	<1.0	<1.0	<2.0	< 0.05	<1.0
MW-8	8.26.10	NA	<1.0	<1.0	<1.0	<2.0	< 0.05	<1.0
MW-8	11.18.10	NA	<1.0	<1.0	<1.0	<2.0	<0.05	<1.0
MW-8	1.31.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-8	4.18.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-8	7.28.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-8	10.27.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-8	1.27.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-8	4.19.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-8	7.31.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-8	10.18.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-8	4.24.13	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-8	10.24.13	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-8	4.21.14	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-8	10.28.14	NA	<1.0	<1.0	<1.0	<2.0	NA	NA



Sample I.D.	Date	Total Dissolved	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH
		Solids	(µg/L)	(µg/L)	(µg/L)	(µg/L)	GRO	DRO
		(mg/L)					(mg/L)	(mg/L)
	ity Control Commmission Quality Standards	NE	10	750	750	620	NE	NE
MW-9	8.10.09	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-9	11.24.09	NA NA	<1.0	<1.0	<1.0	<2.0	NA NA	NA NA
MW-9 MW-9	2.25.10 4.05.10	NA NA	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	NA <0.05	NA <1.0
MW-9	5.27.10	NA NA	<1.0	<1.0	<1.0	<2.0	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	NA
MW-9	7.13.10	NA NA	<1.0	<1.0	<1.0	<2.0	<0.05	<1.0
MW-9	8.26.10	NA	<1.0	<1.0	<1.0	<2.0	<0.05	<1.0
MW-9	11.18.10	NA	<1.0	<1.0	<1.0	<2.0	<0.05	<1.0
MW-9	1.31.11	NA NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-9 MW-9	4.19.11 7.29.11	NA NA	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	<0.050 <0.050	<1.0 <1.0
MW-9	10.27.11	NA NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-9	1.27.12	NA NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-9	4.19.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-9	7.31.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-9	10.19.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-9 MW-9	4.24.13 10.24.13	NA NA	<1.0	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	<0.050 <0.050	<1.0
MW-9	4.22.14	NA NA	<1.0 <1.0	<1.0	<1.0	<2.0 <2.0	<0.050	<1.0 <1.0
MW-9	10.28.14	NA NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-15	4.05.10	NA	1.1	<1.0	<1.0	<2.0	<0.05	<1.0
MW-15	5.27.10	NA	<1.0	<1.0	<1.0	<2.0	<0.05	<1.0
MW-15	7.13.10	NA	490	2.2	7.2	15	3.2	<1.0
MW-15	8.26.10	NA	20	<1.0	<1.0	<2.0	0.095	<1.0
MW-15	11.18.10	NA NA	8.9	<1.0	<1.0	<2.0	0.19	<1.0
MW-15 MW-15	2.1.11 4.18.11	NA NA	16 13	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	0.06 0.14	<1.0 <1.0
MW-15	7.28.11	NA NA	1500	<1.0	19	20	6.7	<1.0
MW-15	10.28.11	NA	810	<10	<10	<20	2.2	1.0
MW-15	1.30.12	NA	150	<10	<10	<20	0.51	<1.0
MW-15	4.18.12	NA	23	<1.0	1.4	<2.0	0.21	<1.0
MW-15	7.31.12	NA NA	64	<1.0	1.1	<2.0	0.22	<1.0
MW-15 MW-15	10.19.12 4.24.13	NA NA	400 6.4	<1.0 <1.0	7.2 <1.0	7.8 <2.0	2.0 0.094	<1.0 <1.0
MW-15	10.24.13	NA NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-15	4.21.14	NA NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-15	10.28.14	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-16	4.05.10	NA	3.8	1.5	1.4	11	0.36	<1.0
MW-16	5.27.10	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-16	7.13.10	NA NA	47	<1.0	<1.0	<2.0	0.3	<1.0
MW-16 MW-16	8.26.10 11.18.10	NA NA	16 3.4	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	0.095 0.11	<1.0 <1.0
MW-16	2.1.11	NA NA	61	<1.0	1.3	2.1	0.11	<1.0
MW-16	4.18.11	NA	34	<1.0	3.7	4.4	0.16	<1.0
MW-16	7.28.11	NA	43	<1.0	1.9	<2.0	0.29	<1.0
MW-16	10.27.11	NA	21	<1.0	<1.0	<2.0	0.19	<1.0
MW-16 MW-16	1.30.12	NA NA	10 20	<1.0	<1.0	<2.0	0.096	<1.0
MW-16	4.18.12 7.31.12	NA NA	46	<1.0 <1.0	1.0 1.9	<2.0 <2.0	0.14 0.23	<1.0 <1.0
MW-16	10.19.12	NA NA	100	<1.0	3.9	<2.0	0.23	<1.0
MW-16	4.24.13	NA NA	10	<1.0	<1.0	<2.0	0.097	<1.0
MW-16	10.28.13	NA	11	<1.0	1.2	<2.0	0.052	<1.0
MW-16	4.23.14	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-16	10.27.14	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
TOVA	14.00.10				Southwest Geoscience		0.272	4.5
TSW-31	11.23.10	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0



Sample I.D.	Date	Total Dissolved	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH
Sample i.b.	Date	Solids			,		GRO	DRO
			(µg/L)	(µg/L)	(µg/L)	(µg/L)	GRO	DRO
		(mg/L)					(mg/L)	(mg/L)
	lity Control Commmission Quality Standards	NE	10	750	750	620	NE	NE
MW-32	1.28.11	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-32	4.19.11	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-32	7.29.11	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-32	10.26.11	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-32	1.27.12	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-32	4.18.12	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-32	7.30.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-32	10.16.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-32	4.23.13	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-32	10.24.13	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-32	4.24.14	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-32	10.29.14	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-33	1.28.11	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-33	4.20.11	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-33	7.28.11	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-33	10.26.11	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-33	1.27.12	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-33	4.18.12	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-33	7.30.12	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-33	10.19.12	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-33	4.23.13	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-33	10.23.13	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-33	4.21.14	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-33	10.27.14	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-34	1.28.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-34	4.19.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-34	7.29.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-34	10.26.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-34	1.27.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-34	4.18.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-34	7.30.12	NA NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-34	10.16.12	NA NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-34 MW-34	4.23.13	NA NA	<1.0	<1.0 <1.0	<1.0	<2.0	<0.050 <0.050	<1.0
	10.25.13		<1.0		<1.0	<2.0		<1.0
MW-34 MW-34	4.24.14 10.29.14	NA NA	<1.0 <1.0	<1.0 <1.0	<1.0	<2.0 <2.0	<0.050 NA	<1.0 NA
					<1.0			
MW-35	1.28.11	NA NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-35 MW-35	4.20.11 7.28.11	NA NA	NAPL NAPL	NAPL NAPL	NAPL NAPL	NAPL NAPL	NAPL NAPL	NAPL NAPL
MW-35	7.28.11 10.26.11	NA NA	NAPL		NAPL NAPL	NAPL NAPL	NAPL NAPL	NAPL NAPL
MW-35	10.26.11	NA NA	NAPL NAPL	NAPL NAPL	NAPL NAPL	NAPL NAPL	NAPL NAPL	NAPL NAPL
MW-35	4.18.12	NA NA	NAPL	NAPL	NAPL NAPL	NAPL	NAPL NAPL	NAPL NAPL
MW-35	7.30.12	NA NA	NAPL	NAPL	NAPL NAPL	NAPL	NAPL NAPL	NAPL NAPL
MW-35	10.19.12	NA NA	NAPL	NAPL	NAPL NAPL	NAPL	NAPL NAPL	NAPL NAPL
MW-35	4.23.13	NA NA	NAPL	NAPL	NAPL	NAPL	NAPL NAPL	NAPL
MW-35	10.23.13	NA NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-35	4.21.14	NA NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-35	10.27.14	NA NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
10100-00	10.21.14	INA	NAFL	IVAFL	IVAFL	IVAFL	INAFL	INAFL



Commis LD	Dete	Tatal Disashuad	Danner	Talasas	Etherlik augusta	Volence	TDU	TPH
Sample I.D.	Date	Total Dissolved Solids	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	
		Condo	(µg/L)	(µg/L)	(µg/L)	(µg/L)	GRO	DRO
		(mg/L)					(mg/L)	(mg/L)
	lity Control Commmission Quality Standards	NE	10	750	750	620	NE	NE
	•							
MW-36	1.31.11	NA NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-36 MW-36	4.20.11	NA NA	<1.0	2.1	<1.0	<2.0	<0.050	<1.0
MW-36	7.29.11 10.27.11	NA NA	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	<0.050 <0.050	<1.0 <1.0
MW-36	1.27.12	NA NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-36	4.18.12	NA NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-36	7.30.12	NA NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-36	10.17.12	NA NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-36	4.23.13	NA NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-36	10.25.13	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-36	4.24.14	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-36	10.29.14	NA	<1.0	<1.0	<1.0	<2.0	NA NA	NA
MW-37	2.4.11	NA	3,100	6,200	700	7,000	38	3.9
MW-37	4.20.11	NA	2,500	3,600	500	5,100	34	4.2
MW-37	7.28.11	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-37	10.26.11	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-37	1.27.12	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-37	4.18.12	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-37	7.30.12	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-37	10.19.12	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-37	4.23.13	NA	670	260	230	1,100	13	4.1
MW-37	10.29.13	NA	580	170	150	610	10	7.7
MW-37	4.24.14	NA	740	49	120	450	7.2	4.9
MW-37	10.30.14	NA	770	<20	140	510	NA	NA
MW-38	1.26.11	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-38	4.20.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-38	7.29.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-38	10.27.11	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-38	1.27.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-38	4.18.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-38	7.30.12	NA 2.000	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-38 MW-38	10.17.12 4.23.13	3,000 NA	<1.0 <1.0	<1.0	<1.0	<2.0 <2.0	<0.050 <0.050	<1.0 <1.0
MW-38	4.23.13 10.24.13	NA NA	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	<0.050 <0.050	<1.0 <1.0
MW-38	4.24.14	NA NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-38	10.28.14	NA NA	<1.0	<1.0	<1.0	<2.0	<0.030 NA	NA
MW-39	1.26.11	NA NA	1.200	730	37	570	11	<1.0
MW-39	4.19.11	NA NA	1,200	730 <1.0	1.6	5.9	0.33	<1.0 <1.0
MW-39	7.29.11	NA NA	27	14	1.9	18	0.80	<1.0
MW-39	10.27.11	NA NA	260	<1.0	1.9	3.5	0.80	<1.0
MW-39	1.27.12	NA NA	580	48	4.3	79	1.8	<1.0
MW-39	4.18.12	NA NA	1,500	620	36	860	12	112
MW-39	7.30.12	NA NA	170	<2.0	<2.0	8.6	0.58	<1.0
MW-39	10.17.12	NA NA	13	<2.0	<2.0	<4.0	<0.10	<1.0
MW-39	4.23.13	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-39	10.23.13	NA	18	<1.0	<1.0	<2.0	0.11	<1.0
MW-39	4.23.14	NA	9.6	<1.0	<1.0	<2.0	0.056	<1.0
MW-39	10.29.14	NA	5.5	<1.0	<1.0	<2.0	NA	NA



Sample I.D.	Date	Total Dissolved	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH
Sample I.D.	Date	Solids				•		
			(µg/L)	(µg/L)	(µg/L)	(µg/L)	GRO	DRO
		(mg/L)					(mg/L)	(mg/L)
	ity Control Commmission Quality Standards	NE	10	750	750	620	NE	NE
MW-40	1.28.11	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-40	4.20.11	NA	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0
MW-40	7.28.11	NA	Dry	Dry	Dry	Dry	Dry	Dry
MW-40	10.26.11	NA	Dry	Dry	Dry	Dry	Dry	Dry
MW-40 MW-40R	1.27.12 4.18.12	NA NA		Dry <1.0	Dry <1.0	Dry <2.0	Dry <0.050	Dry <1.0
MW-40R	7.30.12	NA NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-40R	10.16.12	7,930	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-40R	4.23.13	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-40R	10.23.13	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-40R	4.23.14	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-40R	10.28.14	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-41	1.31.11	NA	<5.0	<5.0	<5.0	<10	<0.25	<1.0
MW-41	4.18.11	NA	<5.0	<5.0	<5.0	<10	<0.25	<1.0
MW-41	7.29.11	NA	<5.0	<5.0	<5.0	<10	<0.050	<1.0
MW-41 MW-41	10.27.11	NA NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-41	1.27.12 4.18.12	NA NA	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	<0.050 <0.050	<1.0 <1.0
MW-41	7.30.12	NA NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-41	10.16.12	30.200	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-41	4.23.13	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-41	10.23.13	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-41	4.23.14	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-41	10.28.14	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-42	2.4.11	NA	<5.0	<5.0	<5.0	<10	<0.25	NA
MW-42	3.3.11	75,400	NA	NA	NA	NA	NA	NA
MW-42	4.19.11	NA NA	<5.0	<5.0	<5.0	<10	<0.25	<1.0
MW-42 MW-42	7.28.11 10.26.11	NA NA	Dry <1.0	Dry <1.0	Dry <1.0	Dry <2.0	Dry <0.050	Dry <1.0
MW-42	1.30.12	NA NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-42	4.18.12	NA NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-42	7.30.12	NA NA	Dry	Dry	Dry	Dry	Dry	Dry
MW-42	10.16.12	NA	Dry	Dry	Dry	Dry	Dry	Dry
MW-42	4.23.13	NA	Dry	Dry	Dry	Dry	Dry	Dry
MW-42	10.23.13	NA	Dry	Dry	Dry	Dry	Dry	Dry
MW-42	4.21.14	NA			Insufficient water to			
MW-42	10.29.14	NA			Insufficient water to			
MW-43	1.28.11	NA NA	<1.0	<1.0	<1.0	<2.0	0.06	<1.0
MW-43 MW-43	4.19.11 7.29.11	NA NA	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	<0.050 <0.050	<1.0 <1.0
MW-43	10.26.11	NA NA	<1.0	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	<0.050	<1.0 <1.0
MW-43	1,27,12	NA NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-43	4.18.12	NA NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-43	7.30.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-43	10.16.12	7,630	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-43	4.23.13	NA	<5.0	<5.0	<5.0	<10	<0.25	<1.0
MW-43	10.24.13	NA	<5.0	<5.0	<5.0	<10	<0.25	<1.0
MW-43	4.24.14	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-43	10.29.14	NA	<1.0	<1.0	<1.0	<2.0	NA 0.050	NA 1.0
TSW-44	11.18.10	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
TSW-45	11.18.10	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
TSW-46	11.23.10	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0



New Macco Water Quality Central Communication (mg/L)									
New Massic Observed Commission	Sample I.D.	Date	Total Dissolved	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH
New Mission Water Quality Control Commission New Mission Water Quality Studies New Water Quality Studies N			Solius	(µg/L)	(µg/L)	(µg/L)	(μg/L)	GRO	DRO
New Mission Water Quality Control Commission New Mission Water Quality Studies New Water Quality Studies N			(mg/L)					(mg/L)	(mg/L)
MW-47			(3)						(3)
MW-47			NE	10	750	750	620	NE	NE
MW-47 7.28.11	MW-47	1.28.11	NA	<5.0	<5.0	<5.0	<10	1.3	2.5
MW-47									
MW-47									
MW-47							_		
MW-47									
MW-47									
MW-47 4.2413 NA 45.0 45.0 5.0 5.0 410 6.4 2.3									
MW-47									
MW-47 4.28.14 NA 700 <5.0 27 <10 8.5 4.0 MA MA MW-47 10.29.14 NA 750 <10 29 <20 NA NA NA MW-48 7.30.12 NA 120 1.100 150 2.990 15 <1.0 MW-48 7.30.12 NA 120 1.100 150 2.990 15 <1.0 MW-48 4.28.13 NA 410 <5.0 170 310 2.9 <1.0 3.5 <1.0 MW-48 4.28.13 NA 410 <5.0 170 310 2.9 <1.0 MW-48 4.28.14 NA 9.2 <1.0 7.8 15 0.25 <1.0 MW-48 4.28.14 NA 9.2 <1.0 7.8 15 0.25 <1.0 MW-48 10.30.14 NA 48 <1.0 4.0 40 40 40 MA NA MW-49 4.28.14 NA 9.2 <1.0 <1.0 <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 MW-49 7.30.12 NA <1.0 <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 MW-49 7.30.12 NA <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 MW-49 4.28.13 NA <1.0 <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1									
MW-47 1029.14 NA 750 <10 29 <20 NA NA NA NA MW-48 4.18.12 NA 290 3.200 360 5.000 25 1.3 NW-48 7.30.12 NA 120 1.100 160 2.900 15 <1.0 NW-48 10.17.12 NA 190 580 150 1.700 8.5 <1.0 NW-48 4.23.13 NA 140 <5.0 170 310 2.9 <1.0 <1.0 NW-48 4.23.13 NA 140 <5.0 170 310 2.9 <1.0 NW-48 4.28.14 NA 9.2 <1.0 7.8 15 0.25 <1.0 NW-48 4.28.14 NA 9.2 <1.0 7.8 15 0.25 <1.0 NW-48 4.28.14 NA 48 <1.0 4.0 60 NA NA NA NA NA NA NA N									
MW-48									
MW-48	MW-48	4.18.12	NA	290	3,200	360	5,000	25	1.3
MW-48									
MW-48	MW-48	10.17.12	NA	190	580	150	1,700	8.5	<1.0
MW-48	MW-48	4.23.13	NA	140	<5.0	170	310	2.9	<1.0
MW-48									
MW-49									
MW-49				_					
MW-49									
MW-49									
MW-49									
MW-49									
MW-49									
MW-50 4.18.12 NA <1.0 <1.0 <2.0 <0.050 <1.0 MW-50 7.30.12 NA <1.0					-				
MW-50									
MW-50									
MW-50 10.23.13 NA <1.0 <1.0 <2.0 <0.050 <1.0 MW-50 4.23.14 NA <1.0									<1.0
MW-50 4.23.14 NA <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 MW-50 10.29.14 NA <1.0	MW-50	4.23.13	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-50 10.29.14 NA <1.0 <1.0 <1.0 <2.0 NA NA MW-51 4.18.12 NA 1,200 3,600 150 1,400 19 <1.0	MW-50	10.23.13	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-51 4.18.12 NA 1,200 3,600 150 1,400 19 <1.0 MW-51 7.30.12 NA 51 5.5 17 78 1.3 <1.0									
MW-51 7.30.12 NA 51 5.5 17 78 1.3 <1.0 MW-51 10.16.12 NA 14 <1.0 4.8 21 0.16 <1.0 MW-51 4.23.13 NA 3.0 <1.0 1.5 <2.0 0.078 <1.0 MW-51 10.23.13 NA 8.2 <1.0 <1.0 <2.0 0.066 <1.0 MW-51 4.23.14 NA 1.1 <1.0 <1.0 <2.0 <0.050 <1.0 MW-51 10.28.14 NA 1.1 <1.0 <1.0 <2.0 <0.050 <1.0 MW-52 4.18.12 NA <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 MW-52 7.30.12 NA <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 MW-52 7.30.12 NA <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 MW-52 10.11 <1.0									
MW-51 10.16.12 NA 14 <1.0 4.8 21 0.16 <1.0 MW-51 4.23.13 NA 3.0 <1.0				,	,		•		
MW-51 4.23.13 NA 3.0 <1.0 1.5 <2.0 0.078 <1.0 MW-51 10.23.13 NA 8.2 <1.0									
MW-51 10.23.13 NA 8.2 <1.0 <1.0 <2.0 0.066 <1.0 MW-51 4.23.14 NA 1.1 <1.0									
MW-51 4.23.14 NA 1.1 <1.0 <1.0 <2.0 <0.050 <1.0 MW-51 10.28.14 NA 5.3 <1.0									
MW-51 10.28.14 NA 5.3 <1.0 <1.0 <2.0 NA NA MW-52 4.18.12 NA <1.0									
MW-52 4.18.12 NA <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 MW-52 7.30.12 NA <1.0					-				
MW-52 7.30.12 NA <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 MW-52 10.17.12 27,000 <1.0									
MW-52 10.17.12 27,000 <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 MW-52 4.23.13 NA 30 <1.0									
MW-52 10.29.13 NA <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 MW-52 4.23.14 NA <1.0	MW-52		27,000	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-52 4.23.14 NA <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 MW-52 10.28.14 NA <1.0									
MW-52 10.28.14 NA <1.0 <1.0 <1.0 <2.0 NA NA MW-53 01.29.13 NA <1.0									
MW-53 01.29.13 NA <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 MW-53 05.03.13 NA <1.0									
MW-53 05.03.13 NA <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 MW-53 10.24.13 NA <1.0		•							
MW-53 10.24.13 NA <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 MW-53 4.24.14 NA <1.0									
MW-53 4.24.14 NA <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 MW-53 10.30.14 NA <1.0									
MW-53 10.30.14 NA <1.0 <1.0 <1.0 <2.0 NA NA MW-54 01.29.13 NA <1.0									
MW-54 01.29.13 NA <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 MW-54 05.03.13 NA <1.0									
MW-54 05.03.13 NA <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 MW-54 10.24.13 NA <1.0									
MW-54 10.24.13 NA <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 MW-54 4.28.14 NA <1.0									
MW-54 4.28.14 NA <1.0 <1.0 <1.0 <2.0 <0.050 <1.0									
	MW-54	10.30.14	NA	<1.0	<1.0	<1.0	<2.0	NA	NA



Sample I.D.	Date	Total Dissolved	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH
		Solids	(µg/L)	(µg/L)	(µg/L)	- (μg/L)	GRO	DRO
		(,		((mm m/ll)
	<u> </u>	(mg/L)					(mg/L)	(mg/L)
	ity Control Commmission Quality Standards	NE	10	750	750	620	NE	NE
MW-55	01.29.13	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-55	05.03.13	NA	<1.0	<1.0	13	710	1.3	<1.0
MW-55	10.29.13	NA	<1.0	<1.0	1.4	<2.0	< 0.050	<1.0
MW-55	4.28.14	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-55	10.30.14	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-75	01.29.13	NA	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0
MW-75	4.23.13	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-75	10.23.13	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-75	4.24.14	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-75	10.28.14	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-76	6.3.13	14,200	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-76	10.25.13	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-76	4.23.14	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-76	10.28.14	NA	<2.0	<2.0	<2.0	<4.0	NA	NA
MW-77	6.3.13	17,900	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-77	10.23.13	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-77	4.23.14	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-77	10.28.14	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-79	6.3.13	NA	Dry	Dry	Dry	Dry	Dry	Dry
MW-79	10.23.13	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-79	4.23.14	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-79	10.28.14	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-80	6.3.13	13,000	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-80	10.23.13	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-80	4.23.14	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-80	10.28.14	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-83	6.3.13	14,500	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-83	10.25.13	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-83	4.23.14	NA	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
MW-83	10.28.14	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-88	10.29.14	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-89	10.29.14	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-90	10.29.14	NA	<1.0	<1.0	<1.0	<2.0	NA	NA

Note: Concentrations in **bold** and yellow exceed the applicable WQCC GQS

NA = Not Analyzed

NE = Not Established

NAPL = Non-aqueous phase liquid

^{* =} piezometer well was replaced with associated monitoring well



Maritarian Wall B	Measurement Date	Top-of-Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Groundwater
Monitoring Well ID	4.5.10	(feet)	(feet) None Observed	(feet) 21.83	(feet) 0.0	Elevation ¹ 6095.65
	5.27.10		None Observed	21.82	0.0	6095.66
	6.25.10		None Observed	22.22	0.0	6095.26
	7.13.10		None Observed	22.47	0.0	6095.01
	8.26.10		None Observed	22.24	0.0	6095.24
	11.18.10		None Observed	22.32	0.0	6095.16
	1.25.11		None Observed	22.13	0.0	6095.35
	4.22.11		None Observed	21.99	0.0	
	7.27.11		None Observed	22.81	0.0	6095.49 6094.67
MW-3R	10.26.11	6117.48	None Observed	22.91	0.0	6094.57
	1.26.12		None Observed	22.74	0.0	6094.74
	4.19.12		None Observed	22.61	0.0	6094.87
	7.31.12		None Observed	22.66	0.0	6094.82
	10.18.12		None Observed	23.04	0.0	6094.44
	4.24.13		None Observed	23.04	0.0	6094.98
			None Observed	22.50	0.0	
	10.23.13 4.21.14		None Observed	21.12		6096.36 6095.51
			None Observed		0.0	
	10.27.14			22.20	0.0	6095.28
	8.10.09		None Observed	20.28	0.0	6095.19
	11.24.09		None Observed	20.17	0.0	6095.30
	2.25.10		None Observed	19.54	0.0	6095.93
	4.5.10		None Observed	19.11	0.0	6096.36
	5.27.10		None Observed	19.28	0.0	6096.19
	6.25.10		None Observed	19.87	0.0	6095.60
	7.13.10		None Observed	20.09	0.0	6095.38
	8.26.10		None Observed	19.68	0.0	6095.79
	11.18.10		None Observed	19.72	0.0	6095.75
	1.25.11		None Observed	19.51	0.0	6095.96
MW-6	4.22.11	6115.47	None Observed	19.42	0.0	6096.05
	7.27.11		None Observed	20.40	0.0	6095.07
	10.26.11		None Observed	20.43	0.0	6095.04
	1.26.12		None Observed	20.15	0.0	6095.32
	4.19.12		None Observed	Not Gauged	0.0	Not Gauged
	7.31.12		None Observed	19.93	0.0	6095.54
	10.18.12		None Observed	20.47	0.0	6095.00
	4.24.13		None Observed	19.89	0.0	6095.58
	10.23.13		None Observed	19.42	0.0	6096.05
	4.21.14		None Observed	19.34	0.0	6096.13
	10.27.14		None Observed	19.50	0.0	6095.97



