GW-211

Supplemental Site Investigation Report Date: 2/22/2013

SUPPLEMENTAL SITE INVESTIGATION REPORT
(November 2012 and January 2013)

GROUNDWATER DISCHARGE PLAN GW-211

Property:

LARGO COMPRESSOR STATION
Section 15, Township 26N, Range 7W
Rio Arriba County, New Mexico
SWG Project No. 0410002
February 22, 2013

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LARGO COMPRESSOR STATION
Section 15, Township 26N, Range 7W
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1.0 EXECUTIVE SUMMARY

This Supplemental Site Investigation (SSI) Report has been prepared in accordance with the SSI Work Plan dated January 12, 2012, as submitted to the New Mexico Energy, Minerals, and Natural Resources Department (EMNRD), Oil Conservation Division (OCD) in correspondence dated March 2, 2012. This study is a continuation of the investigative activities initiated in March 2012 which were reported in the *Supplemental Site Investigation & Quarterly Groundwater Monitoring Report*, dated June 31, 2012. The primary objective of these extended activities was to further evaluate the extent of COCs in soil and/or groundwater within Area 3 (Retention Pond Area).

During the completion of the SSI, twenty three (23) soil borings were advanced in the eastern portion of the Site. Four (4) of the soil borings were subsequently converted into groundwater monitoring wells. Three (3) of these monitoring wells were installed to further evaluate the extent of constituents of concern (COCs) in groundwater in the area north of monitoring well MW-48 and one (1) monitoring well was installed to further evaluate the extent of COCs in groundwater in the area south of the retention pond.

Select soil samples collected from those soil borings converted into permanent monitoring wells were submitted for laboratory analysis. In addition, one (1) soil sample collected from soil boring SB-59 was submitted for laboratory analysis to verify the southern-most extent of observed soil impact. The soil samples collected from borings MW-53, MW-54, MW-55, and MW-75 did not exhibit total petroleum hydrocarbon (TPH), benzene or total benzene, toluene, ethylbenzene or xylenes (BTEX) concentrations above the OCD's *Remediation Action Levels (*RALs*)*. The soil sample collected from soil boring SB-59 exhibited total BTEX and TPH gasoline-range organics (GRO) and diesel-range organics (DRO) in excess of the OCD's RALs. The remainder of the soil borings (SB-56 through SB-58, and SB-60 through SB-74) were screened to obtain headspace readings utilizing a photoionization detector (PID) in an effort to further define the area of impact in the vicinity of the retention pond.

Subsequent to monitoring well development, groundwater samples were collected from each of the recently installed monitoring wells utilizing a disposable bailer to determine if the investigated areas were sufficiently delineated. Groundwater samples collected from monitoring wells MW-53, MW-54, MW-55, and MW-75 did not exhibit BTEX or TPH concentrations above the laboratory reporting limits (RLs), which are below the EMNRD Water Quality Control Commission (WQCC) *Groundwater Quality Standards (GQSs)*.

Based on the results of this supplemental investigation of Area 3, SWG has the following recommendations:

- Report the results of this investigation to the OCD;
- Conduct periodic groundwater sampling events to monitor the magnitude and extent of COCs in groundwater overtime.
- Prepare and submit a Corrective Action Work Plan (CAWP) to the OCD detailing potential corrective action alternatives to address LNAPL and/or COCs identified in soil and groundwater at the Site.

2.0 INTRODUCTION

2.1 SITE LOCATION AND HISTORY

The Largo Compressor Station is located off of County Road (CR) 379 in Section 15, Township 26N, Range 7W in Rio Arriba County, New Mexico, referred to hereinafter as the "Site" or "subject Site". The Site is a natural gas compressor station utilized to dehydrate and compress natural gas collected from production wells in the area for transportation via pipeline. The Site was constructed in the 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 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 New Mexico Administrative Code (NMAC) 19.15.30 Remediation. 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 suspected 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:

Area 1(Former Condensate Storage Tank Area)

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 of 2008. Additional detail regarding the investigative and corrective activities at Area 1 are provided in the *Environmental Site Investigation – Largo Compressor Station (GW-211) (SWG - March 24, 2011)*, and the *Corrective Action Pilot Study Report (SWG – October 10, 2011)*.