		Top-of-Casing	D 41 4 DOM	5 4 4 W 4	DOLL 71 : 1	Corrected Groundwater
Monitoring Well ID	Measurement Date	Elevation (feet)	Depth to PSH (feet)	Depth to Water (feet)	PSH Thickness (feet)	Elevation ¹
	8.10.09	, ,	None Observed	21.52	0.0	6095.13
	11.24.09		None Observed	21.73	0.0	6094.92
	2.25.10		None Observed	21.42	0.0	6095.23
	4.5.10		None Observed	20.96	0.0	6095.69
	5.27.10		None Observed	20.96	0.0	6095.69
	6.25.10		None Observed	21.32	0.0	6095.33
	7.13.10		None Observed	21.46	0.0	6095.19
	8.26.10		None Observed	21.36	0.0	6095.29
	11.18.10		None Observed	21.42	0.0	6095.23
	1.25.11		None Observed	21.24	0.0	6095.41
MW-7	4.22.11	6116.65	None Observed	21.22	0.0	6095.43
	7.27.11		None Observed	21.80	0.0	6094.85
	10.26.11		None Observed	21.94	0.0	6094.71
	1.26.12		None Observed	21.82	0.0	6094.83
	4.19.12		None Observed	21.70	0.0	6094.95
	7.31.12		None Observed	21.88	0.0	6094.77
	10.18.12		None Observed	22.12	0.0	6094.53
	4.24.13		None Observed	21.65	0.0	6095.00
	10.23.13		None Observed	21.43	0.0	6095.22
	4.21.14		None Observed	21.20	0.0	6095.45
	10.27.14		None Observed	21.39	0.0	6095.26
	8.10.09		None Observed	23.17	0.0	6095.11
	11.24.09		None Observed	23.43	0.0	6094.85
	2.25.10		None Observed	23.25	0.0	6095.03
	4.5.10		None Observed	22.97	0.0	6095.31
	5.27.10		None Observed	22.85	0.0	6095.43
	6.25.10		None Observed	23.01	0.0	6095.27
	7.13.10		None Observed	23.21	0.0	6095.07
	8.26.10		None Observed	23.23	0.0	6095.05
	11.18.10		None Observed	23.30	0.0	6094.98
	1.25.11		None Observed	23.10	0.0	6095.18
MW-8	4.22.11	6118.28	None Observed	22.94	0.0	6095.34
	7.27.11		None Observed	23.56	0.0	6094.72
	10.26.11		None Observed	23.75	0.0	6094.53
	1.26.12		None Observed	23.64	0.0	6094.64
	4.19.12		None Observed	23.54	0.0	6094.74
	7.31.12		None Observed	23.19	0.0	6095.09
	10.18.12		None Observed	23.96	0.0	6094.32
	4.24.13		None Observed	23.54	0.0	6094.74
	10.23.13		None Observed	23.38	0.0	6094.90
	4.21.14		None Observed	22.91	0.0	6095.37
	10.27.14		None Observed	23.33	0.0	6094.95



		Top-of-Casing				
		Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Groundwater
Monitoring Well ID	Measurement Date	(feet)	(feet)	(feet)	(feet)	Elevation ¹
	8.10.09		None Observed	21.95	0.0	6095.88
	11.24.09		None Observed	21.98	0.0	6095.85
	2.25.10		None Observed	21.51	0.0	6096.32
	4.5.10		None Observed	21.00	0.0	6096.83
	5.27.10		None Observed	21.10	0.0	6096.73
	6.25.10		None Observed	21.56	0.0	6096.27
	7.13.10		None Observed	21.77	0.0	6096.06
	8.26.10		None Observed	21.58	0.0	6096.25
	11.18.10		None Observed	21.61	0.0	6096.22
	1.25.11		None Observed	21.43	0.0	6096.40
MW-9	4.22.11	6117.83	None Observed	21.30	0.0	6096.53
	7.27.11		None Observed	22.15	0.0	6095.68
	10.26.11		None Observed	22.25	0.0	6095.58
	1.26.12		None Observed	22.04	0.0	6095.79
	4.19.12		None Observed	21.88	0.0	6095.95
	7.31.12		None Observed	21.98	0.0	6095.85
	10.18.12		None Observed	22.37	0.0	6095.46
	4.24.13		None Observed	21.79	0.0	6096.04
	10.23.13		None Observed	21.39	0.0	6096.44
	4.21.14		None Observed	21.20	0.0	6096.63
	10.27.14		None Observed	21.48	0.0	6096.35
	4.5.10		None Observed	20.57	0.0	6096.08
	5.27.10		None Observed	20.75	0.0	6095.90
	6.25.10		None Observed	21.33	0.0	6095.32
	7.13.10		None Observed	21.54	0.0	6095.11
	8.26.10		None Observed	21.17	0.0	6095.48
	11.18.10		None Observed	21.16	0.0	6095.49
	1.25.11		None Observed	21.02	0.0	6095.63
MW-11	4.22.11	6116.65	None Observed	20.91	0.0	6095.74
	7.27.11	0110.00	None Observed	21.89	0.0	6094.76
	10.26.11		None Observed	21.94	0.0	6094.71
	1.26.12		None Observed	21.64	0.0	6095.01
	4.19.12		None Observed	21.49	0.0	6095.16
	7.31.12		None Observed	21.49	0.0	6095.16
	10.18.12		None Observed	21.98	0.0	6094.67
	4.24.13		None Observed	21.40	0.0	6095.25
	9.6.13				ed during remediation	
	4.5.10		None Observed	14.88	0.0	6096.36
	5.27.10		None Observed	15.11	0.0	6096.13
	6.25.10		None Observed	15.67	0.0	6095.57
	7.13.10		None Observed	15.91	0.0	6095.33
	8.26.10		None Observed	15.55	0.0	6095.69
	11.18.10		None Observed	16.58	0.0	6094.66
	1.25.11		None Observed	15.73	0.0	6095.51
MW-12	4.22.11	6111.24	None Observed	15.30	0.0	6095.94
	7.27.11		None Observed	16.10	0.0	6095.14
	10.26.11		None Observed	16.21	0.0	6095.03
	1.26.12		None Observed	15.99	0.0	6095.25
	4.19.12	ł	None Observed	15.83	0.0	6095.41
	7.31.12	ł	None Observed	15.83	0.0	6095.41
	10.18.12 4.24.13	ł	16.30	16.31	0.01	6094.94
		ł	None Observed	15.68	0.00	6095.56
	9.6.13		Monito	oring well was remove	ed during remediation	September 2013.



		Top-of-Casing				
		Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Groundwater
Monitoring Well ID	Measurement Date	(feet)	(feet)	(feet)	(feet)	Elevation ¹
	4.5.10		None Observed	19.26	0.0	6096.20
	5.27.10		None Observed	19.47	0.0	6095.99
	6.25.10		None Observed	20.07	0.0	6095.39
	7.13.10		None Observed	20.28	0.0	6095.18
	8.26.10		None Observed	19.86	0.0	6095.60
	11.18.10		None Observed	19.91	0.0	6095.55
	1.25.11		None Observed	19.71	0.0	6095.75
	4.22.11		None Observed	19.65	0.0	6095.81
MW-13	7.27.11	6115.46	None Observed	20.59	0.0	6094.87
	10.26.11		None Observed	20.62	0.0	6094.84
	1.26.12		None Observed	20.34	0.0	6095.12
	4.19.12		None Observed	20.19	0.0	6095.27
	7.31.12		None Observed	20.15	0.0	6095.31
	10.18.12 4.24.13		None Observed None Observed	20.67 20.10	0.0	6094.79 6095.36
	10.23.13		None Observed	19.64	0.0	6095.82
	4.21.14		None Observed	19.63	0.0	6095.83
	10.27.14		None Observed	19.63	0.0	6095.69
	4.5.10		None Observed	20.09	0.0	6095.90
	5.27.10		None Observed	20.28	0.0	6095.71
	6.25.10		None Observed	20.94	0.0	6095.05
	7.13.10		None Observed	21.19	0.0	6094.80
	8.26.10		None Observed	20.70	0.0	6095.29
	11.18.10		None Observed	20.73	0.0	6095.26
	1.25.11		None Observed	20.52	0.0	6095.47
	4.22.11		None Observed	20.45	0.0	6095.54
NAVA 4 4	7.27.11	0445.00	None Observed	21.47	0.0	6094.52
MW-14	10.26.11	6115.99	None Observed	21.48	0.0	6094.51
	1.26.12		None Observed	21.15	0.0	6094.84
	4.19.12		None Observed	21.00	0.0	6094.99
	7.31.12		None Observed	21.00	0.0	6094.99
	10.18.12		None Observed	21.50	0.0	6094.49
	4.24.13		None Observed	20.91	0.0	6095.08
	10.23.13		None Observed	20.43	0.0	6095.56
	4.21.14		None Observed	21.38	0.0	6094.61
	10.27.14		None Observed	20.58	0.0	6095.41
	4.5.10		None Observed	20.66	0.0	6095.83
	5.27.10		None Observed	20.82	0.0	6095.67
	6.25.10		None Observed	21.43	0.0	6095.06
	7.13.10		None Observed	21.64	0.0	6094.85
	8.26.10		None Observed	21.25	0.0	6095.24
	11.18.10		None Observed	21.36	0.0	6095.13
	1.25.11		None Observed	21.07	0.0	6095.42
MW-15	4.22.11	6116.49	None Observed None Observed	20.95	0.0	6095.54 6094.54
10100-13	7.27.11 10.26.11	0110.49	None Observed	21.95 21.98	0.0	6094.51
	1.26.12		None Observed	21.70	0.0	6094.79
	4.19.12		None Observed	21.56	0.0	6094.79
	7.31.12		None Observed	Errant Gauge	0.0	Errant Gauge
	10.18.12		None Observed	22.05	0.0	6094.44
	4.24.13		None Observed	21.50	0.0	6094.99
	4.21.14		None Observed	20.92	0.0	6095.57
	10.27.14		None Observed	21.17	0.0	6095.32



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		Top-of-Casing				
		Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Groundwater
Monitoring Well ID	Measurement Date	(feet)	(feet)	(feet)	(feet)	Elevation ¹
	4.5.10		None Observed	21.51	0.0	6096.06
	5.27.10		None Observed	51.59	0.0	6065.98
	6.25.10		None Observed	22.10	0.0	6095.47
	7.13.10		None Observed	22.29	0.0	6095.28
	8.26.10		None Observed	22.05	0.0	6095.52
	11.18.10		None Observed	22.11	0.0	6095.46
	1.25.11		None Observed	21.87	0.0	6095.70
	4.22.11		None Observed	21.76	0.0	6095.81
MW-16	7.27.11	6117.57	None Observed	22.66	0.0	6094.91
	10.26.11		None Observed	22.71	0.0	6094.86
	1.26.12		None Observed	22.50	0.0	6095.07
	4.19.12		None Observed	22.38	0.0	6095.19
	7.31.12		None Observed	Errant Gauge	0.0	Errant Gauge
	10.18.12		None Observed	22.82	0.0	6094.75
	4.24.13		None Observed	22.28	0.0	6095.29
	10.23.13		None Observed	21.81	0.0	6095.76
	4.21.14	ł	None Observed None Observed	21.67 21.94	0.0	6095.90
	10.27.14					6095.63
	1.25.11		None Observed	12.67	0.0	6097.55
	4.22.11		None Observed	12.49	0.0	6097.73
	7.27.11		None Observed	13.47	0.0	6096.75
	10.26.11		None Observed	13.56	0.0	6096.66
	1.26.12		None Observed	13.23	0.0	6096.99
MW-32	4.18.12	6110.22	None Observed None Observed	13.05	0.0	6097.17
	7.30.12			14.10 13.59	0.0	6096.12
	10.18.12 4.23.13		None Observed None Observed	13.00	0.0	6096.63 6097.22
	10.23.13		None Observed	12.64	0.0	6097.58
	4.21.14		None Observed	12.47	0.0	6097.75
	10.27.14		None Observed	12.79	0.0	6097.43
	1.25.11*		16.08	16.44	0.36	6097.83
	4.22.11		16.59	16.60	0.36	6097.43
	7.27.11		16.07	16.72	0.65	6097.75
	10.26.11		15.55	16.15	0.60	6098.28
	1.26.12		15.83	15.84	0.00	6098.19
	4.18.12		Not Gauged	10.04	0.01	Not Gauged
MW-33	8.31.12	6114.02	15.4	17.29	1.89	6098.03
	10.18.12	1	14.39	17.51	3.12	6098.66
	4.23.13		12.31	12.35	0.04	6101.70
	10.23.13	1	10.92	14.08	3.16	6102.12
	4.21.14		10.47	10.50	0.03	6103.54
	10.27.14	1	11.82	12.47	0.65	6102.00
	1.25.11		None Observed	17.38	0.0	6097.92
	4.22.11		None Observed	17.20	0.0	6098.10
	7.27.11		None Observed	18.23	0.0	6097.07
	10.26.11	1	None Observed	18.32	0.0	6096.98
	1.26.12	1	None Observed	17.98	0.0	6097.32
NAVA 04	4.18.12	0445.0	None Observed	17.78	0.0	6097.52
MW-34	7.30.12	6115.3	None Observed	17.80	0.0	6097.50
	10.18.12	1	None Observed	18.32	0.0	6096.98
	4.23.13	1	None Observed	17.70	0.0	6097.60
	10.23.13		None Observed	16.32	0.0	6098.98
	4.21.14	1	None Observed	17.12	0.0	6098.18
	10.27.14	1	None Observed	17.33	0.0	6097.97



		Top-of-Casing	D 41 4 DOLL	5 4 . W.	DOLL TIL. 1	Corrected Groundwater
Monitoring Well ID	Measurement Date	Elevation (feet)	Depth to PSH (feet)	Depth to Water (feet)	PSH Thickness (feet)	Elevation ¹
Monitoring Well ID	1.25.11*	(icci)	14.5	14.75	0.25	6097.64
	4.22.11		14.22	14.80	0.58	6097.82
	7.27.11		15.11	16.36	1.25	6096.72
	10.26.11		15.14	16.64	1.50	6096.62
	1.26.12		14.72	14.73	0.01	6097.50
	4.18.12		Not Gauged	14.70	0.01	Not Gauged
MW-35	8.31.12	6112.22	14.43	17.49	3.06	6096.84
	10.18.12	1	14.65	17.84	3.19	6096.58
	4.23.13	1	10.98	13.05	2.07	6100.60
	10.23.13	1	9.26	12.58	3.72	6102.21
	4.21.14	1	10.84	11.35	0.51	6101.22
	10.27.14	1	10.42	10.98	0.56	6101.63
	1.25.11		None Observed	13.80	0.0	6097.68
	4.22.11	1	None Observed	13.65	0.0	6097.83
	7.27.11	†	None Observed	14.69	0.0	6097.63
	10.26.11	1	None Observed	14.45	0.0	6097.03
	1.26.12		None Observed	14.41	0.0	6097.07
	4.18.12	1	None Observed	14.18	0.0	6097.30
MW-36	7.30.12	6111.48	None Observed	14.10	0.0	6097.38
	10.18.12		None Observed	14.76	0.0	6096.72
	4.23.13		None Observed	14.11	0.0	6097.37
	10.23.13	1	None Observed	13.75	0.0	6097.73
	4.21.14	1	None Observed	13.58	0.0	6097.90
	10.27.14	1	None Observed	13.77	0.0	6097.71
	1.25.11		Sheen	12.91	Sheen	6097.82
	4.22.11		None Observed	12.78	0.0	6097.95
	7.27.11	1	13.81	13.84	0.03	6096.91
	10.26.11	1	13.88	13.92	0.04	6096.84
	1.26.12	1	13.54	13.54	0.01	6097.20
	4.18.12	1	Not Gauged		0.0.	Not Gauged
MW-37	7.30.12	6110.73	Sheen	13.15	Sheen	6097.58
	10.18.12		13.89	13.90	0.01	6096.84
	4.23.13		None Observed	13.23	0.0	6097.50
	10.23.13		None Observed	12.84	0.0	6097.89
	4.21.14	1	None Observed	12.72	0.0	6098.01
	10.27.14		None Observed	12.85	0.0	6097.88
	1.25.11		None Observed	12.06	0.0	6098.37
	4.22.11	1	None Observed	11.87	0.0	6098.56
	7.27.11	1	None Observed	13.01	0.0	6097.42
	10.26.11	1	None Observed	13.10	0.0	6097.33
	1.26.12	1	None Observed	12.68	0.0	6097.75
	4.18.12	1	None Observed	12.11	0.0	6098.32
MW-38	7.30.12	6110.43	None Observed	12.24	0.0	6098.19
	10.18.12	1	None Observed	13.01	0.0	6097.42
	4.23.13	1	None Observed	12.34	0.0	6098.09
	10.23.13	1	None Observed	11.92	0.0	6098.51
	4.22.13	1	None Observed	11.80	0.0	6098.63
	4.21.14	1	None Observed	11.80	0.0	6098.63
	10.27.14	1	None Observed	11.91	0.0	6098.52



		Top-of-Casing				
		Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Groundwater
Monitoring Well ID	Measurement Date	(feet)	(feet)	(feet)	(feet)	Elevation ¹
	1.25.11		None Observed	16.21	0.0	6097.49
	4.22.11		None Observed	17.35	0.0	6096.35
	7.27.11		None Observed	16.43	0.0	6097.27
	10.26.11		None Observed	16.52	0.0	6097.18
	1.26.12		None Observed	16.57	0.0	6097.13
MW-39	4.18.12	6113.70	None Observed	16.61	0.0	6097.09
11111 00	7.30.12	0110.70	None Observed	16.69	0.0	6097.01
	10.18.12		None Observed	16.77	0.0	6096.93
	4.23.13		None Observed	16.65	0.0	6097.05
	10.23.13		None Observed	16.25	0.0	6097.45
	4.21.14		None Observed	16.24	0.0	6097.46
	10.29.14		None Observed	16.41	0.0	6097.29
	1.25.11		None Observed	19.16	0.0	6096.53
	4.22.11		None Observed	Dry	0.0	Dry
MW-40	7.27.11	6115.69	None Observed	Dry	0.0	Dry
	10.26.11		None Observed	Dry	0.0	Dry
	1.26.12		None Observed	Dry	0.0	Dry
	4.18.12		None Observed	19.58	0.0	6096.03
	7.30.12		None Observed	19.69	0.0	6095.92
	10.18.12	6115.61	None Observed	19.96	0.0	6095.65
MW-40R	4.23.13		None Observed	19.47	0.0	6096.14
	10.23.13		None Observed	19.12	0.0	6096.49
	4.21.14		None Observed	18.85	0.0	6096.76
	10.27.14		None Observed	19.17	0.0	6096.44
	1.25.11		None Observed	14.14	0.0	6097.93
	4.22.11		None Observed	14.18	0.0	6097.89
	7.27.11		None Observed	14.08	0.0	6097.99
	10.26.11		None Observed	14.97	0.0	6097.10
	1.26.12		None Observed	14.20	0.0	6097.87
MW-41	4.18.12	6112.07	None Observed	14.27	0.0	6097.80
IVIVV- I	7.30.12	0112.07	None Observed	14.21	0.0	6097.86
	10.18.12		None Observed	14.18	0.0	6097.89
	4.23.13		None Observed	14.39	0.0	6097.68
	10.23.13		None Observed	14.23	0.0	6097.84
	4.21.14		None Observed	14.26	0.0	6097.81
	10.27.14		None Observed	14.06	0.0	6098.01
	1.25.11		None Observed	24.88	0.0	6096.65
	4.22.11**		None Observed	Errant Gauge	0.0	Errant Gauge
	7.27.11		None Observed	Dry	0.0	Dry
	10.26.11		None Observed	25.16	0.0	6096.37
	1.26.12		None Observed	24.92	0.0	6096.61
MW-42	4.18.12	6121.53	Not Gauged			Not Gauged
IVIVV = TZ	7.30.12	0121.00	Dry	Dry	Dry	Dry
	10.18.12		Dry	Dry	Dry	Dry
	4.23.13		Dry	Dry	Dry	Dry
ţ	10.23.13		Dry	Dry	Dry	Dry
	4.21.14		None Observed	25.02	0.0	6096.51
	10.27.14		None Observed	25.35	0.0	6096.18



		Top-of-Casing				
		Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Groundwater
Monitoring Well ID	Measurement Date	(feet)	(feet)	(feet)	(feet)	Elevation ¹
	1.25.11		None Observed None Observed	15.41 15.30	0.0	6097.51 6097.62
	4.22.11 7.27.11		None Observed	16.27	0.0	6096.65
	10.26.11		None Observed	16.35	0.0	6096.57
	1.26.12		None Observed	16.05	0.0	6096.87
NAVA 40	4.18.12	0440.00	None Observed	15.87	0.0	6097.05
MW-43	7.30.12	6112.92	None Observed	15.82	0.0	6097.10
	10.18.12		None Observed	16.35	0.0	6096.57
	4.23.13		None Observed	15.79	0.0	6097.13
	10.23.13		None Observed	15.33	0.0	6097.59
	4.21.14		None Observed	15.19	0.0	6097.73
	10.27.14		None Observed	15.42	0.0	6097.50
	1.25.11		None Observed	19.22	0.0	6095.19
	4.22.11 7.27.11		None Observed None Observed	19.02 19.69	0.0	6095.39 6094.72
	10.26.11		None Observed	19.86	0.0	6094.55
F	1.26.12	1	None Observed	19.79	0.0	6094.62
	4.19.12		None Observed	19.67	0.0	6094.74
MW-47	7.31.12	6114.41	None Observed	19.87	0.0	6094.54
	10.18.12		None Observed	20.08	0.0	6094.33
	4.24.13		None Observed	19.65	0.0	6094.76
	10.23.13		None Observed	19.38	0.0	6095.03
	4.21.14	-	None Observed	19.06	0.0	6095.35
	10.27.14		None Observed	19.37	0.0	6095.04
	4.18.12		None Observed			Not Gauged
	7.30.12		None Observed	11.90	0.0	6097.31
	10.18.12	6109.21	None Observed	12.26	0.0	6096.95
MW-48	4.23.13		None Observed	11.60	0.0	6097.61
10100 40	10.23.13		None Observed	11.18	0.0	6098.03
	4.21.14		None Observed	11.06	0.0	6098.15
	10.27.14		None Observed	11.19	0.0	6098.02
	4.18.12		None Observed	12.38	0.0	6097.16
	7.30.12					6097.32
	10.18.12		None Observed	12.22	0.0	6096.62
MW-49	4.23.13**	6109.54	None Observed	12.92	0.0	Errant Gauge
10100-49		0109.54	None Observed	Errant Gauge	0.0	
	10.23.13 4.21.14		None Observed	11.87	0.0	6097.67
			None Observed	11.77 11.89	0.0	6097.77
	10.27.14	<u> </u>	None Observed			6097.65
	4.18.12		None Observed	24.64	0.0	6095.98
	7.30.12		None Observed	24.93	0.0	6095.69
NAVA 50	10.18.12	0400.00	None Observed	25.11	0.0	6095.51
MW-50	4.23.13	6120.62	None Observed	24.57	0.0	6096.05
	10.23.13		None Observed	24.21	0.0	6096.41
	4.21.14		None Observed	23.91	0.0	6096.71
	10.27.14		None Observed	24.36	0.0	6096.26
	4.18.12		None Observed	18.33	0.0	6095.17
	7.30.12	l	None Observed	17.47	0.0	6096.03
	10.18.12		None Observed	17.81	0.0	6095.69
MW-51	04.23.13	6113.50	None Observed	17.35	0.0	6096.15
	10.23.13		None Observed	16.84	0.0	6096.66
	4.21.14		None Observed	16.68	0.0	6096.82
	10.27.14		None Observed	17.08	0.0	6096.42



Monitoring Well ID	Measurement Date	Top-of-Casing Elevation (feet)	Depth to PSH (feet)	Depth to Water (feet)	PSH Thickness (feet)	Corrected Groundwater Elevation ¹
	4.18.12		None Observed	21.11	0.0	6097.87
	7.30.12		None Observed	21.10	0.0	6097.88
	10.18.12		None Observed	21.08	0.0	6097.90
MW-52	4.23.13	6118.98	None Observed	21.25	0.0	6097.73
	10.23.13		None Observed	21.02	0.0	6097.96
	4.21.14	1	None Observed	21.01	0.0	6097.97
	10.27.14		None Observed	20.91	0.0	6098.07
	5.3.13		None Observed	12.16	0.0	6097.25
MAN 50	10.23.13	0400 44	None Observed	11.72	0.0	6097.69
MW-53	4.21.14	6109.41	None Observed	11.58	0.0	6097.83
	10.27.14	1	None Observed	11.73	0.0	6097.68
	5.3.13		None Observed	10.29	0.0	6097.33
	10.23.13	1	None Observed	9.82	0.0	6097.80
MW-54	4.21.14	6107.62	None Observed	9.79	0.0	6097.83
<u> </u>	10.27.14	1	None Observed	9.80	0.0	6097.82
	5.3.13	Ì	None Observed	9.82	0.0	6097.71
	10.23.13	1	None Observed	9.45	0.0	6098.08
MW-55	4.21.14	6107.53	None Observed	9.21	0.0	6098.32
F	10.27.14	1	None Observed	9.08	0.0	6098.45
	4.23.13		None Observed	18.98	0.0	6097.30
	10.23.13	1	None Observed	18.67	0.0	6097.64
MW-75	4.21.14	6116.28	None Observed	18.35	0.0	6097.93
	10.27.14	1	None Observed	18.64	0.0	6097.64
	10.23.13		None Observed	25.33	0.0	6098.03
MW-76	4.21.14	6123.36	None Observed	24.73	0.0	6098.63
	10.27.14		None Observed	25.20	0.0	6098.16
	10.23.13		None Observed	33.13	0.0	6097.84
MW-77	4.21.14	6130.97	None Observed	32.53	0.0	6098.44
	10.27.14		None Observed	32.98	0.0	6097.99
	10.23.13		None Observed	30.46	0.0	6097.35
MW-79	4.21.14	6127.81	None Observed	30.05	0.0	6097.76
-	10.27.14		None Observed	30.34	0.0	6097.47
	10.23.13		None Observed	26.58	0.0	6097.81
MW-80	4.21.14	6124.39	None Observed	26.12	0.0	6098.27
	10.27.14	- 0.200	None Observed	26.47	0.0	6097.92
	10.23.13		None Observed	18.91	0.0	6097.95
MW-83	4.21.14	6116.86	None Observed	18.30	0.0	6098.56
	10.27.14	1	None Observed	18.79	0.0	6098.07
MW-88	10.27.14	6118.65	None Observed	24.16	0.0	6094.49
MW-89	10.27.14	6118.31	None Observed	23.83	0.0	6094.82
MW-90	10.27.14	6117.82	None Observed	23.09	0.0	6095.56

NA-Not Analyzed

- * Regauged 1.31.11 to confirm product thickness
- ** Aberrant gauging data
- $1 On \ 11/02/2012, this \ table \ was \ adjusted \ to \ reflect \ July \ 2012 \ re-survey \ and \ a \ specific \ gravity \ of \ 0.69 \ for \ NAPL$



APPENDIX C

Soil Boring/Monitoring Well Logs

		600 Az F A Subsid	6 S. Rio Gra ztec, New Mo Phone: (505, www.apex liary of Ape:	nde, Suite A exico 87410) 334-5200 cos.com		Pr Pr Pr	roject roject roject	t: Enterprise Field Services Name: Largo Compressor Station Location: Rio Arriba County, New Mexico Manager: Kyle Summers Surface Elevation: 6115.72	_	BORING LOG NUMBER MW-88
Date Samp Drilled by Driller: Logged by Sampler:	: <u>E</u>	August 12 Earthworx Trujillo H. Woods H. Woods	<u>(</u>			To No W	op of orth C est C ench : At	Casing Elevation: 6118.65 Coordinate: 36.48754 coordinate: -107.55827 Mark Elevation: N/A Completion Well Stabilization	Casing Di Well Mat	ameter: 2" PVC erials: PVC ompletion: Above Grade
DEPTH (ft)	SAMPLE INTERVAL	SAMPLE	RECOVERY (%)	FID/PID READING (ppm)	POTENTIO- METRIC SURFACE	GEOLOGIC	LOG SYMBOL	GEOLOGIC DESCRIPTION		BORING / WELL COMPLETION (GRAPHIC DEPICTION)
0 —		18-20		- 0 0 - 0 0 - 0 0 - 0 0 - 0 0 - 0 0 - 0 1				SILTY SAND: moderate yellowish brown, dry, no hydrocarbon or no staining -slightly moist -LAYEY SILTY SAND: moderate yellowish brown, moist, no hyodor, no staining -wet		Filter pack (20-40 clean silica sand) clean silica sand) Hydrated Bentonite Seal Hydrated Bentonite Seal Hydrated Bentonite Seal Crouted Casing Flush threaded 2" ID Schedule 40 PVC with 0.010" machine Schedule 40 PVC casing

		606 Az <i>P</i>	S. Rio Gra tec, New Mo thone: (505, www.apex iary of Apex	nde, Suite <i>P</i> exico 87410) <i>334-5200</i> cos.com	\	Projec Projec	nt: Enterprise Field Services t Name: Largo Compressor Station t Location: Rio Arriba County, New Mexico t Manager: Kyle Summers	-	BORING LOG NUMBER MW-89 Project #	
Date Sampler: Drilled by Driller: Logged by Sampler:	: <u>E</u> L	arthworx . Trujillo I. Woods I. Woods				Top of North (West C Bench A	A Surface Elevation: 6115.33 Casing Elevation: 6118.31 Coordinate: 36.48765 Coordinate: -107.55817 Mark Elevation: N/A 1 Completion 1 Well Stabilization	Casing Di Well Mate	erials:PVC Completion: _Above Grade	
DEPTH (ft)	SAMPLE INTERVAL	SAMPLE ID	RECOVERY (%)	FID/PID READING (ppm)	POTENTIO- METRIC SURFACE	GEOLOGIC LOG SYMBOL	GEOLOGIC DESCRIPTION		BORING / WELL COMPLETION (GRAPHIC DEPICTION)	
0				- - 0 - 0 -			SILTY SAND: moderate yellowish brown, dry, no hydrocarbon of staining	odor, no	Seal Grouted Casing	
10		18-20		- 0 - - 0 - 0			-slightly moist CLAYEY SILTY SAND: moderate yellowish brown, moist, no hodor, no staining	nydrocarbon	Hydrated Bentomite Seal	
20		24-26		0 - 0 - 0 - 2			-wet -clay lense @ 23.5 - 24.5 TOTAL DEPTH OF BORING - 26.0 feet BGS		Filter pack (20.40 clean silica sand) clean silica sand) September 10 PVC with 0.010" machine slotted openings (15-25 feet)	

		600 Az F	S S. Rio Gra etec, New Mo Phone: (505, www.apex iiary of Ape	nde, Suite A exico 87410) <i>334-5200</i> cos.com	•	Project Project Project	t: Enterprise Field Services Name: Largo Compressor Station Location: Rio Arriba County, New Mexico Manager: Kyle Summers	-	BORING LOG NUMBER MW-90 Project #
Date Samp Drilled by Driller: Logged by Sampler:	: <u>E</u> L	August 12 Earthwork Trujillo I. Woods I. Woods)			Top of North O West C Bench I At	Surface Elevation: 6114.67 Casing Elevation: 6117.82 Coordinate: 36.48762 Coordinate: -107.55805 Completion N/A Completion Well Stabilization	Casing Di Well Mat	erials: PVC ompletion: Above Grade
DEPTH (ft)	SAMPLE INTERVAL	SAMPLE ID	RECOVERY (%)	FID/PID READING (ppm)	POTENTIO- METRIC SURFACE	GEOLOGIC LOG SYMBOL	GEOLOGIC DESCRIPTION		BORING / WELL COMPLETION (GRAPHIC DEPICTION)
0 — — — — — — — — — — — — — — — — — — —		16-18					SILTY SAND: moderate yellowish brown, dry, no hydrocarbon o staining CLAYEY SILTY SAND: moderate yellowish brown, slightly moist, no hydrocarbon odor, no staining -wet	dor, no	Filter pack (20-40 clean silica sand) Clean silica sand) Hydrated Bentomite Seal Hydrated Bentomite Seal Hydrated Bentomite Seal Flush threaded 2" ID Schedule 40 PVC casing Schedule 40 PVC casing



APPENDIX D

Laboratory Data Sheets & 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

August 19, 2014

Kyle Summers

Apex Titan, Inc.

606 S. Rio Grande Unit A

Aztec, NM 87410

TEL: (903) 821-5603 FAX (214) 350-2914

RE: Largo Compressor Station OrderNo.: 1408577

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 4 sample(s) on 8/13/2014 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 qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order **1408577**

Date Reported: 8/19/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Apex Titan, Inc. Client Sample ID: MW-88@18'-20'

Project: Largo Compressor Station Collection Date: 8/12/2014 10:45:00 AM

Lab ID: 1408577-001 **Matrix:** SOIL **Received Date:** 8/13/2014 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E ORGANICS				Analys	t: BCN
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	8/14/2014 10:32:21 PN	1 14743
Surr: DNOP	86.4	57.9-140	%REC	1	8/14/2014 10:32:21 PN	1 14743
EPA METHOD 8015D: GASOLINE RA	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/14/2014 1:28:48 PM	14747
Surr: BFB	94.4	80-120	%REC	1	8/14/2014 1:28:48 PM	14747
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.049	mg/Kg	1	8/14/2014 1:28:48 PM	14747
Toluene	ND	0.049	mg/Kg	1	8/14/2014 1:28:48 PM	14747
Ethylbenzene	ND	0.049	mg/Kg	1	8/14/2014 1:28:48 PM	14747
Xylenes, Total	ND	0.098	mg/Kg	1	8/14/2014 1:28:48 PM	14747
Surr: 4-Bromofluorobenzene	105	80-120	%REC	1	8/14/2014 1:28:48 PM	14747

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

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.
- Page 1 of 7
- RL Reporting Detection Limit

Lab Order **1408577**

Date Reported: 8/19/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Apex Titan, Inc. Client Sample ID: MW-89@18'-20'

Project: Largo Compressor Station Collection Date: 8/12/2014 12:05:00 PM

Lab ID: 1408577-002 **Matrix:** SOIL **Received Date:** 8/13/2014 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E ORGANICS				Analys	: BCN
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	8/14/2014 11:02:23 PM	1 14743
Surr: DNOP	80.3	57.9-140	%REC	1	8/14/2014 11:02:23 PM	1 14743
EPA METHOD 8015D: GASOLINE RA	NGE				Analys	: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/14/2014 3:52:14 PM	14747
Surr: BFB	94.3	80-120	%REC	1	8/14/2014 3:52:14 PM	14747
EPA METHOD 8021B: VOLATILES					Analys	: NSB
Benzene	ND	0.048	mg/Kg	1	8/14/2014 3:52:14 PM	14747
Toluene	ND	0.048	mg/Kg	1	8/14/2014 3:52:14 PM	14747
Ethylbenzene	ND	0.048	mg/Kg	1	8/14/2014 3:52:14 PM	14747
Xylenes, Total	ND	0.096	mg/Kg	1	8/14/2014 3:52:14 PM	14747
Surr: 4-Bromofluorobenzene	104	80-120	%REC	1	8/14/2014 3:52:14 PM	14747

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

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

Page 2 of 7

- P Sample pH greater than 2.
- RL Reporting Detection Limit

Lab Order **1408577**

Date Reported: 8/19/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Apex Titan, Inc. Client Sample ID: MW-89@24'-26'

Project: Largo Compressor Station Collection Date: 8/12/2014 12:15:00 PM

Lab ID: 1408577-003 **Matrix:** SOIL **Received Date:** 8/13/2014 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E ORGANICS				Analys	t: BCN
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	8/14/2014 11:32:11 PM	<i>l</i> 14743
Surr: DNOP	74.7	57.9-140	%REC	1	8/14/2014 11:32:11 PM	<i>l</i> 14743
EPA METHOD 8015D: GASOLINE RA	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/14/2014 4:20:53 PM	14747
Surr: BFB	94.4	80-120	%REC	1	8/14/2014 4:20:53 PM	14747
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.049	mg/Kg	1	8/14/2014 4:20:53 PM	14747
Toluene	ND	0.049	mg/Kg	1	8/14/2014 4:20:53 PM	14747
Ethylbenzene	ND	0.049	mg/Kg	1	8/14/2014 4:20:53 PM	14747
Xylenes, Total	ND	0.098	mg/Kg	1	8/14/2014 4:20:53 PM	14747
Surr: 4-Bromofluorobenzene	104	80-120	%REC	1	8/14/2014 4:20:53 PM	14747

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

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

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- P Sample pH greater than 2.
- RL Reporting Detection Limit

Lab Order **1408577**

Date Reported: 8/19/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Apex Titan, Inc. Client Sample ID: MW-90@16'-18'

Project: Largo Compressor Station Collection Date: 8/12/2014 12:45:00 PM

Lab ID: 1408577-004 **Matrix:** SOIL **Received Date:** 8/13/2014 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E ORGANICS				Analys	t: BCN
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	8/15/2014 12:01:58 AM	Л 14743
Surr: DNOP	90.6	57.9-140	%REC	1	8/15/2014 12:01:58 AM	<i>l</i> 14743
EPA METHOD 8015D: GASOLINE RA	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	8/14/2014 4:49:36 PM	14747
Surr: BFB	94.6	80-120	%REC	1	8/14/2014 4:49:36 PM	14747
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.047	mg/Kg	1	8/14/2014 4:49:36 PM	14747
Toluene	ND	0.047	mg/Kg	1	8/14/2014 4:49:36 PM	14747
Ethylbenzene	ND	0.047	mg/Kg	1	8/14/2014 4:49:36 PM	14747
Xylenes, Total	ND	0.095	mg/Kg	1	8/14/2014 4:49:36 PM	14747
Surr: 4-Bromofluorobenzene	103	80-120	%REC	1	8/14/2014 4:49:36 PM	14747

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

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

Page 4 of 7

- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1408577**

19-Aug-14

Client:	Apex Titar	n. Inc.
CHCIIt.	1 ipca i itai	1, 1110.

Project: Largo Compressor Station

Project: Larg	o Compressor Station			
Sample ID MB-14719	SampType: MBLK	TestCode: EPA Method	8015D: Diesel Range Organics	
Client ID: PBS	Batch ID: 14719	RunNo: 20529		
Prep Date: 8/12/2014	Analysis Date: 8/13/2014	SeqNo: 597002	Units: %REC	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit	Qual
Surr: DNOP	9.7 10.00	96.9 57.9	140	
Sample ID LCS-14719	SampType: LCS	TestCode: EPA Method	8015D: Diesel Range Organics	
Client ID: LCSS	Batch ID: 14719	RunNo: 20529		
Prep Date: 8/12/2014	Analysis Date: 8/13/2014	SeqNo: 597313	Units: %REC	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit	Qual
Surr: DNOP	4.6 5.000	91.5 57.9	140	
Sample ID MB-14743	SampType: MBLK	TestCode: EPA Method	8015D: Diesel Range Organics	
Client ID: PBS	Batch ID: 14743	RunNo: 20529		
Prep Date: 8/13/2014	Analysis Date: 8/13/2014	SeqNo: 598024	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit	Qual
Diesel Range Organics (DRO)	ND 10	00.5	440	
Surr: DNOP	8.9 10.00	89.5 57.9	140	
Sample ID LCS-14743	SampType: LCS	TestCode: EPA Method	8015D: Diesel Range Organics	
Sample ID LCS-14743 Client ID: LCSS	SampType: LCS Batch ID: 14743	TestCode: EPA Method RunNo: 20529		
-			8015D: Diesel Range Organics Units: mg/Kg	
Client ID: LCSS Prep Date: 8/13/2014 Analyte	Batch ID: 14743 Analysis Date: 8/13/2014 Result PQL SPK value	RunNo: 20529 SeqNo: 598025 SPK Ref Val %REC LowLimit	Units: mg/Kg HighLimit %RPD RPDLimit	Qual
Client ID: LCSS Prep Date: 8/13/2014 Analyte Diesel Range Organics (DRO)	Batch ID: 14743 Analysis Date: 8/13/2014 Result PQL SPK value 50 10 50.00	RunNo: 20529 SeqNo: 598025 SPK Ref Val %REC LowLimit 0 99.9 68.6	Units: mg/Kg HighLimit %RPD RPDLimit 130	Qual
Client ID: LCSS Prep Date: 8/13/2014 Analyte Diesel Range Organics (DRO) Surr: DNOP	Batch ID: 14743 Analysis Date: 8/13/2014 Result PQL SPK value 50 10 50.00 4.5 5.000	RunNo: 20529 SeqNo: 598025 SPK Ref Val %REC LowLimit 0 99.9 68.6 90.6 57.9	Units: mg/Kg HighLimit %RPD RPDLimit 130 140	Qual
Client ID: LCSS Prep Date: 8/13/2014 Analyte Diesel Range Organics (DRO) Surr: DNOP Sample ID MB-14764	Batch ID: 14743 Analysis Date: 8/13/2014 Result PQL SPK value 50 10 50.00 4.5 5.000 SampType: MBLK	RunNo: 20529 SeqNo: 598025 SPK Ref Val %REC LowLimit 0 99.9 68.6 90.6 57.9 TestCode: EPA Method	Units: mg/Kg HighLimit %RPD RPDLimit 130	Qual
Client ID: LCSS Prep Date: 8/13/2014 Analyte Diesel Range Organics (DRO) Surr: DNOP Sample ID MB-14764 Client ID: PBS	Batch ID: 14743 Analysis Date: 8/13/2014 Result PQL SPK value 50 10 50.00 4.5 5.000 SampType: MBLK Batch ID: 14764	RunNo: 20529 SeqNo: 598025 SPK Ref Val %REC LowLimit 0 99.9 68.6 90.6 57.9 TestCode: EPA Method RunNo: 20602	Units: mg/Kg HighLimit %RPD RPDLimit 130 140 8015D: Diesel Range Organics	Qual
Client ID: LCSS Prep Date: 8/13/2014 Analyte Diesel Range Organics (DRO) Surr: DNOP Sample ID MB-14764 Client ID: PBS Prep Date: 8/14/2014	Batch ID: 14743 Analysis Date: 8/13/2014 Result PQL SPK value 50 10 50.00 4.5 5.000 SampType: MBLK Batch ID: 14764 Analysis Date: 8/14/2014	RunNo: 20529 SeqNo: 598025 SPK Ref Val %REC LowLimit 0 99.9 68.6 90.6 57.9 TestCode: EPA Method RunNo: 20602 SeqNo: 599330	Units: mg/Kg HighLimit %RPD RPDLimit 130 140 8015D: Diesel Range Organics Units: %REC	Qual
Client ID: LCSS Prep Date: 8/13/2014 Analyte Diesel Range Organics (DRO) Surr: DNOP Sample ID MB-14764 Client ID: PBS Prep Date: 8/14/2014 Analyte	Batch ID: 14743 Analysis Date: 8/13/2014 Result PQL SPK value 50 10 50.00 4.5 5.000 SampType: MBLK Batch ID: 14764 Analysis Date: 8/14/2014 Result PQL SPK value	RunNo: 20529 SeqNo: 598025 SPK Ref Val %REC LowLimit 0 99.9 68.6 90.6 57.9 TestCode: EPA Method RunNo: 20602 SeqNo: 599330 SPK Ref Val %REC LowLimit	Units: mg/Kg HighLimit %RPD RPDLimit 130 140 8015D: Diesel Range Organics Units: %REC HighLimit %RPD RPDLimit	Qual
Client ID: LCSS Prep Date: 8/13/2014 Analyte Diesel Range Organics (DRO) Surr: DNOP Sample ID MB-14764 Client ID: PBS Prep Date: 8/14/2014	Batch ID: 14743 Analysis Date: 8/13/2014 Result PQL SPK value 50 10 50.00 4.5 5.000 SampType: MBLK Batch ID: 14764 Analysis Date: 8/14/2014	RunNo: 20529 SeqNo: 598025 SPK Ref Val %REC LowLimit 0 99.9 68.6 90.6 57.9 TestCode: EPA Method RunNo: 20602 SeqNo: 599330	Units: mg/Kg HighLimit %RPD RPDLimit 130 140 8015D: Diesel Range Organics Units: %REC	
Client ID: LCSS Prep Date: 8/13/2014 Analyte Diesel Range Organics (DRO) Surr: DNOP Sample ID MB-14764 Client ID: PBS Prep Date: 8/14/2014 Analyte Surr: DNOP Sample ID LCS-14764	Batch ID: 14743 Analysis Date: 8/13/2014 Result PQL SPK value 50 10 50.00 4.5 5.000 SampType: MBLK Batch ID: 14764 Analysis Date: 8/14/2014 Result PQL SPK value 9.3 10.00 SampType: LCS	RunNo: 20529 SPK Ref Val %REC LowLimit 0 99.9 68.6 90.6 57.9 TestCode: EPA Method RunNo: 20602 SeqNo: 599330 SPK Ref Val %REC LowLimit 93.3 57.9 TestCode: EPA Method	Units: mg/Kg HighLimit %RPD RPDLimit 130 140 8015D: Diesel Range Organics Units: %REC HighLimit %RPD RPDLimit	
Client ID: LCSS Prep Date: 8/13/2014 Analyte Diesel Range Organics (DRO) Surr: DNOP Sample ID MB-14764 Client ID: PBS Prep Date: 8/14/2014 Analyte Surr: DNOP Sample ID LCS-14764 Client ID: LCSS	Batch ID: 14743 Analysis Date: 8/13/2014 Result PQL SPK value 50 10 50.00 4.5 5.000 SampType: MBLK Batch ID: 14764 Analysis Date: 8/14/2014 Result PQL SPK value 9.3 10.00 SampType: LCS Batch ID: 14764	RunNo: 20529 SPK Ref Val %REC LowLimit 0 99.9 68.6 90.6 57.9 TestCode: EPA Method RunNo: 20602 SeqNo: 599330 SPK Ref Val %REC LowLimit 93.3 57.9 TestCode: EPA Method RunNo: 20602	Units: mg/Kg HighLimit %RPD RPDLimit 130 140 8015D: Diesel Range Organics Units: %REC HighLimit %RPD RPDLimit 140 8015D: Diesel Range Organics	
Client ID: LCSS Prep Date: 8/13/2014 Analyte Diesel Range Organics (DRO) Surr: DNOP Sample ID MB-14764 Client ID: PBS Prep Date: 8/14/2014 Analyte Surr: DNOP Sample ID LCS-14764	Batch ID: 14743 Analysis Date: 8/13/2014 Result PQL SPK value 50 10 50.00 4.5 5.000 SampType: MBLK Batch ID: 14764 Analysis Date: 8/14/2014 Result PQL SPK value 9.3 10.00 SampType: LCS	RunNo: 20529 SPK Ref Val %REC LowLimit 0 99.9 68.6 90.6 57.9 TestCode: EPA Method RunNo: 20602 SeqNo: 599330 SPK Ref Val %REC LowLimit 93.3 57.9 TestCode: EPA Method	Units: mg/Kg HighLimit %RPD RPDLimit 130 140 8015D: Diesel Range Organics Units: %REC HighLimit %RPD RPDLimit 140	
Client ID: LCSS Prep Date: 8/13/2014 Analyte Diesel Range Organics (DRO) Surr: DNOP Sample ID MB-14764 Client ID: PBS Prep Date: 8/14/2014 Analyte Surr: DNOP Sample ID LCS-14764 Client ID: LCSS	Batch ID: 14743 Analysis Date: 8/13/2014 Result PQL SPK value 50 10 50.00 4.5 5.000 SampType: MBLK Batch ID: 14764 Analysis Date: 8/14/2014 Result PQL SPK value 9.3 10.00 SampType: LCS Batch ID: 14764 Analysis Date: 8/14/2014	RunNo: 20529 SPK Ref Val %REC LowLimit 0 99.9 68.6 90.6 57.9 TestCode: EPA Method RunNo: 20602 SeqNo: 599330 SPK Ref Val %REC LowLimit 93.3 57.9 TestCode: EPA Method RunNo: 20602	Units: mg/Kg HighLimit %RPD RPDLimit 130 140 8015D: Diesel Range Organics Units: %REC HighLimit %RPD RPDLimit 140 8015D: Diesel Range Organics	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
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- 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

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1408577**

19-Aug-14

Client: Apex Titan, Inc.

Project: Largo Compressor Station

Sample ID MB-14747 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 14747 RunNo: 20588

Prep Date: 8/13/2014 Analysis Date: 8/14/2014 SeqNo: 598916 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Gasoline Range Organics (GRO) ND 5.0

Surr: BFB 930 1000 93.2 80 120

Sample ID LCS-14747 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 14747 RunNo: 20588

Prep Date: 8/13/2014 Analysis Date: 8/14/2014 SeqNo: 598917 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

 Gasoline Range Organics (GRO)
 31
 5.0
 25.00
 0
 125
 65.8
 139

 Surr: BFB
 1000
 1000
 101
 80
 120

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
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- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
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- RL Reporting Detection Limit

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1408577**

19-Aug-14

Client: Apex Titan, Inc.

Project: Largo Compressor Station

Sample ID MB-14747 SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: **PBS** Batch ID: 14747 RunNo: 20588 Prep Date: 8/13/2014 Analysis Date: 8/14/2014 SeqNo: 598982 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene ND 0.050 Toluene ND 0.050 Ethylbenzene ND 0.050 Xylenes, Total ND 0.10 Surr: 4-Bromofluorobenzene 1.0 1.000 105 80 120

Sample ID LCS-14747 SampType: LCS TestCode: EPA Method 8021B: Volatiles Batch ID: 14747 Client ID: **LCSS** RunNo: 20588 Prep Date: 8/13/2014 Analysis Date: 8/14/2014 SeqNo: 598983 Units: mg/Kg **PQL** SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte LowLimit Qual 1.0 0.050 1.000 O 103 80 120 Benzene Toluene 1.0 0.050 1.000 0 102 80 120 Ethylbenzene 0.050 0 103 80 120 1.0 1.000 Xylenes, Total 3.1 0.10 3.000 0 103 80 120 Surr: 4-Bromofluorobenzene 1.1 1.000 109 80 120

Sample ID 1408577-001AMS SampType: MS TestCode: EPA Method 8021B: Volatiles Batch ID: 14747 RunNo: 20588 Client ID: MW-88@18'-20' 8/13/2014 Analysis Date: 8/14/2014 SeaNo: 598985 Prep Date: Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene 1.1 0.049 0.9766 0 108 77.4 142 Toluene 1.0 0.049 0.9766 0 107 77 132 0.049 0.9766 0 107 77.6 Ethylbenzene 1.0 134 Xylenes, Total 3.1 0.098 2.930 0 107 77.4 132 Surr: 4-Bromofluorobenzene 1.1 0.9766 109 80 120

Sample ID 1408577-001AMSD SampType: MSD TestCode: EPA Method 8021B: Volatiles Client ID: MW-88@18'-20' Batch ID: 14747 RunNo: 20588 Prep Date: 8/13/2014 Analysis Date: 8/14/2014 SeqNo: 598986 Units: mg/Kg SPK value SPK Ref Val %REC **RPDLimit** Analyte Result **PQL** LowLimit HighLimit %RPD Qual 1.1 0.049 0.9766 0 108 77.4 142 0.108 20 Benzene Toluene 1.0 0.049 0.9766 0 107 77 132 0.444 20 Ethylbenzene 1.1 0.049 0.9766 0 108 77.6 134 0.900 20 Xylenes, Total 3.2 0.098 2.930 0 108 77.4 132 20 1.17 Surr: 4-Bromofluorobenzene 0.9766 80 120 0 1.1 111 0

Qualifiers:

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- 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

Reporting Detection Limit

P Sample pH greater than 2.