Area 2 (Valve Box Area)

Area 2 includes the new condensate storage tank battery and the immediately surrounding areas. 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/east 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 details regarding the investigative and corrective activities at Area 3 are provided in the following reports: *Environmental Site Investigation – Largo Compressor Station (GW-211) (SWG - March 24, 2011),* and the *Supplemental Site Investigation & Quarterly Groundwater Monitoring Report (SWG - June 31, 2012).*

Area 4 (Compression & Dehydration Area)

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

2.2 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 the current SSI, 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 — Area 1: *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 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 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 TPH GRO/DRO and BTEX analysis utilizing 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

Area 1: 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

Areas 1 through 4: 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. 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 Evirotech 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	Area 1: *Inspection Report – NMOCD (July 9, 2009):* Onsite inspection by NMOCD requires tank integrity testing, improvement on leak detection monitoring, liner repair, soil and groundwater remediation, system repair or replacement.
July 2009	Area 1: *Response to Inspection Report – Enterprise (July 23, 2009):* Enterprise submits a workplan to perform additional investigation activities at the Site.
July/August 2009	Area 3: 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 (GQSs).* 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 *GQSs*. 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 *GQSs*. 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 Evirotech land farm 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 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 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 the NMOCD *Remediation Action Level*. 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, 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 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

Area 1: *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

Area 1: 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 and 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 once-quarterly 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, MW3R, 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.

Areas 1 through 4: 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

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

Areas 1 through 4: *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

Area 1: *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.

Area 1: 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, 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

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

Areas 1 through 4: *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 GQSs 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

Area 1: 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	Area 1: *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	Areas 3 and 4: *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	Areas 3 and 4: *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 additional monitoring wells.
November 2012	Area 3: Enterprise resumes the supplemental investigation, focusing on additional soil and groundwater COC delineation in Area 3.

2.3 CONSTITUENTS OF CONCERN

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. Therefore, COCs targeted from investigation and subsequent corrective actions were limited to petroleum hydrocarbon constituents (TPH GRO/DRO and BTEX). In accordance with NMOCD guidelines and general industry practice, the soil and groundwater samples collected during previous completed investigation and corrective action activities were analyzed for TPH GRO/DRO utilizing EPA method SW-846 #8015M and BTEX using EPA SW-846 method #8021B.

Summary of Historical Soil Exceedances

- Based on the laboratory analytical results, TPH GRO/DRO concentrations were identified in soil samples collected from borings B-1(4'), B-2(12.5'), B-5 (17.5'), B-14(17.5') (*Geoprobe Investigation at Largo Compressor Station, Lodestar - May 16, 2009*); B-22(15.0'), B-23(15.0'), B-24(15.0'), B-29(18.0'), hand auger-2(14.0') (*Report of Subsurface Investigation at Largo Compressor Station, Lodestar - November 30, 2009*); MW-33(7.5'), MW-35(9.5'), MW-37(11.5') (*Environmental Site Investigation, SWG – March 24, 2011*); and Area 3 excavation samples "BWT" and "NE Wall" (*General Report EPCO Largo Station Summary, SMA - 2009*) above the OCD *Remediation Action Level* of 100 mg/Kg.

- Based on the laboratory analytical results, benzene concentrations were identified in soil samples collected from borings MW-35(9.5') (*Environmental Site Investigation, SWG – March 24, 2011),* and excavation sample "BWT" (see *General Report EPCO Largo Station Summary, SMA - 2009*) above the OCD *Remediation Action Level* of 10 mg/Kg.

- Based on the laboratory analytical results, the total BTEX concentrations identified in soil samples collected from borings B-22(15.0'), B-23(15.0') (*Report of Subsurface Investigation at Largo Compressor Station, Lodestar - November 30, 2009*); MW-33(7.5'), MW-35(9.5'), MW-37(11.5') (*Environmental Site Investigation,*

SWG – March 24, 2011); and excavation samples "BWT" and "NE Wall" (see *General Report EPCO Largo Station Summary, SMA - 2009*) were above the OCD *Remediation Action Level* of 50 mg/Kg.

October 2012 Groundwater Exceedances

Due to the presence of LNAPL hydrocarbons in association with the initial groundwater-bearing unit, monitoring wells MW-12, MW-33, MW-35, and MW-37 were not sampled during the completion of the October 2012 field activities. Monitoring well MW-42 was dry during the October 2012 groundwater sampling event.