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4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **APEX Titan** Work Order Number: 1408577 RcptNo: 1 Received by/date: Celin Som Logged By: Celina Sessa 8/13/2014 7:30:00 AM Celin Som Completed By: 8/13/2014 10:11:28 AM Celina Sessa 08/13/14 Reviewed By: Chain of Custody 1. Custody seals intact on sample bottles? Yes No 🗌 Not Present No 🗌 Yes 🗹 Not Present 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In No 🗌 NA 🗌 4. Was an attempt made to cool the samples? Yes 🗸 Yes 🗸 NA 🗌 5. Were all samples received at a temperature of >0° C to 6.0°C No 🗌 Yes 🔽 No \square Sample(s) in proper container(s)? No 🗌 7. Sufficient sample volume for indicated test(s)? No 🔲 V 8. Are samples (except VOA and ONG) properly preserved? No 🗸 9. Was preservative added to bottles? NA . No VOA Vials 🗹 10.VOA vials have zero headspace? No 🗀 No 🔽 11. Were any sample containers received broken? Yes # of preserved bottles checked Yes 🔽 No 🗌 for pH: 12. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? Yes 🗸 No 🗌 13. Are matrices correctly identified on Chain of Custody? No 🗌 **V** 14. Is it clear what analyses were requested? Yes 15. Were all holding times able to be met? Yes 🗹 No 🗌 Checked by: (If no, notify customer for authorization.) Special Handling (if applicable) NA 🗹 16. Was client notified of all discrepancies with this order? Yes 🔲 No 🗀 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 Good 2.6

į	TORY																					1
	ANALYSIS LABORATORY	www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109	Tel. 505-345-3975 Fax 505-345-4107	Analysis	(S)	OS'*	Od SWI9	(1.8 (1.9) (1.4) (1.40) (1.40) (1.40)	(GR D) D) D) D) D) D) D) D) D)	BTEX + MTE TPH 8015B TPH (Methor PAH's (8310 RCRA 8 Met Anions (F,Cl 8081 Pesticit 8081 Pesticit 8081 Pesticit 8081 Pesticit 8250 (VOA	X	X	×	×					arks:		W. Anventarion date will be clearly indicated at the standard on the
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Lurn-Around Time:		Project Name:	Largo Compressor Station			Project Manager:	·	Kyle Summers	Sampler: Heather Woods On Ice: A Yes		Container Preservative HEAL No. Type and # Type I U 0 5 7 7	1-402 h Cold001	1-402 Jar Cold -002	1-402 bs cold -003	1-402 Jan Cold 2004		/ 9			Received by: Mintur fold 8/14/4 14/6	Received by Date Time	contracted to other accredited laboratories. This serves as notice of this
Chain-of-Custody Record	Client: Apex TITAN Inc.		Mailing Address: 400 South Rio Grande,	Suite A Aztec, NM 87410	Phone #: (505) 7-16-2787	email or Fax#:	QA/QC Package:	☑ Standard	Accreditation	□ EDD (Type)	Date Time Matrix Sample Request ID	8/12/14 1045 Soil MW-88@ 18'- 20'	8/12/14 1205 Soil MW-89 @ 18'- 20'	8/12/14 1215 Soil MW-89 @ 24'- 26'	8/12/14 1245 Soil MW-90@ 16'-18'		AKS A		_	Staff 1640 Neather M. Woods	Date: Time: Relinquished by: 8/12/14 S21 Mistra Mistra 101.01.01.01.01.01.01.01.01.01.01.01.01.	\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\



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

May 02, 2014

Kyle Summers Southwest Geoscience 606 S. Rio Grande Unit A Aztec, NM 87410

TEL: (903) 821-5603 FAX (214) 350-2914

RE: Largo CS OrderNo.: 1404A71

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 8 sample(s) on 4/25/2014 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 qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/2/2014

CLIENT: Southwest Geoscience Client Sample ID: MW-8

Project: Largo CS **Collection Date:** 4/21/2014 3:25:00 PM 1404A71-001 Matrix: AQUEOUS Lab ID: Received Date: 4/25/2014 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	GE				Analyst	: BCN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	4/25/2014 5:45:48 PM	12881
Surr: DNOP	99.1	62.7-145	%REC	1	4/25/2014 5:45:48 PM	12881
EPA METHOD 8015D: GASOLINE R	ANGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	4/25/2014 8:01:26 PM	R18223
Surr: BFB	88.1	80.4-118	%REC	1	4/25/2014 8:01:26 PM	R18223
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	1.0	μg/L	1	4/25/2014 8:01:26 PM	R18223
Toluene	ND	1.0	μg/L	1	4/25/2014 8:01:26 PM	R18223
Ethylbenzene	ND	1.0	μg/L	1	4/25/2014 8:01:26 PM	R18223
Xylenes, Total	ND	2.0	μg/L	1	4/25/2014 8:01:26 PM	R18223
Surr: 4-Bromofluorobenzene	98.1	82.9-139	%REC	1	4/25/2014 8:01:26 PM	R18223

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Е Value above quantitation range
- Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

Page 1 of 11

- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 5/2/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience

Client Sample ID: MW-3R

Project: Largo CS Collection Date: 4/21/2014 4:10:00 PM

Lab ID: 1404A71-002 **Matrix:** AQUEOUS **Received Date:** 4/25/2014 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF Date Analyzed Ba	atch
EPA METHOD 8015D: DIESEL RANGE				Analyst: B o	CN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1 4/25/2014 6:17:23 PM 12	2881
Surr: DNOP	99.2	62.7-145	%REC	1 4/25/2014 6:17:23 PM 12	2881
EPA METHOD 8015D: GASOLINE RAN	IGE			Analyst: N	SB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1 4/26/2014 12:32:30 AM R	18223
Surr: BFB	89.4	80.4-118	%REC	1 4/26/2014 12:32:30 AM R	18223
EPA METHOD 8021B: VOLATILES				Analyst: N	SB
Benzene	ND	1.0	μg/L	1 4/26/2014 12:32:30 AM R	18223
Toluene	ND	1.0	μg/L	1 4/26/2014 12:32:30 AM R	18223
Ethylbenzene	ND	1.0	μg/L	1 4/26/2014 12:32:30 AM R	18223
Xylenes, Total	ND	2.0	μg/L	1 4/26/2014 12:32:30 AM R	18223
Surr: 4-Bromofluorobenzene	101	82.9-139	%REC	1 4/26/2014 12:32:30 AM R	18223

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

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

Page 2 of 11

- P Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/2/2014

CLIENT: Southwest Geoscience Client Sample ID: MW-15

 Project:
 Largo CS
 Collection Date: 4/21/2014 5:05:00 PM

 Lab ID:
 1404A71-003
 Matrix: AQUEOUS
 Received Date: 4/25/2014 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E				Analyst	BCN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	4/25/2014 6:48:54 PM	12881
Surr: DNOP	99.1	62.7-145	%REC	1	4/25/2014 6:48:54 PM	12881
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	4/26/2014 1:02:45 AM	R18223
Surr: BFB	87.9	80.4-118	%REC	1	4/26/2014 1:02:45 AM	R18223
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	1.0	μg/L	1	4/26/2014 1:02:45 AM	R18223
Toluene	ND	1.0	μg/L	1	4/26/2014 1:02:45 AM	R18223
Ethylbenzene	ND	1.0	μg/L	1	4/26/2014 1:02:45 AM	R18223
Xylenes, Total	ND	2.0	μg/L	1	4/26/2014 1:02:45 AM	R18223
Surr: 4-Bromofluorobenzene	99.4	82.9-139	%REC	1	4/26/2014 1:02:45 AM	R18223

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

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 Page 3 of 11
 - P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 5/2/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience Client Sample ID: MW-7

 Project:
 Largo CS
 Collection Date: 4/22/2014 12:45:00 PM

 Lab ID:
 1404A71-004
 Matrix: AQUEOUS
 Received Date: 4/25/2014 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	GE				Analyst	BCN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	4/25/2014 7:20:11 PM	12881
Surr: DNOP	101	62.7-145	%REC	1	4/25/2014 7:20:11 PM	12881
EPA METHOD 8015D: GASOLINE R	ANGE				Analyst	: NSB
Gasoline Range Organics (GRO)	0.13	0.050	mg/L	1	4/26/2014 1:32:52 AM	R18223
Surr: BFB	89.0	80.4-118	%REC	1	4/26/2014 1:32:52 AM	R18223
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	43	1.0	μg/L	1	4/26/2014 1:32:52 AM	R18223
Toluene	ND	1.0	μg/L	1	4/26/2014 1:32:52 AM	R18223
Ethylbenzene	ND	1.0	μg/L	1	4/26/2014 1:32:52 AM	R18223
Xylenes, Total	3.1	2.0	μg/L	1	4/26/2014 1:32:52 AM	R18223
Surr: 4-Bromofluorobenzene	102	82.9-139	%REC	1	4/26/2014 1:32:52 AM	R18223

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

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

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Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/2/2014

CLIENT: Southwest Geoscience Client Sample ID: MW-13

 Project:
 Largo CS
 Collection Date: 4/22/2014 1:35:00 PM

 Lab ID:
 1404A71-005
 Matrix: AQUEOUS
 Received Date: 4/25/2014 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	βE				Analyst	:: BCN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	4/25/2014 7:51:42 PM	12881
Surr: DNOP	102	62.7-145	%REC	1	4/25/2014 7:51:42 PM	12881
EPA METHOD 8015D: GASOLINE RA	ANGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	4/26/2014 2:03:07 AM	R18223
Surr: BFB	88.9	80.4-118	%REC	1	4/26/2014 2:03:07 AM	R18223
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	1.0	μg/L	1	4/26/2014 2:03:07 AM	R18223
Toluene	ND	1.0	μg/L	1	4/26/2014 2:03:07 AM	R18223
Ethylbenzene	ND	1.0	μg/L	1	4/26/2014 2:03:07 AM	R18223
Xylenes, Total	ND	2.0	μg/L	1	4/26/2014 2:03:07 AM	R18223
Surr: 4-Bromofluorobenzene	99.0	82.9-139	%REC	1	4/26/2014 2:03:07 AM	R18223

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

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

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- P Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/2/2014

CLIENT: Southwest Geoscience Client Sample ID: MW-6

 Project:
 Largo CS
 Collection Date: 4/22/2014 2:30:00 PM

 Lab ID:
 1404A71-006
 Matrix: AQUEOUS
 Received Date: 4/25/2014 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE					Analyst	BCN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	4/25/2014 8:23:00 PM	12881
Surr: DNOP	99.4	62.7-145	%REC	1	4/25/2014 8:23:00 PM	12881
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	4/26/2014 2:33:11 AM	R18223
Surr: BFB	88.8	80.4-118	%REC	1	4/26/2014 2:33:11 AM	R18223
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	1.0	μg/L	1	4/26/2014 2:33:11 AM	R18223
Toluene	ND	1.0	μg/L	1	4/26/2014 2:33:11 AM	R18223
Ethylbenzene	ND	1.0	μg/L	1	4/26/2014 2:33:11 AM	R18223
Xylenes, Total	ND	2.0	μg/L	1	4/26/2014 2:33:11 AM	R18223
Surr: 4-Bromofluorobenzene	99.2	82.9-139	%REC	1	4/26/2014 2:33:11 AM	R18223

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

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

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- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/2/2014

CLIENT: Southwest Geoscience Client Sample ID: MW-14

 Project:
 Largo CS
 Collection Date: 4/22/2014 3:25:00 PM

 Lab ID:
 1404A71-007
 Matrix: AQUEOUS
 Received Date: 4/25/2014 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	GE				Analyst	: BCN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	4/25/2014 8:54:15 PM	12881
Surr: DNOP	113	62.7-145	%REC	1	4/25/2014 8:54:15 PM	12881
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	4/26/2014 3:03:16 AM	R18223
Surr: BFB	88.2	80.4-118	%REC	1	4/26/2014 3:03:16 AM	R18223
EPA METHOD 8021B: VOLATILES					Analyst	:: NSB
Benzene	ND	1.0	μg/L	1	4/26/2014 3:03:16 AM	R18223
Toluene	ND	1.0	μg/L	1	4/26/2014 3:03:16 AM	R18223
Ethylbenzene	ND	1.0	μg/L	1	4/26/2014 3:03:16 AM	R18223
Xylenes, Total	ND	2.0	μg/L	1	4/26/2014 3:03:16 AM	R18223
Surr: 4-Bromofluorobenzene	97.7	82.9-139	%REC	1	4/26/2014 3:03:16 AM	R18223

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

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

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Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/2/2014

CLIENT: Southwest Geoscience Client Sample ID: MW-9

 Project:
 Largo CS
 Collection Date: 4/22/2014 4:20:00 PM

 Lab ID:
 1404A71-008
 Matrix: AQUEOUS
 Received Date: 4/25/2014 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E				Analyst	:: BCN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	4/25/2014 9:25:41 PM	12881
Surr: DNOP	105	62.7-145	%REC	1	4/25/2014 9:25:41 PM	12881
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	4/26/2014 3:33:29 AM	R18223
Surr: BFB	88.4	80.4-118	%REC	1	4/26/2014 3:33:29 AM	R18223
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	1.0	μg/L	1	4/26/2014 3:33:29 AM	R18223
Toluene	ND	1.0	μg/L	1	4/26/2014 3:33:29 AM	R18223
Ethylbenzene	ND	1.0	μg/L	1	4/26/2014 3:33:29 AM	R18223
Xylenes, Total	ND	2.0	μg/L	1	4/26/2014 3:33:29 AM	R18223
Surr: 4-Bromofluorobenzene	97.8	82.9-139	%REC	1	4/26/2014 3:33:29 AM	R18223

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

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

Page 8 of 11

- P Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#: **1404A71**

02-May-14

Client: Southwest Geoscience

Project: Largo CS

Sample ID MB-12881 SampType: MBLK TestCode: EPA Method 8015D: Diesel Range Client ID: PBW Batch ID: 12881 RunNo: 18203 Prep Date: 4/25/2014 Analysis Date: 4/25/2014 SeqNo: 526501 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 0.88 1.000 87.9 62.7 145 TestCode: EPA Method 8015D: Diesel Range Sample ID LCS-12881 SampType: LCS Client ID: LCSW Batch ID: 12881 RunNo: 18203 Prep Date: 4/25/2014 Analysis Date: 4/25/2014 SeqNo: 526503 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 97.9 78.6 146 Surr: DNOP 0.38 0.5000 75.5 62.7 145

Sample ID LCSD-12881	SampT	/pe: LC	SD	TestCode: EPA Method 8015D: Diesel Range						
Client ID: LCSS02	Batch	ID: 12	881	R	tunNo: 1	8203				
Prep Date: 4/25/2014	Analysis Da	ate: 4/	25/2014	S	seqNo: 5	26504	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.7	1.0	5.000	0	94.8	78.6	146	3.24	26.5	
Surr: DNOP	0.37		0.5000		73.1	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

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Hall Environmental Analysis Laboratory, Inc.

WO#: **1404A71**

02-May-14

Client: Southwest Geoscience

Project: Largo CS

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBW Batch ID: R18223 RunNo: 18223

Prep Date: Analysis Date: 4/25/2014 SeqNo: 526137 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 85.8 80.4 118

Sample ID 2.5UG GRO LCS SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSW Batch ID: R18223 RunNo: 18223

Prep Date: Analysis Date: 4/25/2014 SeqNo: 526138 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
 105
 80
 120

 Surr: BFB
 18
 20.00
 91.8
 80.4
 118

Sample ID 1404A71-001AMS SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: MW-8 Batch ID: R18223 RunNo: 18223

Prep Date: Analysis Date: 4/25/2014 SeqNo: 526162 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
 103
 79
 121

 Surr: BFB
 19
 20.00
 93.6
 80.4
 118

Sample ID 1404A71-001AMSD SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: MW-8 Batch ID: R18223 RunNo: 18223

Prep Date: Analysis Date: 4/25/2014 SeqNo: 526163 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 105 79 121 2.54 20 Surr: BFB 19 20.00 93.4 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.

RL Reporting Detection Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **1404A71**

02-May-14

Client: Southwest Geoscience

Project: Largo CS

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: **PBW** Batch ID: R18223 RunNo: 18223 Prep Date: Analysis Date: 4/25/2014 SeqNo: 526174 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 ND Ethylbenzene 1.0 Xylenes, Total ND 2.0 Surr: 4-Bromofluorobenzene 19 20.00 94.3 82.9 139

Sample ID 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Batch ID: R18223 Client ID: **LCSW** RunNo: 18223 Prep Date: Analysis Date: 4/25/2014 SeqNo: 526175 Units: µg/L Analyte **PQL** SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual LowLimit 22 1.0 20.00 O 108 80 120 Benzene Toluene 22 1.0 20.00 0 108 80 120 Ethylbenzene 21 20.00 0 106 80 120 1.0 65 Xylenes, Total 2.0 60.00 0 108 80 120 20 Surr: 4-Bromofluorobenzene 20.00 102 82.9 139

Sample ID 1404A71-002AMS SampType: MS TestCode: EPA Method 8021B: Volatiles Batch ID: R18223 Client ID: MW-3R RunNo: 18223 Analysis Date: 4/25/2014 SeaNo: 526183 Units: µg/L Prep Date: Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene 21 1.0 20.00 0 105 71 129 Toluene 21 1.0 20.00 0 104 68.4 135 Ethylbenzene 21 1.0 20.00 0 103 69.4 135 Xylenes, Total 64 2.0 60.00 0 106 72.4 135 Surr: 4-Bromofluorobenzene 21 82.9 20.00 105 139

Sample ID 1404A71-002AMSD SampType: MSD TestCode: EPA Method 8021B: Volatiles Client ID: MW-3R Batch ID: R18223 RunNo: 18223 Prep Date: Analysis Date: 4/25/2014 SeqNo: 526184 Units: µg/L **PQL** SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result LowLimit HighLimit Qual 21 1.0 20.00 0 106 71 129 1.55 20 Benzene Toluene 21 1.0 20.00 0 105 68.4 135 1.45 20 Ethylbenzene 21 1.0 20.00 0 105 69.4 135 1.15 20 Xylenes, Total 65 2.0 60.00 0 108 72.4 135 1.70 20 Surr: 4-Bromofluorobenzene 21 20.00 106 82.9 0 0 139

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

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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

RcptNo: 1 Client Name: Southwest Geoscience Work Order Number: 1404A71 Received by/date: Logged By: Lindsay Mangin 4/25/2014 10:00:00 AM Completed By: Lindsay Mangin 4/25/2014 10:23:22 AM 04/25/14 Reviewed By: Chain of Custody Not Present 1. Custody seals intact on sample bottles? Yes No 🗔 Not Present Yes 🗸 2. Is Chain of Custody complete? 3 How was the sample delivered? Courier Log In NΑ No 4. Was an attempt made to cool the samples? Yes 5. Were all samples received at a temperature of >0° C to 6.0°C NA Yes Sample(s) in proper container(s)? Yes Yes 7. Sufficient sample volume for indicated test(s)? No 8 Are samples (except VOA and ONG) properly preserved? Yes No 9. Was preservative added to bottles? Yes No No VOA Vials 10. VOA vials have zero headspace? Yes Yes Νo 11. Were any sample containers received broken? # of preserved bottles checked for pH: No 12. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? 13 Are matrices correctly identified on Chain of Custody? No 14. Is it clear what analyses were requested? Checked by: No 15. Were all holding times able to be met? Yes (If no, notify customer for authorization.) Special Handling (if applicable) 16. Was client notified of all discrepancies with this order? Yes NA ¥ Date: Person Notified: Via: eMail Phone Fax In Person By Whom: Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Temp °C | Condition | Seal Intact | Seal No Seal Date Cooler No 2.2 Good Yes

Temp. of coolers when received (C°):2.2 ab Sample ID (Lab Use Only) -63 14-4-1-67 B Lab use only Due Date: 6 Page. ō-o SL - sludge NOTES ANALYSIS REQUESTED / C - Charcoal tube P/O - Plastic or other 3 Hd/ 12/81 2 186. 186. 8 No/Type of Containers 2 2 2 2 V - Liquid A - Air Bag 250 ml - Glass wide mouth ₽ E PO/SO#: 04/0000 Š MUMMUM Received by: (Signature) NN N Received by. (Signature) (eceived by: (Signature) Received by: (Signature) Contact: FREEmAN Depth ☐ 100% Rush PO/SU m. pu∃ Start Depth W - Water S - Soil SD - Solid A/G - Amber / Or Glass 1 Liter Identifying Marks of Sample(s) Laboratory: ARGS CS ☐ 50% Rush Address: Phone: 1948:34 6730 Prizz Kyyl) MW-3R mw-15 mw-13 F-MM mw-8 11-MW MW-6 me-Project Manager KyLE SummERS □ 25% Rush Environmental & Hydrogeologic Consultants Office Location A2TEL, NM outhwest GEOSCIENCE Project Name HARON BRYANT ೧೦೯೦ □ Normal WW - Wastewater VOA - 40 ml vial Refinquished by (Signature) W 4-22-14/436 Relinguished by (Signature) Relinquished by (Signature) 4-22-4 1620 Relifiquished by (Sugaratura) 4-22-14 1335 V 4-21-14/525 24814-88-41 M N 4-22-14/1525 N 4-1-14 1610 W 4-21-14/705 Time E0000/40 Turn around/time Sampler's Name Date Container Matrix

CHAIN OF CUSTODY RECORD

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

May 02, 2014

Kyle Summers Southwest Geoscience 606 S. Rio Grande Unit A Aztec, NM 87410

TEL: (903) 821-5603 FAX (214) 350-2914

RE: Largo CS OrderNo.: 1404B13

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 21 sample(s) on 4/26/2014 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 qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/2/2014

CLIENT: Southwest Geoscience Client Sample ID: MW-51

Project: Largo CS **Collection Date:** 4/23/2014 4:35:00 PM 1404B13-001 Matrix: AQUEOUS Lab ID: Received Date: 4/26/2014 11:00:00 AM

Analyses	Result	RL Qu	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGI	E				Analyst	: BCN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	4/28/2014 5:18:23 PM	12897
Surr: DNOP	104	62.7-145	%REC	1	4/28/2014 5:18:23 PM	12897
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	4/28/2014 5:13:40 PM	R18252
Surr: BFB	90.7	80.4-118	%REC	1	4/28/2014 5:13:40 PM	R18252
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	1.1	1.0	μg/L	1	4/28/2014 5:13:40 PM	R18252
Toluene	ND	1.0	μg/L	1	4/28/2014 5:13:40 PM	R18252
Ethylbenzene	ND	1.0	μg/L	1	4/28/2014 5:13:40 PM	R18252
Xylenes, Total	ND	2.0	μg/L	1	4/28/2014 5:13:40 PM	R18252
Surr: 4-Bromofluorobenzene	102	82.9-139	%REC	1	4/28/2014 5:13:40 PM	R18252

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Е Value above quantitation range
- Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P
- Page 1 of 27 Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 5/2/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience

Client Sample ID: MW-77

 Project:
 Largo CS
 Collection Date: 4/23/2014 6:10:00 PM

 Lab ID:
 1404B13-002
 Matrix: AQUEOUS
 Received Date: 4/26/2014 11:00:00 AM

Analyses	Result	RL Qı	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE	•				Analyst	BCN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	4/28/2014 5:49:42 PM	12897
Surr: DNOP	108	62.7-145	%REC	1	4/28/2014 5:49:42 PM	12897
EPA METHOD 8015D: GASOLINE RAM	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	4/28/2014 9:45:30 PM	R18252
Surr: BFB	86.7	80.4-118	%REC	1	4/28/2014 9:45:30 PM	R18252
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	1.0	μg/L	1	4/28/2014 9:45:30 PM	R18252
Toluene	ND	1.0	μg/L	1	4/28/2014 9:45:30 PM	R18252
Ethylbenzene	ND	1.0	μg/L	1	4/28/2014 9:45:30 PM	R18252
Xylenes, Total	ND	2.0	μg/L	1	4/28/2014 9:45:30 PM	R18252
Surr: 4-Bromofluorobenzene	98.8	82.9-139	%REC	1	4/28/2014 9:45:30 PM	R18252

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

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

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Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/2/2014

CLIENT: Southwest Geoscience Client Sample ID: MW-49

 Project:
 Largo CS
 Collection Date: 4/24/2014 10:20:00 AM

 Lab ID:
 1404B13-003
 Matrix: AQUEOUS
 Received Date: 4/26/2014 11:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	βE				Analyst	: BCN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	4/28/2014 6:20:31 PM	12897
Surr: DNOP	105	62.7-145	%REC	1	4/28/2014 6:20:31 PM	12897
EPA METHOD 8015D: GASOLINE RA	ANGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	4/28/2014 10:15:46 PM	1 R18252
Surr: BFB	88.4	80.4-118	%REC	1	4/28/2014 10:15:46 PM	R18252
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	1.0	μg/L	1	4/28/2014 10:15:46 PM	1 R18252
Toluene	ND	1.0	μg/L	1	4/28/2014 10:15:46 PM	R18252
Ethylbenzene	ND	1.0	μg/L	1	4/28/2014 10:15:46 PM	R18252
Xylenes, Total	ND	2.0	μg/L	1	4/28/2014 10:15:46 PM	R18252
Surr: 4-Bromofluorobenzene	99.2	82.9-139	%REC	1	4/28/2014 10:15:46 PM	R18252