- The groundwater samples collected from monitoring wells MW-7, MW-11, MW-15, MW-16, MW-39, MW-48, and MW-51 exhibited benzene concentrations ranging from 13 µg/L to 8,200 µg/L, which exceed the WQCC *Groundwater Quality Standard* of 10 µg/L.

- The groundwater sample collected from monitoring well MW-48 exhibited a xylene concentration of 1,700 µg/L, which exceeds the WQCC *Groundwater Quality Standard* of 620 µg/L.

Figure 3 indicates the approximate locations of the borings/ monitoring wells completed at the Site in relation to pertinent Site features and general Site boundaries. Figures 5 and 6 detail the OCD *Remediation Action Level* Exceedance Zone in soil and NMWQCC *Groundwater Quality Standard* Exceedance Zone in groundwater (based on October 2012 data), respectively. Comprehensive soil and groundwater analytical results for the site are included in Tables 1 and 2 (Appendix B), respectively.

2.4 OBJECTIVES OF SUPPLEMENTAL SITE INVESTIGATION

The primary objective for this phase of the supplemental site investigation activities was to further evaluate the extent of COCs in soil and/or groundwater within Area 3 in accordance with the SSI Work Plan dated January 12, 2012, as submitted to the New Mexico EMNRD OCD in correspondence dated March 2, 2012. These activities are a continuation of the investigative efforts that were initiated during March 2012 and documented in the *Supplemental Site Investigation & Quarterly Groundwater Monitoring Report (SWG - June 31, 2012).*

3.0 SITE CHARACTERIZATION

3.1 GEOLOGY & HYDROGEOLOGY

According to the New Mexico Bureau of Geology and Mineral Resource (Geologic Map of New Mexico 2003), the Site overlies the upper Nacimiento or lower San Jose geologic formation. The Nacimiento geologic formation is a heterogeneous non-marine formation composed of sandstone, siltstone, and shale, comprised of sediment eroded from the San Juan and Brazos-Sangre de Cristo uplifts. The Paleocene-age Nacimiento Group includes the Puerco and Torrejon Formations. The Eocene age San Jose geologic formation contains a mixture of clastic sedimentary rocks varying from siltstone to conglomerate, dominated by rocks containing sand-sized particles. The lithology encountered at the Site during boring activities were composed of Quaternary alluvial deposits derived from erosion of the parent sandstones and siltstones which

comprise the canyon walls. Based on the data collected during the completion of soil borings, the alluvia generally consist of tan silty sands and silty clays from the ground surface to at least 20 feet below ground surface (bgs).

The lithology observed during the advancement of soil boring MW-53 at the Site included a moderate yellowish brown (tan) silty sand to fine sand from the surface to approximately 15.0 feet bgs. The silty sand stratum was underlain by a tan clayey silt from 15.0 feet bgs to the terminus of the boring at 16.0 feet bgs. The lithologies observed in the remaining soil borings at the Site were generally similar to soil boring MW-53, with slightly varying sequences of silty sands and silty clays. Detailed lithologic descriptions are presented on the soil borings logs included in Appendix C.

The major aquifer underlying the Site vicinity is listed as the Colorado Plateaus Aquifer, which is made up of four smaller aquifers, the Uinta-Animas, the Mesa Verde, the Dakota-Glen, and the Coconino-De Chelly. The Uinta-Animas is the shallowest of these aquifers, and is present in the San Juan Basin. The general composition of the aquifers is moderately to well-consolidated sedimentary rocks of an age ranging from Permian to Tertiary. Each aquifer is separated from the others by an impermeable confining unit. Two of the confining units are completely impermeable and cover the entire area of the aquifers. The other two confining units are less extensive and are thinner. These units allow water to flow between the principal aquifers. There are countless streams, rivers, and lakes that overlay the Colorado Plateaus Aquifers. The surface water bodies in this region provide a place for the aquifers to discharge. Some of the high altitude rivers and lakes may also provide recharge.

The initial groundwater-bearing unit (GWBU) at the Site was encountered at depths ranging from less than 7 feet bgs (near the retention pond) to 20 feet bgs during these supplemental investigation activities. The retention pond appears to influence the observed groundwater levels in the immediate area, producing an apparent groundwater "mounding" in the immediate vicinity.

3.1.1 Groundwater Flow

The previously installed monitoring wells were historically surveyed for top-of-casing (TOC) elevations. The monitoring wells installed during this SSI were surveyed into the network during February 2013, and a full round of gauging is scheduled to be performed during the April 2013 groundwater sampling event. Based on the most recent site-wide sampling event, the groundwater flow direction at the Site is generally towards the northwest, with an average gradient of 0.0035 ft/ft.