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

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

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- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 5/2/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience Client Sample ID: MW-32

 Project:
 Largo CS
 Collection Date: 4/24/2014 5:10:00 PM

 Lab ID:
 1404B13-004
 Matrix: AQUEOUS
 Received Date: 4/26/2014 11:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE					Analyst	BCN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	4/28/2014 6:51:36 PM	12897
Surr: DNOP	107	62.7-145	%REC	1	4/28/2014 6:51:36 PM	12897
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	4/28/2014 10:46:01 PM	R18252
Surr: BFB	88.6	80.4-118	%REC	1	4/28/2014 10:46:01 PM	R18252
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	1.0	μg/L	1	4/28/2014 10:46:01 PM	R18252
Toluene	ND	1.0	μg/L	1	4/28/2014 10:46:01 PM	R18252
Ethylbenzene	ND	1.0	μg/L	1	4/28/2014 10:46:01 PM	R18252
Xylenes, Total	ND	2.0	μg/L	1	4/28/2014 10:46:01 PM	R18252
Surr: 4-Bromofluorobenzene	100	82.9-139	%REC	1	4/28/2014 10:46:01 PM	R18252

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

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

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- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 5/2/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience

Client Sample ID: MW-75

 Project:
 Largo CS
 Collection Date: 4/24/2014 6:05:00 PM

 Lab ID:
 1404B13-005
 Matrix: AQUEOUS
 Received Date: 4/26/2014 11:00:00 AM

Analyses Result **RL Qual Units DF** Date Analyzed Batch **EPA METHOD 8015D: DIESEL RANGE** Analyst: BCN Diesel Range Organics (DRO) 4/28/2014 7:22:40 PM ND 1.0 mg/L 1 12897 Surr: DNOP 109 62.7-145 %REC 4/28/2014 7:22:40 PM 12897 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB 4/28/2014 11:16:12 PM R18252 Gasoline Range Organics (GRO) ND 0.050 mg/L 1 Surr: BFB 90.0 80.4-118 %REC 4/28/2014 11:16:12 PM R18252 **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 1.0 μg/L 1 4/28/2014 11:16:12 PM R18252 Toluene 4/28/2014 11:16:12 PM R18252 ND 1.0 μg/L 1 Ethylbenzene ND 1.0 μg/L 4/28/2014 11:16:12 PM R18252 1 Xylenes, Total ND 2.0 μg/L 4/28/2014 11:16:12 PM R18252 Surr: 4-Bromofluorobenzene 99.3 82.9-139 %REC 4/28/2014 11:16:12 PM R18252

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

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

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- P Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/2/2014

CLIENT: Southwest Geoscience Client Sample ID: MW-37

 Project:
 Largo CS
 Collection Date: 4/24/2014 2:20:00 PM

 Lab ID:
 1404B13-006
 Matrix: AQUEOUS
 Received Date: 4/26/2014 11:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	SE				Analyst	: BCN
Diesel Range Organics (DRO)	4.9	1.0	mg/L	1	4/28/2014 7:54:02 PM	12897
Surr: DNOP	107	62.7-145	%REC	1	4/28/2014 7:54:02 PM	12897
EPA METHOD 8015D: GASOLINE RA	ANGE				Analyst	: NSB
Gasoline Range Organics (GRO)	7.2	1.0	mg/L	20	4/28/2014 11:46:23 PM	1 R18252
Surr: BFB	118	80.4-118	%REC	20	4/28/2014 11:46:23 PM	R18252
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	740	20	μg/L	20	4/28/2014 11:46:23 PM	1 R18252
Toluene	49	20	μg/L	20	4/28/2014 11:46:23 PM	R18252
Ethylbenzene	120	20	μg/L	20	4/28/2014 11:46:23 PM	R18252
Xylenes, Total	450	40	μg/L	20	4/28/2014 11:46:23 PM	R18252
Surr: 4-Bromofluorobenzene	112	82.9-139	%REC	20	4/28/2014 11:46:23 PM	R18252

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

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

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- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 5/2/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience

Client Sample ID: MW-36

Project: Largo CS Collection Date: 4/24/2014 3:20:00 PM Lab ID: 1404B13-007 Matrix: AQUEOUS Received Date: 4/26/2014 11:00:00 AM

Analyses Result **RL Qual Units DF** Date Analyzed Batch **EPA METHOD 8015D: DIESEL RANGE** Analyst: BCN Diesel Range Organics (DRO) 4/28/2014 8:25:02 PM ND 1.0 mg/L 1 12897 Surr: DNOP 108 62.7-145 %REC 4/28/2014 8:25:02 PM 12897 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 0.050 mg/L 1 4/29/2014 12:16:27 AM R18252 Surr: BFB 87.7 80.4-118 %REC 4/29/2014 12:16:27 AM R18252 **EPA METHOD 8021B: VOLATILES** Analyst: NSB 4/29/2014 12:16:27 AM R18252 Benzene ND 1.0 μg/L 1 Toluene 4/29/2014 12:16:27 AM R18252 ND 1.0 μg/L 1 Ethylbenzene ND 1.0 μg/L 4/29/2014 12:16:27 AM R18252 1 Xylenes, Total ND 2.0 μg/L 4/29/2014 12:16:27 AM R18252 Surr: 4-Bromofluorobenzene 99.2 82.9-139 %REC 4/29/2014 12:16:27 AM R18252

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Ε Value above quantitation range
- Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

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- Sample pH greater than 2. P
- RLReporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/2/2014

CLIENT: Southwest Geoscience Client Sample ID: MW-38

Project: Largo CS **Collection Date:** 4/24/2014 1:25:00 PM 1404B13-008 Matrix: AQUEOUS Lab ID: Received Date: 4/26/2014 11:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E				Analyst	: BCN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	4/28/2014 9:27:42 PM	12897
Surr: DNOP	112	62.7-145	%REC	1	4/28/2014 9:27:42 PM	12897
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	4/29/2014 12:46:49 AM	1 R18252
Surr: BFB	88.2	80.4-118	%REC	1	4/29/2014 12:46:49 AM	R18252
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	1.0	μg/L	1	4/29/2014 12:46:49 AM	1 R18252
Toluene	ND	1.0	μg/L	1	4/29/2014 12:46:49 AM	R18252
Ethylbenzene	ND	1.0	μg/L	1	4/29/2014 12:46:49 AM	R18252
Xylenes, Total	ND	2.0	μg/L	1	4/29/2014 12:46:49 AM	R18252
Surr: 4-Bromofluorobenzene	99.3	82.9-139	%REC	1	4/29/2014 12:46:49 AM	R18252

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

Qualifiers:

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

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- RL
- Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/2/2014

CLIENT: Southwest Geoscience Client Sample ID: MW-43

 Project:
 Largo CS
 Collection Date: 4/24/2014 4:20:00 PM

 Lab ID:
 1404B13-009
 Matrix: AQUEOUS
 Received Date: 4/26/2014 11:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	βE				Analyst	:: BCN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	4/28/2014 9:59:03 PM	12897
Surr: DNOP	111	62.7-145	%REC	1	4/28/2014 9:59:03 PM	12897
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	4/29/2014 1:17:02 AM	R18252
Surr: BFB	88.6	80.4-118	%REC	1	4/29/2014 1:17:02 AM	R18252
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	1.0	μg/L	1	4/29/2014 1:17:02 AM	R18252
Toluene	ND	1.0	μg/L	1	4/29/2014 1:17:02 AM	R18252
Ethylbenzene	ND	1.0	μg/L	1	4/29/2014 1:17:02 AM	R18252
Xylenes, Total	ND	2.0	μg/L	1	4/29/2014 1:17:02 AM	R18252
Surr: 4-Bromofluorobenzene	98.5	82.9-139	%REC	1	4/29/2014 1:17:02 AM	R18252

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

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

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- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 5/2/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience

Client Sample ID: MW-53

 Project:
 Largo CS
 Collection Date: 4/24/2014 11:05:00 AM

 Lab ID:
 1404B13-010
 Matrix: AQUEOUS
 Received Date: 4/26/2014 11:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	SE .				Analyst	: BCN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	4/28/2014 10:30:25 PM	12897
Surr: DNOP	115	62.7-145	%REC	1	4/28/2014 10:30:25 PM	12897
EPA METHOD 8015D: GASOLINE RANGE					Analyst	:: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	4/29/2014 1:47:10 AM	R18252
Surr: BFB	88.0	80.4-118	%REC	1	4/29/2014 1:47:10 AM	R18252
EPA METHOD 8021B: VOLATILES					Analyst	:: NSB
Benzene	ND	1.0	μg/L	1	4/29/2014 1:47:10 AM	R18252
Toluene	ND	1.0	μg/L	1	4/29/2014 1:47:10 AM	R18252
Ethylbenzene	ND	1.0	μg/L	1	4/29/2014 1:47:10 AM	R18252
Xylenes, Total	ND	2.0	μg/L	1	4/29/2014 1:47:10 AM	R18252
Surr: 4-Bromofluorobenzene	98.6	82.9-139	%REC	1	4/29/2014 1:47:10 AM	R18252

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

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

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- ND Not Detected at the Reporting Limit Page 1
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 5/2/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience

Client Sample ID: MW-40R

 Project:
 Largo CS
 Collection Date: 4/23/2014 12:30:00 PM

 Lab ID:
 1404B13-011
 Matrix: AQUEOUS
 Received Date: 4/26/2014 11:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	GE				Analyst	: BCN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	4/28/2014 11:01:26 PM	12897
Surr: DNOP	106	62.7-145	%REC	1	4/28/2014 11:01:26 PM	12897
EPA METHOD 8015D: GASOLINE R.	ANGE				Analyst	:: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	4/29/2014 2:20:32 AM	R18252
Surr: BFB	88.0	80.4-118	%REC	1	4/29/2014 2:20:32 AM	R18252
EPA METHOD 8021B: VOLATILES					Analyst	:: NSB
Benzene	ND	1.0	μg/L	1	4/29/2014 2:20:32 AM	R18252
Toluene	ND	1.0	μg/L	1	4/29/2014 2:20:32 AM	R18252
Ethylbenzene	ND	1.0	μg/L	1	4/29/2014 2:20:32 AM	R18252
Xylenes, Total	ND	2.0	μg/L	1	4/29/2014 2:20:32 AM	R18252
Surr: 4-Bromofluorobenzene	99.6	82.9-139	%REC	1	4/29/2014 2:20:32 AM	R18252

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

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 Page 11 of 27
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/2/2014

CLIENT: Southwest Geoscience Client Sample ID: MW-39

 Project:
 Largo CS
 Collection Date: 4/23/2014 2:40:00 PM

 Lab ID:
 1404B13-012
 Matrix: AQUEOUS
 Received Date: 4/26/2014 11:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGI	E				Analyst	BCN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	4/28/2014 11:32:33 PM	12900
Surr: DNOP	104	62.7-145	%REC	1	4/28/2014 11:32:33 PM	12900
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	0.056	0.050	mg/L	1	4/29/2014 1:49:36 PM	R18292
Surr: BFB	88.2	80.4-118	%REC	1	4/29/2014 1:49:36 PM	R18292
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	9.6	1.0	μg/L	1	4/29/2014 1:49:36 PM	R18292
Toluene	ND	1.0	μg/L	1	4/29/2014 1:49:36 PM	R18292
Ethylbenzene	ND	1.0	μg/L	1	4/29/2014 1:49:36 PM	R18292
Xylenes, Total	ND	2.0	μg/L	1	4/29/2014 1:49:36 PM	R18292
Surr: 4-Bromofluorobenzene	102	82.9-139	%REC	1	4/29/2014 1:49:36 PM	R18292

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

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

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- ND Not Detected at the Reporting Limit Pool
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/2/2014

CLIENT: Southwest Geoscience Client Sample ID: MW-80

 Project:
 Largo CS
 Collection Date: 4/23/2014 6:50:00 PM

 Lab ID:
 1404B13-013
 Matrix: AQUEOUS
 Received Date: 4/26/2014 11:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE	=				Analyst	BCN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	4/29/2014 12:03:13 AM	12900
Surr: DNOP	112	62.7-145	%REC	1	4/29/2014 12:03:13 AM	12900
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	4/29/2014 3:20:36 PM	R18292
Surr: BFB	88.9	80.4-118	%REC	1	4/29/2014 3:20:36 PM	R18292
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	1.0	μg/L	1	4/29/2014 3:20:36 PM	R18292
Toluene	ND	1.0	μg/L	1	4/29/2014 3:20:36 PM	R18292
Ethylbenzene	ND	1.0	μg/L	1	4/29/2014 3:20:36 PM	R18292
Xylenes, Total	ND	2.0	μg/L	1	4/29/2014 3:20:36 PM	R18292
Surr: 4-Bromofluorobenzene	102	82.9-139	%REC	1	4/29/2014 3:20:36 PM	R18292

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

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 Page 13 of 27
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 5/2/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience

Client Sample ID: MW-50

 Project:
 Largo CS
 Collection Date: 4/23/2014 1:40:00 PM

 Lab ID:
 1404B13-014
 Matrix: AQUEOUS
 Received Date: 4/26/2014 11:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE					Analyst	BCN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	4/29/2014 12:34:00 AM	12900
Surr: DNOP	113	62.7-145	%REC	1	4/29/2014 12:34:00 AM	12900
EPA METHOD 8015D: GASOLINE RAM	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	4/29/2014 4:51:00 PM	R18292
Surr: BFB	89.6	80.4-118	%REC	1	4/29/2014 4:51:00 PM	R18292
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	1.0	μg/L	1	4/29/2014 4:51:00 PM	R18292
Toluene	ND	1.0	μg/L	1	4/29/2014 4:51:00 PM	R18292
Ethylbenzene	ND	1.0	μg/L	1	4/29/2014 4:51:00 PM	R18292
Xylenes, Total	ND	2.0	μg/L	1	4/29/2014 4:51:00 PM	R18292
Surr: 4-Bromofluorobenzene	103	82.9-139	%REC	1	4/29/2014 4:51:00 PM	R18292

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

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 Page 14 of 27
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/2/2014

CLIENT: Southwest Geoscience Client Sample ID: MW-16

 Project:
 Largo CS
 Collection Date: 4/23/2014 11:30:00 AM

 Lab ID:
 1404B13-015
 Matrix: AQUEOUS
 Received Date: 4/26/2014 11:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E				Analyst	: BCN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	4/29/2014 1:35:16 AM	12900
Surr: DNOP	112	62.7-145	%REC	1	4/29/2014 1:35:16 AM	12900
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	4/29/2014 5:21:15 PM	R18292
Surr: BFB	89.2	80.4-118	%REC	1	4/29/2014 5:21:15 PM	R18292
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	1.0	μg/L	1	4/29/2014 5:21:15 PM	R18292
Toluene	ND	1.0	μg/L	1	4/29/2014 5:21:15 PM	R18292
Ethylbenzene	ND	1.0	μg/L	1	4/29/2014 5:21:15 PM	R18292
Xylenes, Total	ND	2.0	μg/L	1	4/29/2014 5:21:15 PM	R18292
Surr: 4-Bromofluorobenzene	101	82.9-139	%REC	1	4/29/2014 5:21:15 PM	R18292

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

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
- D. Samuel all market than 2

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- P Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/2/2014

CLIENT: Southwest Geoscience Client Sample ID: MW-41

 Project:
 Largo CS
 Collection Date: 4/23/2014 5:20:00 PM

 Lab ID:
 1404B13-016
 Matrix: AQUEOUS
 Received Date: 4/26/2014 11:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGI	E				Analyst	BCN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	4/29/2014 2:06:18 AM	12900
Surr: DNOP	109	62.7-145	%REC	1	4/29/2014 2:06:18 AM	12900
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	4/29/2014 5:51:31 PM	R18292
Surr: BFB	91.0	80.4-118	%REC	1	4/29/2014 5:51:31 PM	R18292
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	1.0	μg/L	1	4/29/2014 5:51:31 PM	R18292
Toluene	ND	1.0	μg/L	1	4/29/2014 5:51:31 PM	R18292
Ethylbenzene	ND	1.0	μg/L	1	4/29/2014 5:51:31 PM	R18292
Xylenes, Total	ND	2.0	μg/L	1	4/29/2014 5:51:31 PM	R18292
Surr: 4-Bromofluorobenzene	101	82.9-139	%REC	1	4/29/2014 5:51:31 PM	R18292

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

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 Page
- P Sample pH greater than 2.
- RL Reporting Detection Limit

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Date Reported: 5/2/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience

Client Sample ID: MW-52

 Project:
 Largo CS
 Collection Date: 4/23/2014 3:35:00 PM

 Lab ID:
 1404B13-017
 Matrix: AQUEOUS
 Received Date: 4/26/2014 11:00:00 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 4/29/2014 2:37:14 AM 12900 1 Surr: DNOP 117 62.7-145 %REC 4/29/2014 2:37:14 AM 12900 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB 4/29/2014 6:21:40 PM Gasoline Range Organics (GRO) ND 0.050 mg/L 1 R18292 Surr: BFB 90.1 80.4-118 %REC 4/29/2014 6:21:40 PM R18292 **EPA METHOD 8021B: VOLATILES** Analyst: NSB R18292 Benzene ND 1.0 μg/L 1 4/29/2014 6:21:40 PM Toluene R18292 ND 1.0 μg/L 1 4/29/2014 6:21:40 PM Ethylbenzene ND 1.0 μg/L 4/29/2014 6:21:40 PM R18292 1 Xylenes, Total ND 2.0 μg/L 4/29/2014 6:21:40 PM R18292 Surr: 4-Bromofluorobenzene 100 82.9-139 %REC 4/29/2014 6:21:40 PM R18292

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

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 Page
- P Sample pH greater than 2.
- RL Reporting Detection Limit

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Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/2/2014

CLIENT: Southwest Geoscience Client Sample ID: MW-79

 Project:
 Largo CS
 Collection Date: 4/23/2014 5:50:00 PM

 Lab ID:
 1404B13-018
 Matrix: AQUEOUS
 Received Date: 4/26/2014 11:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E				Analyst	BCN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	4/29/2014 3:08:32 AM	12900
Surr: DNOP	119	62.7-145	%REC	1	4/29/2014 3:08:32 AM	12900
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	4/29/2014 6:52:04 PM	R18292
Surr: BFB	88.9	80.4-118	%REC	1	4/29/2014 6:52:04 PM	R18292
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	1.0	μg/L	1	4/29/2014 6:52:04 PM	R18292
Toluene	ND	1.0	μg/L	1	4/29/2014 6:52:04 PM	R18292
Ethylbenzene	ND	1.0	μg/L	1	4/29/2014 6:52:04 PM	R18292
Xylenes, Total	ND	2.0	μg/L	1	4/29/2014 6:52:04 PM	R18292
Surr: 4-Bromofluorobenzene	98.1	82.9-139	%REC	1	4/29/2014 6:52:04 PM	R18292

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

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

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- ND Not Detected at the Reporting Limit Page
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 5/2/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience

Client Sample ID: MW-76

 Project:
 Largo CS
 Collection Date: 4/23/2014 6:35:00 PM

 Lab ID:
 1404B13-019
 Matrix: AQUEOUS
 Received Date: 4/26/2014 11:00:00 AM

Analyses	Result	RL Qu	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E				Analyst	: BCN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	4/29/2014 3:39:50 AM	12900
Surr: DNOP	118	62.7-145	%REC	1	4/29/2014 3:39:50 AM	12900
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	4/29/2014 7:22:13 PM	R18292
Surr: BFB	89.6	80.4-118	%REC	1	4/29/2014 7:22:13 PM	R18292
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	1.0	μg/L	1	4/29/2014 7:22:13 PM	R18292
Toluene	ND	1.0	μg/L	1	4/29/2014 7:22:13 PM	R18292
Ethylbenzene	ND	1.0	μg/L	1	4/29/2014 7:22:13 PM	R18292
Xylenes, Total	ND	2.0	μg/L	1	4/29/2014 7:22:13 PM	R18292
Surr: 4-Bromofluorobenzene	99.3	82.9-139	%REC	1	4/29/2014 7:22:13 PM	R18292

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

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 Page 19 of 27
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 5/2/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience Client Sample ID: MW-83

 Project:
 Largo CS
 Collection Date: 4/23/2014 7:10:00 PM

 Lab ID:
 1404B13-020
 Matrix: AQUEOUS
 Received Date: 4/26/2014 11:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	GE				Analys	t: BCN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	4/29/2014 4:10:49 AM	12900
Surr: DNOP	129	62.7-145	%REC	1	4/29/2014 4:10:49 AM	12900
EPA METHOD 8015D: GASOLINE R.	ANGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	4/29/2014 10:22:53 PM	1 R18292
Surr: BFB	88.6	80.4-118	%REC	1	4/29/2014 10:22:53 PM	1 R18292
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	1.0	μg/L	1	4/29/2014 10:22:53 PM	1 R18292
Toluene	ND	1.0	μg/L	1	4/29/2014 10:22:53 PM	1 R18292
Ethylbenzene	ND	1.0	μg/L	1	4/29/2014 10:22:53 PM	1 R18292
Xylenes, Total	ND	2.0	μg/L	1	4/29/2014 10:22:53 PM	1 R18292
Surr: 4-Bromofluorobenzene	98.0	82.9-139	%REC	1	4/29/2014 10:22:53 PM	1 R18292

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

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

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- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 5/2/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience

Client Sample ID: MW-34

 Project:
 Largo CS
 Collection Date: 4/24/2014 12:05:00 PM

 Lab ID:
 1404B13-021
 Matrix: AQUEOUS
 Received Date: 4/26/2014 11:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE	=				Analys	t: BCN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	4/29/2014 4:42:08 AM	12900
Surr: DNOP	120	62.7-145	%REC	1	4/29/2014 4:42:08 AM	12900
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	4/29/2014 10:53:00 PM	1 R18292
Surr: BFB	88.2	80.4-118	%REC	1	4/29/2014 10:53:00 PM	1 R18292
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	1.0	μg/L	1	4/29/2014 10:53:00 PM	1 R18292
Toluene	ND	1.0	μg/L	1	4/29/2014 10:53:00 PM	1 R18292
Ethylbenzene	ND	1.0	μg/L	1	4/29/2014 10:53:00 PM	1 R18292
Xylenes, Total	ND	2.0	μg/L	1	4/29/2014 10:53:00 PM	1 R18292
Surr: 4-Bromofluorobenzene	97.8	82.9-139	%REC	1	4/29/2014 10:53:00 PM	1 R18292

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

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 Page
 - P Sample pH greater than 2.
- RL Reporting Detection Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **1404B13**

02-May-14

Client: Southwest Geoscience

Project: Largo CS

Sample ID MB-12897 SampType: MBLK TestCode: EPA Method 8015D: Diesel Range Client ID: **PBW** Batch ID: 12897 RunNo: 18231 Prep Date: 4/28/2014 Analysis Date: 4/28/2014 SeqNo: 526810 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 0.94 1.000 94.1 62.7 145 Sample ID LCS-12897 SampType: LCS TestCode: EPA Method 8015D: Diesel Range Client ID: LCSW Batch ID: 12897 RunNo: 18231 Prep Date: 4/28/2014 Analysis Date: 4/28/2014 SeqNo: 526866 Units: mg/L Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 5.2 1.0 5.000 103 78.6 146 Surr: DNOP 0.48 0.5000 95.5 62.7 145 Sample ID LCSD-12897 SampType: LCSD TestCode: EPA Method 8015D: Diesel Range Client ID: LCSS02 Batch ID: 12897 RunNo: 18231 Prep Date: 4/28/2014 Analysis Date: 4/28/2014 SeqNo: 526867 Units: mg/L PQL **RPDLimit** %RPD Analyte Result SPK value SPK Ref Val %REC LowLimit HighLimit Qual Diesel Range Organics (DRO) 4.2 1.0 5.000 84.2 78.6 20.1 26.5 Surr: DNOP 0.41 0.5000 82.1 62.7 145 0 0 Sample ID MB-12900 SampType: MBLK TestCode: EPA Method 8015D: Diesel Range Client ID: **PBW** Batch ID: 12900 RunNo: 18231 Prep Date: 4/28/2014 Analysis Date: 4/28/2014 SeqNo: 526868 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-12900 SampType: LCS TestCode: EPA Method 8015D: Diesel Range Client ID: LCSW Batch ID: 12900 RunNo: 18231 Prep Date: 4/28/2014 Analysis Date: 4/28/2014 SeqNo: 526869 Units: mg/L SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Result LowLimit Qual Diesel Range Organics (DRO) 5.8 0 78.6 1.0 5.000 116 146 Surr: DNOP 0.54 0.5000 108 62.7 145 Sample ID LCSD-12900 SampType: LCSD TestCode: EPA Method 8015D: Diesel Range Client ID: LCSS02 Batch ID: 12900 RunNo: 18231 Prep Date: 4/28/2014 Analysis Date: 4/28/2014 SeqNo: 526870 Units: mg/L

Qualifiers:

Analyte

* Value exceeds Maximum Contaminant Level.

Result

- 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

LowLimit

HighLimit

%RPD

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

%REC

P Sample pH greater than 2.

SPK value SPK Ref Val

RL Reporting Detection Limit

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Qual

RPDLimit

Hall Environmental Analysis Laboratory, Inc.

WO#: 1404B13

Qual

02-May-14

Client: Southwest Geoscience

Project: Largo CS

 Sample ID
 LCSD-12900
 SampType:
 LCSD
 TestCode:
 EPA Method 8015D: Diesel Range

 Client ID:
 LCSS02
 Batch ID:
 12900
 RunNo:
 18231

 Prep Date:
 4/28/2014
 Analysis Date:
 4/28/2014
 SeqNo:
 526870
 Units: mg/L

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Diesel Range Organics (DRO) 0 0.388 26.5 5.8 1.0 5.000 117 78.6 146 Surr: DNOP 0.55 0.5000 111 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

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Hall Environmental Analysis Laboratory, Inc.