Groundwater measurements collected during the most recent gauging event are presented with TOC elevations in Table 3, Appendix B. A groundwater gradient map for the October 2012 event is included as Figure 4 (Appendix A).

3.1.2 Groundwater Classification

In accordance with 19.15.30 NMAC *Remediation*, a groundwater-bearing unit is classified as an "Underground Source of Drinking Water" provided the groundwater-bearing unit is capable of producing water for human consumption or that contains ground water having a total dissolved solids (TDS) concentration of 10,000 mg/l or less and that is not an exempted aquifer.

Based on analyses from selected monitoring wells (see Table 2, Appendix B), TDS concentrations vary significantly across the site. Additional TDS samples will be collected to further evaluate groundwater quality.

3.2 LAND USE & CLASSIFICATION

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

The Site is an active compressor station, while adjacent, and surrounding (beyond adjacent) properties, are currently utilized as undeveloped agricultural rangeland with occasional oil and gas gathering facilities. A ranch house is located approximately 1,800 feet west of the site, across Palluche Canyon. Based on SWG's review of the available information and visual inspection of the Site and vicinity, the Site appears to meet the non-residential land use classification.

3.3 SITE RANKING & PROPOSED CLEANUP GOALS

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. To address activities related to condensate releases, the New Mexico EMNRD OCD utilizes the *Guidelines for Remediation of Leaks, Spills and Releases* as guidance, in addition to the 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 action.

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

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

Based on SWG's evaluation of the scoring criteria, the Site would have a 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, which is approximate 425 feet north of the Site, is the nearest surface water feature.
- Two (2) Out of Service water wells are located up- and/or cross-gradient from the areas of impact.

Based on a Total Ranking Score of 30, cleanup goals for soil located at the Site include: 10 mg/Kg for benzene, 50 mg/Kg for total BTEX and 100 mg/Kg for TPH GRO/DRO.

In addition, cleanup goals for groundwater located at the Site include the NMWQCC *Water Quality Standards* of: 10 µg/L for benzene, 750 µg/L for toluene, 750 µg/L for ethylbenzene, and 620 µg/L for xylenes. However, the New Mexico WQCC *Groundwater Quality Standards* may not be applicable since the initial groundwater-bearing unit might not qualify as an "Underground Source of Drinking Water" in accordance with 19.15.30 NMAC *Remediation* (The TDS analysis from some non-impacted monitoring wells exceed the 10,000 mg/L drinking water requirement). Additional TDS analyses will be performed to determine ultimate applicability.

4.0 SUPPLEMENTAL SITE INVESTIGATION

4.1 SOIL BORINGS & MONITORING WELLS

This SSI was performed as a continuation of the investigative activities initiated in March 2012 which were reported in the *Supplemental Site Investigation & Quarterly Groundwater Monitoring Report*, dated June 31, 2012. The primary objective of these extended activities was to further evaluate the extent of COCs in soil and/or groundwater within Area 3 (Retention Pond Area) in accordance with the SSI Work Plan dated January 12, 2012, as submitted to the New Mexico EMNRD, OCD in correspondence dated March 2, 2012.

During the completion of the SSI, twenty three (23) soil borings (MW-53, MW-54, MW-55, SB-56 through SB-74, and MW-75) were advanced in the eastern portion of the Site and to the north of CR-379.

Figure 3 of Appendix A is a Site Map which depicts the location of the soil borings in relation to pertinent land features.

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. Detailed lithologic descriptions are presented on the soil borings logs included in Appendix C.

Soil samples were collected continuously from the soil borings, 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 volatile organic compounds (VOCs). The PID was calibrated utilizing an isobutylene standard prior to use in the field.

PID readings were not identified above the instrument detection limit in the soils screened from borings MW-53, MW-54, MW-55, SB-71 through SB-74, and MW-75. PID readings ranging from below the instrument detection level to 14 parts per million (ppm) were identified in soil borings SB-58, SB-63, SB-64, SB-67, SB-68, and SB-69. Several borings (SB-56, SB-57, SB-59, SB-60, SB-62, SB-65, SB-66, and SB-70) exhibited PID readings in excess of 100 ppm, and were used to further define the extent of soil impact in the relative vicinity of the retention pond. The majority of soil borings located in the apparently hydrocarbon-affected area demonstrated elevated PID readings for soils above the capillary fringe zone, indicating possible "source area" impact. Field screening results are presented on the soil boring logs included in Appendix C. Figure 5a provides a visual presentation of the highest observed PID from the SSI soil borings.