WO#: 1404B13

02-May-14

Client: Southwest Geoscience

Project: Largo CS

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBW Batch ID: R18252 RunNo: 18252

Prep Date: Analysis Date: 4/28/2014 SeqNo: 527177 Units: mg/L

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual

Gasoline Range Organics (GRO) 0.050 ND

Surr: BFB 17 20.00 87.0 80.4 118

Sample ID 2.5UG GRO LCS SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSW Batch ID: R18252 RunNo: 18252

Prep Date: Analysis Date: 4/28/2014 SeqNo: 527179 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 107 80 120 Surr: BFB 19 20.00 92.5 80.4 118

Sample ID 1404B13-001AMS SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: MW-51 Batch ID: R18252 RunNo: 18252

Prep Date: Analysis Date: 4/28/2014 SeqNo: 527181 Units: mg/L

SPK value %RPD **RPDLimit** Analyte Result PQL SPK Ref Val %REC LowLimit HighLimit Qual Gasoline Range Organics (GRO) 0.56 0.050 0.5000 0.03820 104 79 121

Surr: BFB 19 20.00 96.0 80.4 118

Sample ID 1404B13-001AMSD SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: MW-51 Batch ID: R18252 RunNo: 18252

Prep Date: Analysis Date: 4/28/2014 SeqNo: 527182 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 0.03820 102 79 121 1.55 20

Surr: BFB 19 20.00 97.4 80.4 118 0 0

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBW Batch ID: R18292 RunNo: 18292

Prep Date: Analysis Date: 4/29/2014 SeqNo: 528200 Units: mg/L

%REC SPK value SPK Ref Val %RPD Analyte Result LowLimit HighLimit **RPDLimit** Qual

Gasoline Range Organics (GRO) ND 0.050

Surr: BFB 18 20.00 88.5 80.4 118

Sample ID 2.5UG GRO LCS SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: **LCSW** Batch ID: R18292 RunNo: 18292

Prep Date: Analysis Date: 4/29/2014 SeqNo: 528201 Units: mg/L

SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte Result LowLimit Qual

Qualifiers:

Value exceeds Maximum Contaminant Level.

Е Value above quantitation range

Analyte detected below quantitation limits J

0 RSD is greater than RSDlimit

R RPD outside accepted recovery limits

Spike Recovery outside accepted recovery limits

В Analyte detected in the associated Method Blank

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

P Sample pH greater than 2.

Reporting Detection Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **1404B13**

02-May-14

Client: Southwest Geoscience

Project: Largo CS

Sample ID 2.5UG GRO LCS SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSW Batch ID: R18292 RunNo: 18292

Prep Date: Analysis Date: 4/29/2014 SeqNo: 528201 Units: mg/L

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 0.56 0.050 0 80 0.5000 111 120 93.1 Surr: BFB 19 20.00 80.4 118

Sample ID 1404B13-012AMS SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: MW-39 Batch ID: R18292 RunNo: 18292

Prep Date: Analysis Date: 4/29/2014 SeqNo: 528204 Units: mg/L

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 0.58 0.050 0.5000 0.05560 106 79 121

Surr: BFB 19 20.00 96.1 80.4 118

Sample ID 1404B13-012AMSD SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: MW-39 Batch ID: R18292 RunNo: 18292

Prep Date: Analysis Date: 4/29/2014 SeqNo: 528205 Units: mg/L

SPK value SPK Ref Val %REC %RPD **RPDLimit** Qual Analyte Result **PQL** LowLimit HighLimit Gasoline Range Organics (GRO) 0.59 0.050 0.5000 0.05560 107 79 121 0.921 20 Surr: BFB 19 20.00 96.0 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.
- RL Reporting Detection Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **1404B13**

02-May-14

Client: Southwest Geoscience

Project: Largo CS

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: **PBW** Batch ID: R18252 RunNo: 18252 Prep Date: Analysis Date: 4/28/2014 SeqNo: 527204 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 ND Ethylbenzene 1.0 Xylenes, Total ND 2.0 Surr: 4-Bromofluorobenzene 20 20.00 98.1 82.9 139

Sample ID 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Batch ID: R18252 Client ID: **LCSW** RunNo: 18252 Analysis Date: 4/28/2014 Prep Date: SeqNo: 527205 Units: µg/L Analyte **PQL** SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual LowLimit 21 1.0 20.00 O 106 80 120 Benzene Toluene 21 1.0 20.00 0 105 80 120 Ethylbenzene 21 20.00 0 104 80 120 1.0 63 Xylenes, Total 2.0 60.00 0 105 80 120 21 Surr: 4-Bromofluorobenzene 20.00 103 82.9 139

Sample ID 1404B13-002AMS SampType: MS TestCode: EPA Method 8021B: Volatiles MW-77 Batch ID: R18252 Client ID: RunNo: 18252 Analysis Date: 4/28/2014 SeqNo: 527217 Units: µg/L Prep Date: Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene 20 1.0 20.00 97.8 71 129 Λ Toluene 19 20.00 0 97.0 68.4 135 1.0 20.00 0 96.0 69.4 135 Ethylbenzene 19 1.0 0.5540 Xylenes, Total 59 2.0 60.00 96.6 72.4 135 Surr: 4-Bromofluorobenzene 21 82.9 20.00 105 139

Sample ID 1404B13-002AMSD SampType: MSD TestCode: EPA Method 8021B: Volatiles Client ID: MW-77 Batch ID: R18252 RunNo: 18252 Prep Date: Analysis Date: 4/28/2014 SeqNo: 527218 Units: µg/L **PQL** SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result LowLimit HighLimit Qual 19 1.0 20.00 0 96.2 71 129 1.63 20 Benzene Toluene 19 1.0 20.00 0 95.5 68.4 135 1.52 20 Ethylbenzene 19 1.0 20.00 0 94 2 69.4 135 1.88 20 Xylenes, Total 58 2.0 60.00 0.5540 95.5 72.4 135 1.17 20 Surr: 4-Bromofluorobenzene 21 20.00 106 82.9 0 0 139

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

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Hall Environmental Analysis Laboratory, Inc.

WO#: **1404B13**

02-May-14

Client: Southwest Geoscience

Project: Largo CS

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: PBW Batch ID: R18292 RunNo: 18292 Prep Date: Analysis Date: 4/29/2014 SeqNo: 528218 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 ND Ethylbenzene 1.0 Xylenes, Total ND 2.0 Surr: 4-Bromofluorobenzene 20 20.00 102 82.9 139

SampType: LCS Sample ID 100NG BTEX LCS TestCode: EPA Method 8021B: Volatiles Client ID: **LCSW** Batch ID: R18292 RunNo: 18292 Prep Date: Analysis Date: 4/29/2014 SeqNo: 528219 Units: µg/L Analyte **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 21 1.0 20.00 O 107 80 120 Benzene Toluene 21 1.0 20.00 0 107 80 120 Ethylbenzene 21 20.00 0 106 80 120 1.0 65 Xylenes, Total 2.0 60.00 0 108 80 120 21 Surr: 4-Bromofluorobenzene 20.00 104 82.9 139

Sample ID 1404B13-013AMS SampType: MS TestCode: EPA Method 8021B: Volatiles Client ID: MW-80 Batch ID: R18292 RunNo: 18292 Prep Date: Analysis Date: 4/29/2014 SeqNo: 528224 Units: µg/L Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene 20 1.0 20.00 101 71 129 Toluene 20 1.0 20.00 0.3640 98.8 68.4 135 Ethylbenzene 20 1.0 20.00 97.6 69.4 135 0 Xylenes, Total 60 60.00 0.5780 99.4 72.4 2.0 135 Surr: 4-Bromofluorobenzene 21 20.00 105 82.9 139

Sample ID 1404B13-013AM	I SD SampT	D SampType: MSD TestCode: EPA Method 8021B: Volatiles								
Client ID: MW-80	Batch	Batch ID: R18292 RunNo: 18292								
Prep Date:	Analysis Date: 4/29/2014 SeqNo: 528225 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	71	129	2.87	20	
Toluene	21	1.0	20.00	0.3640	101	68.4	135	2.34	20	
Ethylbenzene	20	1.0	20.00	0	102	69.4	135	4.16	20	
Xylenes, Total	62	2.0	60.00	0.5780	103	72.4	135	3.21	20	
Surr: 4-Bromofluorobenzene	21		20.00		106	82.9	139	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

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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Southwest Geoscience Work O	order Number: 1404B		•	RcptNo:	1
Received by/date: AF 0476	14				
Logged By: Lindsay Mangin 4/26/2014	11:00:00 AM	June of the state	Harry S		
Completed By: Lindsay Mangin 4/28/2014	7:20:17 AM	Amenty)	Homes		
Reviewed By:	3/14	0 0	U		
Chain of Custody	9/2	·			
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?	<u>Courie</u>	ग			
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 t	o 6.0°C Yes	Ž No		. NA	
6. Sample(s) in proper container(s)?	Yes	√ No			2
7. Sufficient sample volume for indicated test(s)?	Yes [✓ No			
8. Are samples (except VOA and ONG) properly preserve	d? Yes [✓ No			
9. Was preservative added to bottles?	Yes	No	Y	NA	
10.VOA vials have zero headspace?	Yes	✓ No		No VOA Vials	
11. Were any sample containers received broken?	Yes	No.	✓ .	# of preserved	··
12 Dogg panonyark match hattle labeles		7 No.	-	bottles checked	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes	✓ No		for pH: (<2 (or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes 1	Z No		Adjusted?	
14. Is it clear what analyses were requested?	Yes 5		1		
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes	Z No		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 B	1 ve		
1 2.7 Good Yes	ocal ing Geal Date	, J Signed E	'y		
			I		

CHAIN OF CUSTODY RECORD			Page 2 of 3	200	500	No/Type of Containers	VOA A/G 250 P/O 250 P/	071	X X	7 7 7	X X	XX	- W - X X		X K	XX	XX		Date: Time: NOTES:	Date: Time: 4/1/ Sample	Date:	e) Date: Time:	L - Liquid A - Air Bag C - Charcoal tube SL - sludge O - Oil 250 ml - Glass wide mouth P/O - Plastic or other
	Laboratory: MALL Address: A13 (2)	Contact: FREEMAN	Phone:	PO/SO #: 04/16 C/603	Sampler's Signature	5	Identifying Marks of Sample(s) যে চি	T	tt	48	1-32	35	37	36	38	-43	-53	□ 100% F	Time: Received by: (Signature)	Received by: (S	Time: Received by: (Signature)	Time: Received by: (Signature)	W - Water S - Soil SD - Solid L - Liquic A/G - Amber / Or Glass 1 Liter 250 ml
	Southwest GEOSCIENCE	Office Location $A_{275}c$, ${\cal N}{\cal M}$		KYLE SUMMERS	BIZYANT	т.	Time C G Identifying N p b	256 X mov-	210 x mm	70 mm-	MV	305 mm-75			1325 MW-	₩.	'.	mal 🗆 25% Rush	Pare:	Date: 4/25/14	'Daté:	nature) Date:	WW - Wastewater W - Water VOA - 40 ml vial A/G - Amber /
	Second Second	Office Location_		Project Manager HUE	i's Name	Proj. No. 04/10 6263	Matrix Date		W 4-23-14/8/10	W 4-2444 1020	4	8		7	//3	9/		Turn around time	Relinquished by (Signature)		Relinquished by (Sign	hed	Matrix WW - W Container VOA - 40

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

per Andy	SL - sludge	ate: Time: The Time: Time: Time: C - Charcoal tube P/O - Plastic or other.	3 2 0	Signature) (Signature) (Signature) L-Liquid A-Air Bag 250 ml - Glass wide mouth		Date: Time: Received W. Water S. Soil SD. Soild A/G. Amber / Or Glass 1 Liter	Date:	ure) ure) ure)	d by (Signature) by (Signature) WW - Wastewater VOA - 40 ml vial	Relinquished by (Signature) Relinquished by (Signature) Matrix WW - Wastewa
\$97/Schole	NOTES:	Time:	Date:	(Signature)		Time: B	4-35-H			Relinguished by (Ginature)
		×		-1	100% Rush	-83 □50% Rush	M/W 25% Rush	(O)	-	上 十 Turn around time
906	-	メメ				1	JUN X	5	1835	
810>		۲ بر				b±-	94-MW X	0	1750	
7.07		メメ				-53	1 MW X	ťű	535	
- J.C		メ				17-	X MW-L		1720	-
705		χ ×				م)ا <i>ب</i>	M MW		1130	
710-		メメ				09-1	WW X	(at	1340	
7.7		X X				-80 -80	X mw -		0581	
2.0-		X		•		mw-39	X mw	5	HHP	
1104813-011		X		D		40R	X mw-40R		4-23-H 1730	w 423
Lab Sample ID (Lab Use Only)		1/2/1/V	250 P/O 12/4/	VOA A/G 2	Start Depth	Identifying Marks of Sample(s)	G r k d b	೧ಂ೯ರ	ite Time	Matrix Date
	1	102 102 103	ntainers	No/Type of Containers)	20 05	Project Name LAR VO	Project	, 603	Proj. No. 04/100-003
	108	S S S S S S S S S S S S S S S S S S S		7	Signature	Sampler's Signature	J_V	BRYANT	_	Sampler's Name
Page of A.S.		7		6009	0/1/0	Phone:	E Summers	NE	anager K	Project Manager
	100			Nt	FREEMAN	Contact:	Nor		ation A	Office Location $A_{2,7EC_{j}}$
Due Date: Temp. of coolers When received (G°): 2, 7	080,	Analysis Requested		_	N. LIA	Laboratory:	SOUTHWEST GEOSCIENCE	TW S C 1 E	Outhwest 3 E O S C I E N C E nenial & Hydrogeologic Consultan	S
CHAIN OF CUSTODY RECORD			i							

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Anderess: AISG Address: AISG Contact: FREEMAN Sappler's Signature ARCS: CS Nortype of Containers Sappler's Signature ARCS: CS Nortype of Containers Nortype of Containers ARCS: CS ARCS: CS Nortype of Containers ARCS: CS ARCS: CS	Lab use only Due Date:		Lab Sample ID (Lab Use Univ)				7	11/ Sample per Andy	~~	iO - Oi	5
Address: ALS A Contact: FREEMAN Phone: Sapplers Signature Sapplers Signature AR CS CS IT I 50% Rush	ANALYSIS REQUESTED		X				NOTES:		je j	SL - sludge	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ory: WALL S: A13Q : FREEMAN	W10C2CCろ waturge A Containers No/Type of Containers	E E E E E E E E E E E E E E E E E E E		314	è	gceived by: (Signature)	0 %		L-Liquid A-Air Bag	250 ml - Glass wide mouth
Hydro S S S S S S S S S S S S S S S S S S S	Southwest Laboral GEOSCIENCE Address Environmental & Hydrogeologic Consultants Office Location A2TEC, NM. Contaction A2TEC, NM.	4 LE Summercs 4 ANT Project Name ARC	507			930	Date: P-35-44	Date	Date.	Tet.	

CHAIN OF CUSTODY RECORD

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

May 06, 2014

Kyle Summers Southwest Geoscience 606 S. Rio Grande Unit A Aztec, NM 87410

TEL: (903) 821-5603 FAX (214) 350-2914

RE: Largo CS OrderNo.: 1404C08

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 4 sample(s) on 4/30/2014 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 qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/6/2014

CLIENT: Southwest Geoscience Client Sample ID: MW-47

Project: Largo CS Collection Date: 4/28/2014 10:30:00 AM 1404C08-001 Matrix: AQUEOUS Lab ID: Received Date: 4/30/2014 10:05:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E				Analyst	:: BCN
Diesel Range Organics (DRO)	4.0	1.0	mg/L	1	5/1/2014 7:41:54 PM	12957
Surr: DNOP	106	62.7-145	%REC	1	5/1/2014 7:41:54 PM	12957
EPA METHOD 8015D: GASOLINE RA	ANGE				Analyst	: NSB
Gasoline Range Organics (GRO)	8.5	0.25	mg/L	5	5/1/2014 7:28:28 PM	R18351
Surr: BFB	149	80.4-118	S %REC	5	5/1/2014 7:28:28 PM	R18351
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	700	20	μg/L	20	5/5/2014 12:50:25 PM	R18407
Toluene	ND	5.0	μg/L	5	5/1/2014 7:28:28 PM	R18351
Ethylbenzene	27	5.0	μg/L	5	5/1/2014 7:28:28 PM	R18351
Xylenes, Total	ND	10	μg/L	5	5/1/2014 7:28:28 PM	R18351
Surr: 4-Bromofluorobenzene	127	82.9-139	%REC	5	5/1/2014 7:28:28 PM	R18351

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

Qualifiers:

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

Page 1 of 8

- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/6/2014

CLIENT: Southwest Geoscience Client Sample ID: MW-48

 Project:
 Largo CS
 Collection Date: 4/28/2014 2:50:00 PM

 Lab ID:
 1404C08-002
 Matrix: AQUEOUS
 Received Date: 4/30/2014 10:05:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	GE				Analys	t: BCN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	5/1/2014 8:12:38 PM	12957
Surr: DNOP	115	62.7-145	%REC	1	5/1/2014 8:12:38 PM	12957
EPA METHOD 8015D: GASOLINE R	ANGE				Analys	t: NSB
Gasoline Range Organics (GRO)	0.25	0.050	mg/L	1	5/1/2014 7:58:43 PM	R18351
Surr: BFB	116	80.4-118	%REC	1	5/1/2014 7:58:43 PM	R18351
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	9.2	1.0	μg/L	1	5/1/2014 7:58:43 PM	R18351
Toluene	ND	1.0	μg/L	1	5/1/2014 7:58:43 PM	R18351
Ethylbenzene	7.8	1.0	μg/L	1	5/1/2014 7:58:43 PM	R18351
Xylenes, Total	15	2.0	μg/L	1	5/1/2014 7:58:43 PM	R18351
Surr: 4-Bromofluorobenzene	117	82.9-139	%REC	1	5/1/2014 7:58:43 PM	R18351

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

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

Page 2 of 8

- P Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/6/2014

CLIENT: Southwest Geoscience Client Sample ID: MW-54

 Project:
 Largo CS
 Collection Date: 4/28/2014 1:25:00 PM

 Lab ID:
 1404C08-003
 Matrix: AQUEOUS
 Received Date: 4/30/2014 10:05:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E				Analyst	: BCN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	5/1/2014 8:43:18 PM	12957
Surr: DNOP	123	62.7-145	%REC	1	5/1/2014 8:43:18 PM	12957
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	5/2/2014 12:33:25 AM	R18351
Surr: BFB	88.2	80.4-118	%REC	1	5/2/2014 12:33:25 AM	R18351
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	1.0	μg/L	1	5/2/2014 12:33:25 AM	R18351
Toluene	ND	1.0	μg/L	1	5/2/2014 12:33:25 AM	R18351
Ethylbenzene	ND	1.0	μg/L	1	5/2/2014 12:33:25 AM	R18351
Xylenes, Total	ND	2.0	μg/L	1	5/2/2014 12:33:25 AM	R18351
Surr: 4-Bromofluorobenzene	96.0	82.9-139	%REC	1	5/2/2014 12:33:25 AM	R18351

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

- * 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
- Page 3 of 8
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/6/2014

CLIENT: Southwest Geoscience Client Sample ID: MW-55

Project: Largo CS **Collection Date:** 4/28/2014 2:10:00 PM 1404C08-004 Matrix: AQUEOUS Lab ID: Received Date: 4/30/2014 10:05:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	SE .				Analys	t: BCN
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	5/1/2014 9:14:15 PM	12957
Surr: DNOP	109	62.7-145	%REC	1	5/1/2014 9:14:15 PM	12957
EPA METHOD 8015D: GASOLINE RA	ANGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	5/2/2014 1:03:36 AM	R18351
Surr: BFB	89.5	80.4-118	%REC	1	5/2/2014 1:03:36 AM	R18351
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	1.0	μg/L	1	5/2/2014 1:03:36 AM	R18351
Toluene	ND	1.0	μg/L	1	5/2/2014 1:03:36 AM	R18351
Ethylbenzene	ND	1.0	μg/L	1	5/2/2014 1:03:36 AM	R18351
Xylenes, Total	ND	2.0	μg/L	1	5/2/2014 1:03:36 AM	R18351
Surr: 4-Bromofluorobenzene	95.6	82.9-139	%REC	1	5/2/2014 1:03:36 AM	R18351

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

Qualifiers:

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

Page 4 of 8

- P
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#: **1404C08**

06-May-14

Client: Southwest Geoscience

Project: Largo CS

Sample ID MB-12957 SampType: MBLK TestCode: EPA Method 8015D: Diesel Range Client ID: PBW Batch ID: 12957 RunNo: 18327 Prep Date: 5/1/2014 Analysis Date: 5/1/2014 SeqNo: 529722 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 1.000 107 62.7 1.1 145 Sample ID LCS-12957 SampType: LCS TestCode: EPA Method 8015D: Diesel Range Client ID: LCSW Batch ID: 12957 RunNo: 18327 Prep Date: 5/1/2014 Analysis Date: 5/1/2014 SeqNo: 529723 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 78.6 146 Surr: DNOP 0.58 0.5000 117 62.7 145

Sample ID LCSD-12957	SampT	ype: LC	SD	Tes	tCode: E	PA Method	8015D: Diese	el Range		
Client ID: LCSS02	Batch	n ID: 12	957	R	RunNo: 1	8327				
Prep Date: 5/1/2014	Analysis D	oate: 5/	1/2014	S	SeqNo: 5	29724	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	118	78.6	146	4.76	26.5	
Surr: DNOP	0.60		0.5000		119	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

Page 5 of 8

Hall Environmental Analysis Laboratory, Inc.

WO#: **1404C08**

06-May-14

Client: Southwest Geoscience

Project: Largo CS

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBW Batch ID: R18351 RunNo: 18351

Prep Date: Analysis Date: 5/1/2014 SeqNo: 530059 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 87.4 80.4 118

Sample ID 2.5UG GRO LCS SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSW Batch ID: R18351 RunNo: 18351

Prep Date: Analysis Date: 5/1/2014 SeqNo: 530062 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
 103
 80
 120

 Surr: BFB
 19
 20.00
 93.8
 80.4
 118

Sample ID 1404C08-001AMS SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: MW-47 Batch ID: R18351 RunNo: 18351

Prep Date: Analysis Date: 5/1/2014 SeqNo: 530074 Units: mg/L

RPDLimit SPK value SPK Ref Val %RPD Analyte Result PQL %REC LowLimit HighLimit Qual Gasoline Range Organics (GRO) 12 0.25 2.500 8.520 131 79 121 S Surr: BFB 170 100.0 167 S 80.4 118

Sample ID 1404C08-001AMSD SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: **MW-47** Batch ID: **R18351** RunNo: **18351**

Prep Date: Analysis Date: 5/1/2014 SeqNo: 530075 Units: mg/L

Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 12 0.25 2.500 8.520 134 79 0.499 20 S 121 Surr: BFB 170 100.0 165 80.4 118 0 S

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBW Batch ID: R18407 RunNo: 18407

Prep Date: Analysis Date: 5/5/2014 SeqNo: 531676 Units: %REC

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: BFB 18 20.00 88.8 80.4 118

Sample ID 2.5UG GRO LCS SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSW Batch ID: R18407 RunNo: 18407

Prep Date: Analysis Date: 5/5/2014 SeqNo: 531677 Units: %REC

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: BFB 19 20.00 96.8 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.

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RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#: **1404C08**

06-May-14

Client: Southwest Geoscience

Project: Largo CS

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: PBW Batch ID: R18351 RunNo: 18351 Prep Date: Analysis Date: 5/1/2014 SeqNo: 530087 Units: µg/L Analyte **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene ND 1.0 Toluene ND 1.0 ND Ethylbenzene 1.0 Xylenes, Total ND 2.0 Surr: 4-Bromofluorobenzene 19 20.00 95.1 82.9 139

SampType: LCS Sample ID 100NG BTEX LCS TestCode: EPA Method 8021B: Volatiles Client ID: **LCSW** Batch ID: R18351 RunNo: 18351 Prep Date: Analysis Date: 5/1/2014 SeqNo: 530088 Units: µg/L Analyte **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 21 1.0 20.00 O 107 80 120 Benzene Toluene 21 1.0 20.00 0 107 80 120 Ethylbenzene 21 20.00 0 106 80 120 1.0 65 Xylenes, Total 2.0 60.00 0 109 80 120 21 Surr: 4-Bromofluorobenzene 20.00 106 82.9 139

Sample ID 1404C08-002AMS SampType: MS TestCode: EPA Method 8021B: Volatiles Client ID: MW-48 Batch ID: R18351 RunNo: 18351 Prep Date: Analysis Date: 5/1/2014 SeqNo: 530100 Units: µg/L Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene 31 1.0 20.00 9.216 111 71 129 Toluene 22 1.0 20.00 0.4640 107 68.4 135 Ethylbenzene 29 1.0 20.00 7.832 108 69.4 135 Xylenes, Total 79 60.00 107 2.0 15.27 72.4 135 Surr: 4-Bromofluorobenzene 24 20.00 82.9 121 139

Sample ID 1404C08-002AM	ISD SampT	уре: М S	SD.	Tes	tCode: El	PA Method	8021B: Volati	les		
Client ID: MW-48	Batch	ID: R1	8351	R	RunNo: 1	8351				
Prep Date:	Analysis D	ate: 5/	1/2014	S	SeqNo: 5	30101	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	30	1.0	20.00	9.216	105	71	129	4.10	20	
Toluene	21	1.0	20.00	0.4640	103	68.4	135	3.57	20	
Ethylbenzene	28	1.0	20.00	7.832	103	69.4	135	3.25	20	
Xylenes, Total	77	2.0	60.00	15.27	102	72.4	135	3.34	20	
Surr: 4-Bromofluorobenzene	24		20.00		118	82.9	139	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

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Hall Environmental Analysis Laboratory, Inc.