Subsequent to advancement, four (4) of the soil borings (MW-53, MW-54, MW-55, and MW-75) were converted into groundwater monitoring wells. The monitoring wells were completed using the following methodology:

- Installation of 10 feet of 2-inch or 1.5-inch inside diameter, 0.010-inch machine slotted PVC well screen with a threaded bottom cap;
- Installation of 2-inch or 1.5-inch inside diameter, threaded flush joint PVC riser pipe to the ground surface (1.5-inch inside diameter at MW-75);
- Addition of a pre-sieved 10/20 grade annular silica sand pack from the bottom of the soil boring to 2-feet above the top of the well screen;
- Addition of a hydrated bentonite seal above the sand pack filter zone with addition of cement grout to the surface; and,
- Installation of an above-grade protective steel riser with locking cap.

Monitoring well construction details are presented on the monitoring well logs included in Appendix C.

4.2 INVESTIGATION SAMPLING PROGRAM

All analytical samples collected from the soil borings and monitoring wells during the SSI were analyzed for TPH GRO and DRO utilizing EPA method SW-846#8015M, and BTEX utilizing EPA method SW-846 #8021B.

A summary of the analysis, sample type, number of samples and EPA-approved methods are presented on the following table:

Analysis	Sample Type	No. of Samples	Method
TPH GRO/DRO	Soil	5	SW-846# 8015M
BTEX	Soil	5	SW-846# 8021B
TPH GRO/DRO	Groundwater	4	SW-846# 8015M
BTEX	Groundwater	4	SW-846# 8021B

4.2.1 Soil Sampling Program

SWG's soil sampling program involved submitting one (1) soil sample from each monitoring well soil boring (MW-53, MW-54, MW-55, and MW-75) and from soil boring SB-59 for laboratory analysis. Soil samples were collected from the zone exhibiting the highest PID reading, from a change in lithology, or from the bottom of the boring, based on the field professional's judgment.

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

4.2.2 Groundwater Sampling Program

Subsequent to monitoring well development and aquifer recovery, groundwater from each of the four (4) newly installed monitoring wells was sampled utilizing a disposable bailer to determine if the investigated areas were sufficiently delineated.

4.3 LABORATORY ANALYTICAL PROGRAM

The soil and groundwater samples were analyzed for TPH GRO/DRO using EPA method SW-846 #8015B and BTEX using EPA method SW-846 method #8021B.

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

4.4 QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

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

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

HEAL performed the analyses of samples under an adequate and documented quality assurance program to meet the project and data quality objectives. The laboratory's quality assurance program is generally consistent the quality standards outlined in the National Environmental Laboratory Accreditation Program, as amended. In addition, the

data generated by HEAL meet the intralaboratory performance standards for the selected analytical method and the performance standards are sufficient to meet the bias, precision, sensitivity, representativeness, comparability, and completeness, as specified in the project data quality objectives. Sample results that resulted in Data Qualifier flags are listed below:

Sample ID	Data Qualifier Flag	Comments/Reactions
SB-59 - Soil	TPH Gasoline Range Spike Recovery was outside the accepted recovery limits.	The surrogate spike flag is due to the interference of the matrix compounds, compounded by the dilution factor. The sample is suitable for the intended purpose. The sample also registered a total BTEX regulatory exceedance.

4.5 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 New Mexico Administrative Code (NMAC) 19.15.30 *Remediation*. These guidance documents establish investigation and abatement action requirements for sites subject to reporting and/or corrective action.

4.5.1 Soil Samples

SWG compared the TPH GRO/DRO and BTEX concentrations or laboratory reporting limits (RLs) associated with the soil samples collected from soil borings MW-53, MW-54, MW-55, MW-75, and SB-59 to the OCD *Remediation Action Levels*.

TPH GRO/DRO

Soil samples collected from soil borings MW-53, MW-54, MW-55, and MW-75 did not exhibit TPH GRO/DRO concentrations above the laboratory RLs, which are below the OCD's *Remediation Action Level* of 100 mg/Kg.