WO#: **1404C08**

06-May-14

Client: Southwest Geoscience

Project: Largo CS

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBW Batch ID: R18407 RunNo: 18407

Prep Date: Analysis Date: 5/5/2014 SeqNo: 531690 Units: µg/L

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Benzene ND 1.0

Surr: 4-Bromofluorobenzene 20 20.00 97.7 82.9 139

Sample ID 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles

Client ID: LCSW Batch ID: R18407 RunNo: 18407

Prep Date: Analysis Date: 5/5/2014 SeqNo: 531691 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 21 20.00 106 82.9 Surr: 4-Bromofluorobenzene 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

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Sample Log-In Check List

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Client Name: Southwest Geoscience Work Order Number:	1404C08		RcptNo:	1
Received by/date: 04/30/2014 10:05:00 AN	 I	A		
Completed By: Ashley Gallegos , 4/30/2014 12:41:54 PM	I	A		
Reviewed By: VIMS U/30/14		V		
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 1	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 🗹	# of preserved bottles checked	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes 🗹	No 🗌		r >12 unless noted)
13 Are matrices correctly identified on Chain of Custody?	Yes 🗸	No	Adjusted?	
14. Is it clear what analyses were requested?	Yes 🗹	No	Checked by:	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 😾	No : :	Checked by	
Special Handling (if applicable)				
16. Was client notified of all discrepancies with this order?	Yes 🗌	No 🗍	NA 🗸	
Person Notified: Date: Date: 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 Intact Sea	Seal Date	Signed By		
1 1.0 Good Yes			·	

				•		
•				_	ANALYSIS / / /	Lab use only
	outhwest	Laboratory:	I TAC	<u> </u>	Requested / / /	Due Date:
GEOS	CIENCE		Œ			Transferred in
EIVIOIINGIIII & HYW. OBEOLOBIC COINWIAINS	geologic Consulains		!		7	when received (C°):
Office Location ALTEC	TEC, MIN	Contact:	FREMAN		2/9/	1 2 3 4 5
		Phone:			76	Page of
Project Manager 164	LE Simmers	PO/SO #:	64106602		70	
_	BRYANT	Sampler's Signature	ignature M		5/0	
Proj. No. 64100002	ARCO (7		No/Type of Containers	The Po	
Matrix Date Time	C G ldentifying	Identifying Marks of Sample(s)	Start Cepth End Depth VOA 1Lt	250 P/O		Lab Sample ID (Lab Use Only)
W 4-28-4 1630	×	MW-47	7		7	1404.208-001
W 1 1450	Sh-mw X	27	rv	X		-082
W 1325	メアン・スター・	54	2	X	×	887
01/h/ T M	\ \ \	55	w	X	<u>×</u>	400 -
			/ WE			
			MZ			
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Refinduished by (Signature)	e) Date:	Time: Re	Received by: (Signature)	DH30/	Time:	
Relinquished by (Signature	ì	Time: Re	Received by: (Signature) (Date:	Time:	
Relinquished by (Signature)) Date:	Time: Re	Received by: (Signature)	Date:	Time:	
Matrix WW - Wastewater Container VOA - 40 ml vial		W - Water S - Soil SD - Soild A/G - Amber / Or Glass 1 Liter	Solid L - Liquid A - Air Bag 250 ml - Glass wide mouth		C - Charcoal tube SL - studge O - Plastic or other	0 - Oil

CHAIN OF CUSTODY RECORD

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

November 06, 2014

Kyle Summers

Apex Titan, Inc.

606 S. Rio Grande Unit A

Aztec, NM 87410

TEL: (903) 821-5603 FAX (214) 350-2914

RE: Largo CS OrderNo.: 1410D42

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 19 sample(s) on 10/30/2014 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 qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 11/6/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Apex Titan, Inc. Client Sample ID: MW-13

 Project:
 Largo CS
 Collection Date: 10/27/2014 2:50:00 PM

 Lab ID:
 1410D42-001
 Matrix: AQUEOUS
 Received Date: 10/30/2014 7:15:00 AM

Analyses	Result	RL Qu	al Units	DF Date Analy	zed Batc	ch
EPA METHOD 8021B: VOLATILES					Analyst: DJF	:
Benzene	ND	1.0	μg/L	1 11/2/2014 12	2:26:48 AM R222	281
Toluene	ND	1.0	μg/L	1 11/2/2014 12	2:26:48 AM R222	281
Ethylbenzene	ND	1.0	μg/L	1 11/2/2014 12	2:26:48 AM R222	281
Xylenes, Total	ND	2.0	μg/L	1 11/2/2014 12	2:26:48 AM R222	281
Surr: 4-Bromofluorobenzene	92.8	66.6-167	%REC	1 11/2/2014 12	2:26:48 AM R222	281

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

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

Page 1 of 20

- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 11/6/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Apex Titan, Inc. Client Sample ID: MW-14

 Project:
 Largo CS
 Collection Date: 10/27/2014 3:40:00 PM

 Lab ID:
 1410D42-002
 Matrix: AQUEOUS
 Received Date: 10/30/2014 7:15:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: DJF
Benzene	ND	1.0	μg/L	1	11/2/2014 1:52:38 AM	R22281
Toluene	ND	1.0	μg/L	1	11/2/2014 1:52:38 AM	R22281
Ethylbenzene	ND	1.0	μg/L	1	11/2/2014 1:52:38 AM	R22281
Xylenes, Total	ND	2.0	μg/L	1	11/2/2014 1:52:38 AM	R22281
Surr: 4-Bromofluorobenzene	91.9	66.6-167	%REC	1	11/2/2014 1:52:38 AM	R22281

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

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

Page 2 of 20

Date Reported: 11/6/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Apex Titan, Inc. Client Sample ID: MW-6

 Project:
 Largo CS
 Collection Date: 10/27/2014 4:30:00 PM

 Lab ID:
 1410D42-003
 Matrix: AQUEOUS
 Received Date: 10/30/2014 7:15:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	:: DJF
Benzene	ND	1.0	μg/L	1	11/2/2014 2:21:14 AM	R22281
Toluene	ND	1.0	μg/L	1	11/2/2014 2:21:14 AM	R22281
Ethylbenzene	ND	1.0	μg/L	1	11/2/2014 2:21:14 AM	R22281
Xylenes, Total	ND	2.0	μg/L	1	11/2/2014 2:21:14 AM	R22281
Surr: 4-Bromofluorobenzene	92.4	66.6-167	%REC	1	11/2/2014 2:21:14 AM	R22281

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

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

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- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 11/6/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Apex Titan, Inc. Client Sample ID: MW-16

 Project:
 Largo CS
 Collection Date: 10/27/2014 5:15:00 PM

 Lab ID:
 1410D42-004
 Matrix: AQUEOUS
 Received Date: 10/30/2014 7:15:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	st: DJF
Benzene	ND	1.0	μg/L	1	11/2/2014 2:49:46 AM	R22281
Toluene	ND	1.0	μg/L	1	11/2/2014 2:49:46 AM	R22281
Ethylbenzene	ND	1.0	μg/L	1	11/2/2014 2:49:46 AM	R22281
Xylenes, Total	ND	2.0	μg/L	1	11/2/2014 2:49:46 AM	R22281
Surr: 4-Bromofluorobenzene	93.6	66.6-167	%REC	1	11/2/2014 2:49:46 AM	R22281

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

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.

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RL Reporting Detection Limit

Date Reported: 11/6/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Apex Titan, Inc. Client Sample ID: MW-3R

 Project:
 Largo CS
 Collection Date: 10/28/2014 9:00:00 AM

 Lab ID:
 1410D42-005
 Matrix: AQUEOUS
 Received Date: 10/30/2014 7:15:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: DJF
Benzene	ND	1.0	μg/L	1	11/2/2014 3:18:15 AM	R22281
Toluene	ND	1.0	μg/L	1	11/2/2014 3:18:15 AM	R22281
Ethylbenzene	ND	1.0	μg/L	1	11/2/2014 3:18:15 AM	R22281
Xylenes, Total	ND	2.0	μg/L	1	11/2/2014 3:18:15 AM	R22281
Surr: 4-Bromofluorobenzene	92.1	66.6-167	%REC	1	11/2/2014 3:18:15 AM	R22281

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

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

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- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 11/6/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Apex Titan, Inc. Client Sample ID: MW-15

 Project:
 Largo CS
 Collection Date: 10/28/2014 9:55:00 AM

 Lab ID:
 1410D42-006
 Matrix: AQUEOUS
 Received Date: 10/30/2014 7:15:00 AM

Analyses	Result	RL Qu	al Units	DF Date Analyzed		Batch
EPA METHOD 8021B: VOLATILES					Analys	t: DJF
Benzene	ND	1.0	μg/L	1 11/2	/2014 3:46:50 AM	R22281
Toluene	ND	1.0	μg/L	1 11/2	/2014 3:46:50 AM	R22281
Ethylbenzene	ND	1.0	μg/L	1 11/2	/2014 3:46:50 AM	R22281
Xylenes, Total	ND	2.0	μg/L	1 11/2	/2014 3:46:50 AM	R22281
Surr: 4-Bromofluorobenzene	94.7	66.6-167	%REC	1 11/2/	/2014 3:46:50 AM	R22281

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

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

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- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 11/6/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Apex Titan, Inc. Client Sample ID: MW-8

Project: Largo CS Collection Date: 10/28/2014 10:45:00 AM 1410D42-007 Matrix: AQUEOUS Lab ID: Received Date: 10/30/2014 7:15:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: DJF
Benzene	ND	1.0	μg/L	1	11/2/2014 4:15:25 AM	R22281
Toluene	ND	1.0	μg/L	1	11/2/2014 4:15:25 AM	R22281
Ethylbenzene	ND	1.0	μg/L	1	11/2/2014 4:15:25 AM	R22281
Xylenes, Total	ND	2.0	μg/L	1	11/2/2014 4:15:25 AM	R22281
Surr: 4-Bromofluorobenzene	91.9	66.6-167	%REC	1	11/2/2014 4:15:25 AM	R22281

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Е Value above quantitation range
- Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

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- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 11/6/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Apex Titan, Inc. Client Sample ID: MW-9

 Project:
 Largo CS
 Collection Date: 10/28/2014 11:30:00 AM

 Lab ID:
 1410D42-008
 Matrix: AQUEOUS
 Received Date: 10/30/2014 7:15:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: DJF
Benzene	ND	1.0	μg/L	1	11/2/2014 4:43:56 AM	R22281
Toluene	ND	1.0	μg/L	1	11/2/2014 4:43:56 AM	R22281
Ethylbenzene	ND	1.0	μg/L	1	11/2/2014 4:43:56 AM	R22281
Xylenes, Total	ND	2.0	μg/L	1	11/2/2014 4:43:56 AM	R22281
Surr: 4-Bromofluorobenzene	92.9	66.6-167	%REC	1	11/2/2014 4:43:56 AM	R22281

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

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

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- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 11/6/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Apex Titan, Inc. Client Sample ID: MW-40R

Project: Largo CS Collection Date: 10/28/2014 12:20:00 PM Lab ID: 1410D42-009 Matrix: AQUEOUS Received Date: 10/30/2014 7:15:00 AM

Analyses Result **RL Qual Units DF** Date Analyzed Batch **EPA METHOD 8021B: VOLATILES** Analyst: DJF 11/2/2014 5:12:28 AM Benzene ND 1.0 μg/L R22281 Toluene ND 1.0 μg/L 11/2/2014 5:12:28 AM R22281 Ethylbenzene ND 1.0 11/2/2014 5:12:28 AM R22281 μg/L 1 Xylenes, Total ND 2.0 μg/L 11/2/2014 5:12:28 AM R22281 Surr: 4-Bromofluorobenzene 92.9 %REC 11/2/2014 5:12:28 AM R22281 66.6-167

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Ε Value above quantitation range
- Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

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- P Sample pH greater than 2.
- RLReporting Detection Limit

Date Reported: 11/6/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Apex Titan, Inc. Client Sample ID: MW-52

 Project:
 Largo CS
 Collection Date: 10/28/2014 1:15:00 PM

 Lab ID:
 1410D42-010
 Matrix: AQUEOUS
 Received Date: 10/30/2014 7:15:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	st: DJF
Benzene	ND	1.0	μg/L	1	11/2/2014 7:34:56 AM	R22281
Toluene	ND	1.0	μg/L	1	11/2/2014 7:34:56 AM	R22281
Ethylbenzene	ND	1.0	μg/L	1	11/2/2014 7:34:56 AM	R22281
Xylenes, Total	ND	2.0	μg/L	1	11/2/2014 7:34:56 AM	R22281
Surr: 4-Bromofluorobenzene	94.1	66.6-167	%REC	1	11/2/2014 7:34:56 AM	R22281

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

- * 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 Page 10 of 20
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 11/6/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Apex Titan, Inc. Client Sample ID: MW-51

 Project:
 Largo CS
 Collection Date: 10/28/2014 2:05:00 PM

 Lab ID:
 1410D42-011
 Matrix: AQUEOUS
 Received Date: 10/30/2014 7:15:00 AM

Analyses	Result	esult RL Qual Units		DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: DJF
Benzene	5.3	1.0	μg/L	1	11/2/2014 8:03:29 AM	R22281
Toluene	ND	1.0	μg/L	1	11/2/2014 8:03:29 AM	R22281
Ethylbenzene	ND	1.0	μg/L	1	11/2/2014 8:03:29 AM	R22281
Xylenes, Total	ND	2.0	μg/L	1	11/2/2014 8:03:29 AM	R22281
Surr: 4-Bromofluorobenzene	97.9	66.6-167	%REC	1	11/2/2014 8:03:29 AM	R22281

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

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 Page 11
- P Sample pH greater than 2.
- RL Reporting Detection Limit

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Date Reported: 11/6/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Apex Titan, Inc. Client Sample ID: MW-41

 Project:
 Largo CS
 Collection Date: 10/28/2014 2:55:00 PM

 Lab ID:
 1410D42-012
 Matrix: AQUEOUS
 Received Date: 10/30/2014 7:15:00 AM

Analyses Result **RL Qual Units DF** Date Analyzed Batch **EPA METHOD 8021B: VOLATILES** Analyst: DJF Benzene ND 1.0 μg/L 11/2/2014 8:32:05 AM R22281 Toluene ND 1.0 μg/L 11/2/2014 8:32:05 AM R22281 Ethylbenzene ND 1.0 11/2/2014 8:32:05 AM R22281 μg/L 1 Xylenes, Total ND 2.0 μg/L 11/2/2014 8:32:05 AM R22281 Surr: 4-Bromofluorobenzene 95.1 %REC R22281 66.6-167 11/2/2014 8:32:05 AM

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

- * 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 Page 12 of 20
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 11/6/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Apex Titan, Inc. Client Sample ID: MW-75

 Project:
 Largo CS
 Collection Date: 10/28/2014 3:45:00 PM

 Lab ID:
 1410D42-013
 Matrix: AQUEOUS
 Received Date: 10/30/2014 7:15:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	st: DJF
Benzene	ND	1.0	μg/L	1	11/2/2014 9:00:42 AM	R22281
Toluene	ND	1.0	μg/L	1	11/2/2014 9:00:42 AM	R22281
Ethylbenzene	ND	1.0	μg/L	1	11/2/2014 9:00:42 AM	R22281
Xylenes, Total	ND	2.0	μg/L	1	11/2/2014 9:00:42 AM	R22281
Surr: 4-Bromofluorobenzene	94.1	66.6-167	%REC	1	11/2/2014 9:00:42 AM	R22281

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

- * 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 Page 13 of 20
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 11/6/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Apex Titan, Inc. Client Sample ID: MW-38

 Project:
 Largo CS
 Collection Date: 10/28/2014 4:40:00 PM

 Lab ID:
 1410D42-014
 Matrix: AQUEOUS
 Received Date: 10/30/2014 7:15:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analysi	:: DJF
Benzene	ND	1.0	μg/L	1	11/2/2014 9:29:14 AM	R22281
Toluene	ND	1.0	μg/L	1	11/2/2014 9:29:14 AM	R22281
Ethylbenzene	ND	1.0	μg/L	1	11/2/2014 9:29:14 AM	R22281
Xylenes, Total	ND	2.0	μg/L	1	11/2/2014 9:29:14 AM	R22281
Surr: 4-Bromofluorobenzene	93.4	66.6-167	%REC	1	11/2/2014 9:29:14 AM	R22281

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

- 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 Page 14 of 20
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 11/6/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Apex Titan, Inc. Client Sample ID: MW-79

 Project:
 Largo CS
 Collection Date: 10/28/2014 5:00:00 PM

 Lab ID:
 1410D42-015
 Matrix: AQUEOUS
 Received Date: 10/30/2014 7:15:00 AM

Analyses Result **RL Qual Units DF** Date Analyzed Batch **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 1.0 μg/L 11/2/2014 4:22:29 PM R22283 Toluene ND 1.0 μg/L 11/2/2014 4:22:29 PM R22283 Ethylbenzene ND 1.0 11/2/2014 4:22:29 PM R22283 μg/L Xylenes, Total ND 2.0 μg/L 11/2/2014 4:22:29 PM R22283 Surr: 4-Bromofluorobenzene 94.0 %REC R22283 66.6-167 11/2/2014 4:22:29 PM

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

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

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- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 11/6/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Apex Titan, Inc. Client Sample ID: MW-77

 Project:
 Largo CS
 Collection Date: 10/28/2014 5:15:00 PM

 Lab ID:
 1410D42-016
 Matrix: AQUEOUS
 Received Date: 10/30/2014 7:15:00 AM

Analyses Result **RL Qual Units DF** Date Analyzed Batch **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 1.0 μg/L 11/2/2014 5:48:23 PM R22283 Toluene ND 1.0 μg/L 11/2/2014 5:48:23 PM R22283 Ethylbenzene ND 1.0 11/2/2014 5:48:23 PM R22283 μg/L 1 Xylenes, Total ND 2.0 μg/L 11/2/2014 5:48:23 PM R22283 Surr: 4-Bromofluorobenzene 92.7 %REC R22283 66.6-167 11/2/2014 5:48:23 PM

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

- * 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 Page 16 of 20
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 11/6/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Apex Titan, Inc. Client Sample ID: MW-76

 Project:
 Largo CS
 Collection Date: 10/28/2014 5:25:00 PM

 Lab ID:
 1410D42-017
 Matrix: AQUEOUS
 Received Date: 10/30/2014 7:15:00 AM

Analyses Result **RL Qual Units DF** Date Analyzed Batch **EPA METHOD 8021B: VOLATILES** Analyst: NSB 11/2/2014 6:17:01 PM Benzene ND 2.0 μg/L 2 R22283 Toluene ND 2.0 μg/L 11/2/2014 6:17:01 PM R22283 Ethylbenzene ND 2.0 2 11/2/2014 6:17:01 PM R22283 μg/L Xylenes, Total ND 4.0 μg/L 2 11/2/2014 6:17:01 PM R22283 Surr: 4-Bromofluorobenzene 91.1 %REC R22283 66.6-167 11/2/2014 6:17:01 PM

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

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

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- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 11/6/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Apex Titan, Inc. Client Sample ID: MW-80

Project: Largo CS **Collection Date:** 10/28/2014 5:35:00 PM Lab ID: 1410D42-018 Matrix: AQUEOUS Received Date: 10/30/2014 7:15:00 AM

Analyses Result **RL Qual Units DF** Date Analyzed Batch **EPA METHOD 8021B: VOLATILES** Analyst: NSB 11/2/2014 6:45:41 PM Benzene ND 1.0 μg/L R22283 Toluene ND 1.0 μg/L 11/2/2014 6:45:41 PM R22283 Ethylbenzene ND 1.0 11/2/2014 6:45:41 PM R22283 μg/L Xylenes, Total ND 2.0 μg/L 11/2/2014 6:45:41 PM R22283 Surr: 4-Bromofluorobenzene 90.3 %REC R22283 66.6-167 11/2/2014 6:45:41 PM

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

Qualifiers:

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

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- RLReporting Detection Limit

Date Reported: 11/6/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Apex Titan, Inc. Client Sample ID: MW-83

 Project:
 Largo CS
 Collection Date: 10/28/2014 6:00:00 PM

 Lab ID:
 1410D42-019
 Matrix: AQUEOUS
 Received Date: 10/30/2014 7:15:00 AM

Analyses Result **RL Qual Units DF** Date Analyzed Batch **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 1.0 μg/L 11/2/2014 7:14:16 PM R22283 Toluene ND 1.0 μg/L 11/2/2014 7:14:16 PM R22283 Ethylbenzene ND 1.0 11/2/2014 7:14:16 PM R22283 μg/L Xylenes, Total ND 2.0 μg/L 11/2/2014 7:14:16 PM R22283 Surr: 4-Bromofluorobenzene %REC 11/2/2014 7:14:16 PM R22283 87.8 66.6-167

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

- * 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 Page 19 of 20
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#: **1410D42**

06-Nov-14

Client: Apex Titan, Inc.
Project: Largo CS

Sample ID 5ML RB	SampType: MBLK			Tes						
Client ID: PBW	Batch ID: R22283			F	RunNo: 2	2283				
Prep Date:	Analysis Date: 11/2/2014			SeqNo: 656428			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	18		20.00		92.2	66.6	167			

Sample ID 100NG BTEX LC	S Samp	Гуре: LC	S	Tes	TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSW	Batc	h ID: R2	2283	RunNo: 22283							
Prep Date:	Analysis Date: 11/2/2014			SeqNo: 656429			Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	20	1.0	20.00	0	98.8	80	120				
Toluene	20	1.0	20.00	0	99.9	80	120				
Ethylbenzene	20	1.0	20.00	0	102	80	120				
Xylenes, Total	60	2.0	60.00	0	101	80	120				
Surr: 4-Bromofluorobenzene	20		20.00		98.5	66.6	167				

Sample ID 5ML RB	SampType: MBLK Batch ID: R22281			TestCode: EPA Method 8021B: Volatiles							
Client ID: PBW				F	RunNo: 2	2281					
Prep Date:	Analysis Date: 11/1/2014			8	SeqNo: 6	56501	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	18		20.00		91.2	66.6	167				

Sample ID 100 BTEX LCS	SampT	ype: LC	s	TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSW	Batch	ID: R2	2281	R	RunNo: 2	2281				
Prep Date:	Analysis D	ate: 1 1	/1/2014	S	SeqNo: 6	56502	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.6	80	120			
Toluene	20	1.0	20.00	0	100	80	120			
Ethylbenzene	20	1.0	20.00	0	99.5	80	120			
Xylenes, Total	59	2.0	60.00	0	99.1	80	120			
Surr: 4-Bromofluorobenzene	20		20.00		97.6	66.6	167			

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

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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105

Sample Log-In Check List

LABORATORY

TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Work Order Number: 1410D42

Client Name: APEX AZTEC World	k Order Number: 1	1410D4	12			RcptNo:	1	
Received by/date: LM 10/3	0/14			· · · · · · · · · · · · · · · · · · ·				
Logged By: Michelle Garcia 10/30/2	2014 7:15:00 AM			Miku. Miku	Gar	un		
Completed By: Michelle Garcia 10/30/2	2014 8:35:54 AM			Michell	Gar	uiv		
Reviewed By:	20/1				•			
Chain of Custody	STIP!	••						
Custody seals intact on sample bottles?		Yes [No [Not Present 🗹		
2. Is Chain of Custody complete?		Yes 5	✓	No [Not Present		
3. How was the sample delivered?		<u>Courie</u>	ŗ					
<u>Log In</u>								
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 [\supset		,	
8. Are samples (except VOA and ONG) properly prese	erved?	Yes [V	No [
9. Was preservative added to bottles?		Yes [No E	/	NA 🗆		
10.VOA vials have zero headspace?		Yes [<u>✓</u>	No [No VOA Vials		
11. Were any sample containers received broken?		Yes [No	y [# of preserved		
12.Does paperwork match bottle labels?		Yes [<u>.</u>	No [-,	bottles checked for pH:		
(Note discrepancies on chain of custody)		165	•	110	_	(<2	or >12 unless no	ited)
13. Are matrices correctly identified on Chain of Custod	ly?	Yes 5	/	No [⊒	Adjusted?		_
14. Is it clear what analyses were requested?		Yes [No L	_	Observation of the co		
15. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes [✓	No L	_] [Checked by:		
Special Handling (if applicable)	0	v [_	N- [_	NA 🗹		
16. Was client notified of all discrepancies with this order	er?	Yes		No L		NA 🖳	٦	
Person Notified:	Date:		10170**************					
By Whom:	Via:	eMail	Р	hone 📙 F	ах	In Person		
Regarding:	e materia de estada escuencia de como como contracto estada e	ATE A COD A COD	A 4	Patrick Commence of the Commen	·	and an analysis of the first state of the st		
Client Instructions:	to de vittere video constituir de la con		21222***			and an action and the second second		
17. Additional remarks:								
18. Cooler Information Cooler No Temp °C Condition Seal Inter	ct Seal No Se	eal Dat	i ara	Signed By	#1: 1-1			
Cooler No Temp C Condition Seal Intai	GO SCALINO 1 SE	aı Dal	G ay 18.5	Orginea D				
	i , l,							

CHAIN OF CUSTODY RECORD

Apex TITAN, Inc. • 606 S. Rio Grande, Suite A, Downstairs • Aztec, New Mexico 87410 • Office: 505-334-5200 • Fax: 505-334-5204

*	-	Mill	ANALYSIS REQUESTED /	Lab use only Due Date:
APEX		2		Temp. of coolers
Office Location AZTE(NW .			when received (C°): (, C
		Contact: 千をGEMAN		1 2 3 4 5
	Phone:		78	Page 2 of 4
Project Manager KULE	S/mmc/25	PO/SO #:	i a	
Sampler's Name RAPA RAPA		Sampler's Signature	8 7	
2000	Project Name	No/Type of Containers		
Matrix Date Time D	Q-az	ample (s) Start Depth VOA VG 1111 CH CH S50 MI	\$	Lab Sample ID (Lab Use Only)
2011 H-35-01 W	↓ `		7	410042-011
	14-mm			- 612
5451	mw-75			. 613
01/01	mw-38			P10 -
00±1	pt-~m			- 015
5112	たたーかる			- 011p
1735)t-mm			F10 -
1 1735	mw-86			210 -
1800	1 mv-83			- 019
+				
Turn around time	☐ 25% Rush ☐ 50% Rush	☐ 100% Rush	-	
Relinquished by (Signature)	Date: Time: 10-29-14 0626	Reckiyed by: (Signature)	Time: 2 NOTE	67. Q
Religiques ped by (Signature)	Pate Time:	Received by: (Signature) Date: NAS-T. J. C. O. T. 10 29 14	- 1	
Refinquished by (Signature)	Date: Time:		の子ら	
Relinquished by (Signature)	Date: Time:	Received by: (Signature) Date:	Пте:	
Matrix WW - Wastewater Container VOA - 40 ml vial	W - Water S - Soil SD - Solid A/G - Amber / Or Glass 1 Liter	L - Liquid A - Air Bag 250 ml - Glass wide mouth	C - Charooal tube SL - sludge O - Oil P/O - Plastic or other	

CHAIN OF CUSTODY RECORD

Apex TITAN, Inc. • 606 S. Rio Grande, Suite A, Downstairs • Aztec, New Mexico 87410 • Office: 505-334-5200 • Fax: 505-334-5204



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

November 10, 2014

Kyle Summers APEX TITAN 606 S. Rio Grande Unit A Aztec, NM 87410

TEL: (903) 821-5603

FAX

RE: Largo LS OrderNo.: 1411007

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 17 sample(s) on 11/1/2014 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 qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

Indest

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1411007

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 11/10/2014

CLIENT: APEX TITAN Client Sample ID: MW-34

 Project:
 Largo LS
 Collection Date: 10/29/2014 9:00:00 AM

 Lab ID:
 1411007-001
 Matrix: AQUEOUS
 Received Date: 11/1/2014 11:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	st: NSB
Benzene	ND	1.0	μg/L	1	11/6/2014 5:13:57 PM	R22373
Toluene	ND	1.0	μg/L	1	11/6/2014 5:13:57 PM	R22373
Ethylbenzene	ND	1.0	μg/L	1	11/6/2014 5:13:57 PM	R22373
Xylenes, Total	ND	2.0	μg/L	1	11/6/2014 5:13:57 PM	R22373
Surr: 4-Bromofluorobenzene	111	66.6-167	%REC	1	11/6/2014 5:13:57 PM	R22373

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

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

Page 1 of 19

- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 11/10/2014

Lab Order 1411007

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN Client Sample ID: MW-50

 Project:
 Largo LS
 Collection Date: 10/29/2014 9:45:00 AM

 Lab ID:
 1411007-002
 Matrix: AQUEOUS
 Received Date: 11/1/2014 11:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	:: NSB
Benzene	ND	1.0	μg/L	1	11/6/2014 6:35:06 PM	R22373
Toluene	ND	1.0	μg/L	1	11/6/2014 6:35:06 PM	R22373
Ethylbenzene	ND	1.0	μg/L	1	11/6/2014 6:35:06 PM	R22373
Xylenes, Total	ND	2.0	μg/L	1	11/6/2014 6:35:06 PM	R22373
Surr: 4-Bromofluorobenzene	109	66.6-167	%REC	1	11/6/2014 6:35:06 PM	R22373

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

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

Page 2 of 19

Lab Order **1411007**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 11/10/2014

CLIENT: APEX TITAN Client Sample ID: MW-39

 Project:
 Largo LS
 Collection Date: 10/29/2014 10:40:00 AM

 Lab ID:
 1411007-003
 Matrix: AQUEOUS
 Received Date: 11/1/2014 11:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	:: NSB
Benzene	5.5	1.0	μg/L	1	11/6/2014 7:02:25 PM	R22373
Toluene	ND	1.0	μg/L	1	11/6/2014 7:02:25 PM	R22373
Ethylbenzene	ND	1.0	μg/L	1	11/6/2014 7:02:25 PM	R22373
Xylenes, Total	ND	2.0	μg/L	1	11/6/2014 7:02:25 PM	R22373
Surr: 4-Bromofluorobenzene	108	66.6-167	%REC	1	11/6/2014 7:02:25 PM	R22373

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

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

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Lab Order **1411007**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 11/10/2014

CLIENT: APEX TITAN Client Sample ID: MW-32

 Project:
 Largo LS
 Collection Date: 10/29/2014 11:35:00 AM

 Lab ID:
 1411007-004
 Matrix: AQUEOUS
 Received Date: 11/1/2014 11:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	st: NSB
Benzene	ND	1.0	μg/L	1	11/6/2014 7:29:46 PM	R22373
Toluene	ND	1.0	μg/L	1	11/6/2014 7:29:46 PM	R22373
Ethylbenzene	ND	1.0	μg/L	1	11/6/2014 7:29:46 PM	R22373
Xylenes, Total	ND	2.0	μg/L	1	11/6/2014 7:29:46 PM	R22373
Surr: 4-Bromofluorobenzene	108	66.6-167	%REC	1	11/6/2014 7:29:46 PM	R22373

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

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

Page 4 of 19

- P Sample pH greater than 2.
- RL Reporting Detection Limit

Lab Order **1411007**

Date Reported: 11/10/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN Client Sample ID: MW-43

 Project:
 Largo LS
 Collection Date: 10/29/2014 12:25:00 PM

 Lab ID:
 1411007-005
 Matrix: AQUEOUS
 Received Date: 11/1/2014 11:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	1.0	μg/L	1	11/6/2014 7:57:07 PM	R22373
Toluene	ND	1.0	μg/L	1	11/6/2014 7:57:07 PM	R22373
Ethylbenzene	ND	1.0	μg/L	1	11/6/2014 7:57:07 PM	R22373
Xylenes, Total	ND	2.0	μg/L	1	11/6/2014 7:57:07 PM	R22373
Surr: 4-Bromofluorobenzene	106	66.6-167	%REC	1	11/6/2014 7:57:07 PM	R22373

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

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

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- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 11/10/2014

Lab Order 1411007

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN Client Sample ID: MW-36

Project: Largo LS **Collection Date:** 10/29/2014 1:10:00 PM Lab ID: 1411007-006 Matrix: AQUEOUS Received Date: 11/1/2014 11:30:00 AM

Analyses Result **RL Qual Units DF** Date Analyzed Batch **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 1.0 μg/L 11/6/2014 10:13:26 PM R22373 Toluene ND 1.0 μg/L 11/6/2014 10:13:26 PM R22373 Ethylbenzene ND 1.0 11/6/2014 10:13:26 PM R22373 μg/L Xylenes, Total ND 2.0 μg/L 11/6/2014 10:13:26 PM R22373 Surr: 4-Bromofluorobenzene 108 %REC 11/6/2014 10:13:26 PM R22373 66.6-167

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

Qualifiers:

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

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RLReporting Detection Limit

Lab Order **1411007**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 11/10/2014

CLIENT: APEX TITAN Client Sample ID: MW-88

 Project:
 Largo LS
 Collection Date: 10/29/2014 2:25:00 PM

 Lab ID:
 1411007-007
 Matrix: AQUEOUS
 Received Date: 11/1/2014 11:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analy	/st: NSB
Benzene	ND	1.0	μg/L	1	11/6/2014 10:40:51 F	PM R22373
Toluene	ND	1.0	μg/L	1	11/6/2014 10:40:51 F	PM R22373
Ethylbenzene	ND	1.0	μg/L	1	11/6/2014 10:40:51 F	PM R22373
Xylenes, Total	ND	2.0	μg/L	1	11/6/2014 10:40:51 F	PM R22373
Surr: 4-Bromofluorobenzene	114	66.6-167	%REC	1	11/6/2014 10:40:51 F	PM R22373

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

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 Po
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Page 7 of 19

Lab Order 1411007

Hall Environmental Analysis Laboratory, Inc. Date Reported: 11/10/2014

CLIENT: APEX TITAN Client Sample ID: MW-89

Project: Largo LS **Collection Date:** 10/29/2014 2:45:00 PM 1411007-008 Matrix: AQUEOUS Received Date: 11/1/2014 11:30:00 AM Lab ID:

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analy	/st: NSB
Benzene	ND	1.0	μg/L	1	11/6/2014 11:08:07 F	PM R22373
Toluene	ND	1.0	μg/L	1	11/6/2014 11:08:07 F	PM R22373
Ethylbenzene	ND	1.0	μg/L	1	11/6/2014 11:08:07 F	PM R22373
Xylenes, Total	ND	2.0	μg/L	1	11/6/2014 11:08:07 F	PM R22373
Surr: 4-Bromofluorobenzene	108	66.6-167	%REC	1	11/6/2014 11:08:07 F	PM R22373

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Ε Value above quantitation range
- Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

Page 8 of 19

- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 11/10/2014

Lab Order 1411007

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN Client Sample ID: MW-90

Project: Largo LS **Collection Date:** 10/29/2014 3:00:00 PM 1411007-009 Matrix: AQUEOUS Received Date: 11/1/2014 11:30:00 AM Lab ID:

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analy	st: NSB
Benzene	ND	1.0	μg/L	1	11/6/2014 11:35:20 F	PM R22373
Toluene	ND	1.0	μg/L	1	11/6/2014 11:35:20 F	PM R22373
Ethylbenzene	ND	1.0	μg/L	1	11/6/2014 11:35:20 F	PM R22373
Xylenes, Total	ND	2.0	μg/L	1	11/6/2014 11:35:20 F	PM R22373
Surr: 4-Bromofluorobenzene	107	66.6-167	%REC	1	11/6/2014 11:35:20 F	PM R22373

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Ε Value above quantitation range
- Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

Page 9 of 19

- P Sample pH greater than 2.
- RL Reporting Detection Limit

Lab Order 1411007

Date Reported: 11/10/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN Client Sample ID: MW-7

Collection Date: 10/29/2014 4:05:00 PM **Project:** Largo LS Lab ID: 1411007-010 Matrix: AQUEOUS Received Date: 11/1/2014 11:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analy	st: NSB
Benzene	2.3	1.0	μg/L	1	11/7/2014 12:02:41 A	M R22373
Toluene	ND	1.0	μg/L	1	11/7/2014 12:02:41 A	M R22373
Ethylbenzene	ND	1.0	μg/L	1	11/7/2014 12:02:41 A	M R22373
Xylenes, Total	ND	2.0	μg/L	1	11/7/2014 12:02:41 A	M R22373
Surr: 4-Bromofluorobenzene	108	66.6-167	%REC	1	11/7/2014 12:02:41 A	M R22373

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Ε Value above quantitation range
- Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P

Page 10 of 19 Sample pH greater than 2.

- RL Reporting Detection Limit

Lab Order **1411007**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 11/10/2014

CLIENT: APEX TITAN Client Sample ID: MW-47

 Project:
 Largo LS
 Collection Date: 10/29/2014 4:50:00 PM

 Lab ID:
 1411007-011
 Matrix: AQUEOUS
 Received Date: 11/1/2014 11:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Anal	yst: NSB
Benzene	750	10	μg/L	10	11/7/2014 12:29:58	AM R22373
Toluene	ND	10	μg/L	10	11/7/2014 12:29:58	AM R22373
Ethylbenzene	29	10	μg/L	10	11/7/2014 12:29:58	AM R22373
Xylenes, Total	ND	20	μg/L	10	11/7/2014 12:29:58	AM R22373
Surr: 4-Bromofluorobenzene	116	66.6-167	%REC	10	11/7/2014 12:29:58	AM R22373

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

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 Page 11 of 19
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Date Reported: 11/10/2014

Lab Order 1411007

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN Client Sample ID: MW-49

 Project:
 Largo LS
 Collection Date: 10/30/2014 10:00:00 AM

 Lab ID:
 1411007-012
 Matrix: AQUEOUS
 Received Date: 11/1/2014 11:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Batch	
EPA METHOD 8021B: VOLATILES					Analy	/st: NSB
Benzene	ND	1.0	μg/L	1	11/7/2014 12:56:59	AM R22373
Toluene	ND	1.0	μg/L	1	11/7/2014 12:56:59	AM R22373
Ethylbenzene	ND	1.0	μg/L	1	11/7/2014 12:56:59	AM R22373
Xylenes, Total	ND	2.0	μg/L	1	11/7/2014 12:56:59	AM R22373
Surr: 4-Bromofluorobenzene	111	66.6-167	%REC	1	11/7/2014 12:56:59	AM R22373

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

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 De
- P Sample pH greater than 2.
- RL Reporting Detection Limit

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Date Reported: 11/10/2014

Lab Order 1411007

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: MW-53

 Project:
 Largo LS
 Collection Date: 10/30/2014 10:45:00 AM

 Lab ID:
 1411007-013
 Matrix: AQUEOUS
 Received Date: 11/1/2014 11:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Batch	
EPA METHOD 8021B: VOLATILES					Analy	st: NSB
Benzene	ND	1.0	μg/L	1	11/7/2014 1:24:06 AM	1 R22373
Toluene	ND	1.0	μg/L	1	11/7/2014 1:24:06 AM	1 R22373
Ethylbenzene	ND	1.0	μg/L	1	11/7/2014 1:24:06 AM	1 R22373
Xylenes, Total	ND	2.0	μg/L	1	11/7/2014 1:24:06 AM	1 R22373
Surr: 4-Bromofluorobenzene	109	66.6-167	%REC	1	11/7/2014 1:24:06 AM	1 R22373

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

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 De
- P Sample pH greater than 2.
- RL Reporting Detection Limit

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Lab Order **1411007**

Date Reported: 11/10/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN Client Sample ID: MW-54

 Project:
 Largo LS
 Collection Date: 10/30/2014 11:25:00 AM

 Lab ID:
 1411007-014
 Matrix: AQUEOUS
 Received Date: 11/1/2014 11:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	1.0	μg/L	1	11/7/2014 1:51:26 AM	R22373
Toluene	ND	1.0	μg/L	1	11/7/2014 1:51:26 AM	R22373
Ethylbenzene	ND	1.0	μg/L	1	11/7/2014 1:51:26 AM	R22373
Xylenes, Total	ND	2.0	μg/L	1	11/7/2014 1:51:26 AM	R22373
Surr: 4-Bromofluorobenzene	109	66.6-167	%REC	1	11/7/2014 1:51:26 AM	R22373

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

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 Page 14 of 19
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Lab Order **1411007**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 11/10/2014

CLIENT: APEX TITAN Client Sample ID: MW-55

 Project:
 Largo LS
 Collection Date: 10/30/2014 12:05:00 PM

 Lab ID:
 1411007-015
 Matrix: AQUEOUS
 Received Date: 11/1/2014 11:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	1.0	μg/L	1	11/7/2014 2:18:40 AM	R22373
Toluene	ND	1.0	μg/L	1	11/7/2014 2:18:40 AM	R22373
Ethylbenzene	ND	1.0	μg/L	1	11/7/2014 2:18:40 AM	R22373
Xylenes, Total	ND	2.0	μg/L	1	11/7/2014 2:18:40 AM	R22373
Surr: 4-Bromofluorobenzene	108	66.6-167	%REC	1	11/7/2014 2:18:40 AM	R22373

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

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

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- P Sample pH greater than 2.
- RL Reporting Detection Limit

Lab Order **1411007**

Date Reported: 11/10/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN Client Sample ID: MW-48

 Project:
 Largo LS
 Collection Date: 10/30/2014 12:45:00 PM

 Lab ID:
 1411007-016
 Matrix: AQUEOUS
 Received Date: 11/1/2014 11:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Batch	
EPA METHOD 8021B: VOLATILES					Analys	st: NSB
Benzene	48	1.0	μg/L	1	11/7/2014 2:45:36 PM	R22405
Toluene	ND	1.0	μg/L	1	11/7/2014 2:45:36 PM	R22405
Ethylbenzene	40	1.0	μg/L	1	11/7/2014 2:45:36 PM	R22405
Xylenes, Total	60	2.0	μg/L	1	11/7/2014 2:45:36 PM	R22405
Surr: 4-Bromofluorobenzene	140	66.6-167	%REC	1	11/7/2014 2:45:36 PM	R22405

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

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

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Lab Order **1411007**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 11/10/2014

CLIENT: APEX TITAN Client Sample ID: MW-37

 Project:
 Largo LS
 Collection Date: 10/30/2014 1:50:00 PM

 Lab ID:
 1411007-017
 Matrix: AQUEOUS
 Received Date: 11/1/2014 11:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Batch	
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	770	20	μg/L	20	11/7/2014 4:06:39 PM	R22405
Toluene	ND	20	μg/L	20	11/7/2014 4:06:39 PM	R22405
Ethylbenzene	140	20	μg/L	20	11/7/2014 4:06:39 PM	R22405
Xylenes, Total	510	40	μg/L	20	11/7/2014 4:06:39 PM	R22405
Surr: 4-Bromofluorobenzene	111	66.6-167	%REC	20	11/7/2014 4:06:39 PM	R22405

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

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 Page 17 of 19
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411007**

10-Nov-14

Client: APEX TITAN
Project: Largo LS

Sample ID 5ML RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: **PBW** Batch ID: R22373 RunNo: 22373 Prep Date: Analysis Date: 11/6/2014 SeqNo: 659760 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 ND Ethylbenzene 1.0 Xylenes, Total ND 2.0 Surr: 4-Bromofluorobenzene 21 20.00 104 66.6 167

Sample ID 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Batch ID: R22373 Client ID: **LCSW** RunNo: 22373 Prep Date: Analysis Date: 11/6/2014 SeqNo: 659761 Units: µg/L Analyte **PQL** SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual LowLimit 21 1.0 20.00 O 107 80 120 Benzene Toluene 21 1.0 20.00 0 107 80 120 Ethylbenzene 22 20.00 0 109 80 120 1.0 Xylenes, Total 66 2.0 60.00 0 111 80 120 21 107 Surr: 4-Bromofluorobenzene 20.00 66.6 167

Sample ID 1411007-001AMS SampType: MS TestCode: EPA Method 8021B: Volatiles MW-34 Batch ID: R22373 Client ID: RunNo: 22373 Analysis Date: 11/6/2014 SeaNo: 659768 Units: µg/L Prep Date: Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene 20 1.0 20.00 0.2220 100 80 120 Toluene 21 1.0 20.00 0.2300 103 80 120 21 1.0 20.00 106 79.7 126 Ethylbenzene 0 65 Xylenes, Total 2.0 60.00 0 109 80 120 Surr: 4-Bromofluorobenzene 22 20.00 109 66.6 167

Sample ID 1411007-001AMSD SampType: MSD TestCode: EPA Method 8021B: Volatiles MW-34 Client ID: Batch ID: R22373 RunNo: 22373 Prep Date: Analysis Date: 11/6/2014 SeqNo: 659769 Units: µg/L PQL SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result LowLimit HighLimit Qual 20 1.0 20.00 0.2220 100 80 120 0.187 20 Benzene Toluene 21 1.0 20.00 0.2300 102 80 120 0.414 20 Ethylbenzene 21 1.0 20.00 Λ 106 79.7 126 0.0188 20 Xylenes, Total 66 2.0 60.00 0 109 80 120 0.496 20 Surr: 4-Bromofluorobenzene 22 20.00 108 66.6 167 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

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411007**

10-Nov-14

Client: APEX TITAN
Project: Largo LS

Sample ID 5ML RB	SampT	ype: ME	BLK	Tes						
Client ID: PBW	Batch	1D: R2	2405	F	RunNo: 2	2405				
Prep Date:	Analysis D	1/7/2014	5	SeqNo: 6	60583	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	orobenzene 22 20.00				109	66.6	167			

Sample ID 100NG BTEX LC	S SampT	ype: LC	s	Tes	8021B: Volat	iles				
Client ID: LCSW	Batch	1D: R2	2405	F	RunNo: 2	2405				
Prep Date:	Analysis D	ate: 1 1	1/7/2014	8	SeqNo: 6	60584	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	112	80	120			
Toluene	23	1.0	20.00	0	115	80	120			
Ethylbenzene	23	1.0	20.00	0	116	80	120			
Xylenes, Total	70	2.0	60.00	0	117	80	120			
Surr: 4-Bromofluorobenzene		111	66.6	167						

Sample ID 1411007-016AMS	SampT	уре: М	3	Tes	8021B: Volati	iles				
Client ID: MW-48	Batch	n ID: R2	2405	R	RunNo: 2	2405				
Prep Date:	Analysis D	ate: 11	1/7/2014	S	SeqNo: 6	60586	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	I %REC LowLimit		HighLimit	%RPD	RPDLimit	Qual
Benzene	68	1.0	20.00	47.61	99.6	80	120			
Toluene	22	1.0	20.00	0.4760	109	80	120			
Ethylbenzene	58	1.0	20.00	39.73	93.1	79.7	126			
Xylenes, Total	120	2.0	60.00	60.44	95.5	80	120			
Surr: 4-Bromofluorobenzene	28		20.00		139	66.6	167			

Sample ID 1411007-016AMS	D SampT	уре: М	SD	TestCode: EPA Method 8021B: Volatiles										
Client ID: MW-48	Batch	n ID: R2	2405	F	RunNo: 2	2405								
Prep Date:	Analysis D)ate: 11	/7/2014	8	SeqNo: 6	60587	Units: μg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Benzene	67	1.0	20.00	47.61	97.2	80	120	0.725	20					
Toluene	22	1.0	20.00	0.4760	109	80	120	0.00895	20					
Ethylbenzene	59	1.0	20.00	39.73	94.2	79.7	126	0.349	20					
Xylenes, Total	120	2.0	60.00	60.44 97.1 80			120	0.770	20					
Surr: 4-Bromofluorobenzene	138 66.6 167 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

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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: APEX AZTEC Work Order Nu	mber: 1411007		RcptNo: 1
Received by/date: 1/0//12			
Logged By: Ashley Gallegos 11/1/2014 11:30:	00 AM	A	
Completed By: Ashley Gallegos 11/3/2014 8:54:5		A = 2	
	· · · · ·	J F ()	
Chain of Custody			
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		
<u>Log In</u>			
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 \square
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 🗹 [# of preserved
•			bottles checked
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes 🗹	No ∐	for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes 🗹	No □	Adjusted?
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 🗆	Checked by:
(ii no, notify customer for authorization.)			
Special Handling (if applicable)			
16. Was client notified of all discrepancies with this order?	Yes 🗌	No 🗆	NA 🗹
Person Notified:	ate:		
By Whom:	/ia: ☐ eMail ☐ Pl	none 🗌 Fax	☐ In Person
Regarding:	tanan and any suprassion of the contract of th		
Client Instructions:	and the second second second		
17. Additional remarks:			
18. <u>Cooler Information</u>			
Cooler No Temp °C Condition Seal Intact Seal N	No Seal Date	Signed By	
1 1.8 Good Yes			 - - - -

CHAIN OF CUSTODY RECORD	Lab use only Due Date: 3	Temp. of coolers when received (C°):	1 2 3 4 5	Page of				Lab Sample ID (Lab Use Only)	100-L0011h1 Athit	200-	800,	-20d	-005	-000	-007	,008	1-00-	0)0-						
																				ES:			;	ludge O - Oil
	ANALYSIS REQUESTED		7	2		7.	3228	7	×-									1	ŀ	Breigh / Imes NOTES:	Time:	Time: //30	Time:	C - Charcoal tube SL - sludge P/O - Plastic or other
	:						itainers	D\O												18/25/	Date: 10/31/14	Date: ///01/14	Date:	
	HAU	4BO	FREEMAN			ure But	No/Type of Containers	Start Depth End AOV AOV	2										☐ 100% Rush	Regelectory (Signature)	Received by: (Signature)	eceived by: (Signature)	Received by: (Signature)	1 L - Liquid A - Air Bag 250 ml - Glass wide mouth
	Laboratory: _	Address:	Contact:	Phone:	PO/SO #:	Samplen's Signature	50		34	50	5	7	3		8	6	0		☐ 50% Rush ☐ 1	Time: Regula	Time: Received 8:00	;; \) iii	W - Water S - Soil SD - Solid A/G - Amber / Or Glass 1 Liter
		ATEC. NR			SUMMETES PO/SO#:		lame ARGO	Identifying Marks of Sample(s)	m~-34	3-20		Mw-32	mw-43	MV-36	mw-88	mar 89	mw-90	FIWE -	☐ 25% Rush ☐	Date: 15-17	1899114 8	Date: Tim	-	W - Water S A/G - Amber / Or
		777) 		S ST	BRYAN	Project Name	೧೦೯೮	2									-	maj	7	(9)	3	,	water vial
					iger Kc	}	76	Time	0060	5460	0h91	1135	1225	1316	1475	145	1560	1605	N N	Relinquished by (Signature)	Relipquished by (Signature)	Relinquished by (Signature)	Relinquished by (Signature)	WW - Wastewater VOA - 40 ml vial
		APEX	Ollice Location		Project Manager	Sampler's Name	36412	Date	h-52-01									-	Turn around time	quished by	fuishedby	nquished by	quished by	
		₹ ₹	5		Proje	Sampl	Nig. V	Matrix	3					- L				-	Turn a	Relize		F. Z		Matrix Container

Apex TITAN, Inc. • 606 S. Rio Grande, Suite A, Downstairs • Aztec, New Mexico 87410 • Office: 505-334-5200 • Fax: 505-334-5204

CHAIN OF CUSTODY RECORD

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