The Soil sample collected from soil boring SB-59 exhibited TPH GRO (3,600 mg/Kg) and DRO (88 mg/Kg) concentrations that exceed the OCD's combined TPH *Remediation Action Level* of 100 mg/Kg.

Benzene

The soil samples collected from soil borings MW-53, MW-54, MW-55, MW-75, and SB-59 exhibited benzene concentrations ranging from below the laboratory RLs to 3.0 mg/Kg, which are below the OCD's *Remediation Action Level* of 10 mg/Kg.

Total BTEX

The soil samples collected from soil borings MW-53, MW-54, MW-55, and MW-75 did not exhibit total BTEX concentrations above the laboratory RLs, which are below the OCD's *Remediation Action Level* of 50 mg/Kg.

The soil sample collected from soil boring SB-59 exhibited a total BTEX concentration of 203 mg/Kg, which exceeds the OCD's *Remediation Action Level* of 50 mg/Kg.

The results of the soil sample analyses are summarized in Table 1 of Appendix B. Figure 5 (Appendix A) presents the *Remediation Action Level* Exceedance Zone in Soil based on the cumulative soil analytical data and PID data. Figure 5a presents an enlarged view of the perceived Area 3 Remediation Action Level Exceedance Zone, including PID results for soil borings from which analytical samples were not obtained.

4.5.2 Groundwater Samples

SWG compared BTEX concentrations or laboratory RLs associated with the groundwater samples collected from monitoring wells during recent SSI sampling event to the New Mexico WQCC *Groundwater Quality Standards;* however, the New Mexico WQCC *Groundwater Quality Standards* may not be applicable since groundwater from some areas of the Site exceed the total dissolved solids standards described in 19.15.30 NMAC *Remediation.*

TPH GRO/DRO

The groundwater samples collected from monitoring wells MW-53, MW-54, MW-55, and MW-75 did not exhibit TPH GRO/DRO concentrations above the laboratory RLs during the SSI sampling event.

Benzene, Toluene, Ethylbenzene, and Xylenes

The groundwater samples collected from monitoring wells MW-53, MW-54, MW-55, and MW-75 did not exhibit benzene concentrations above the laboratory RLs, which are below the WQCC *Groundwater Quality Standard* of 10 µg/L.

The groundwater samples collected from monitoring wells MW-53, MW-54, MW-55, and MW-75 did not exhibit toluene concentrations above the laboratory RLs, which are below the WQCC *Groundwater Quality Standard* of 750 µg/L.

The groundwater samples collected from monitoring wells MW-53, MW-54, MW-55, and MW-75 did not exhibit ethylbenzene concentrations above the laboratory RLs, which are below the WQCC *Groundwater Quality Standard* of 750 µg/L.

The groundwater samples collected from monitoring wells MW-53, MW-54, MW-55, and MW-75 did not exhibit total xylenes concentrations above the laboratory RLs, which are below the WQCC *Groundwater Quality Standard* of 620 µg/L.

The results of the groundwater sample analyses are summarized in Table 2 of Appendix B. Figure 6 (Appendix A) presents the *Groundwater Quality Standard* Exceedance Zone for Benzene based on the October 2012 Quarterly monitoring data and the results from the SSI.

5.0 FINDINGS AND RECOMMENDATIONS

The primary objective of this phase of the supplemental site investigation activities was to further evaluate the extent of COCs in soil and/or groundwater within Area 3.

Area 3 (Retention Pond Area)

Historic soil and groundwater impact was reported during the excavation of a storm-water retention pond at the Site in June of 2009. Approximately 1,700 cubic yards of petroleum hydrocarbon affected soils were excavated from the area and disposed off-site, and approximately 1,120 barrels of hydrocarbon affected groundwater was removed from the resulting excavation and disposed off-site.

Based on October quarterly monitoring data, NAPL is present in association with the initial groundwater-bearing unit in monitoring wells MW-33, MW-35, and MW-37.

Satellite imagery and topographic maps suggest a former drainage channel traverses the Site from south to north through the retention pond area, resulting in the identified distribution of COCs in the initial groundwater-bearing zone in Area 3. During this phase of the SSI, four (4) additional monitoring wells, MW-53, MW-54, MW-55, and MW-75, were advanced downgradient and upgradient of the affected area to further delineate COCs in groundwater.

In addition to the monitoring well installations, nineteen (19) soil borings were advanced at the Site to further define the extent of COCs in soils. These soil borings were evaluated utilizing PID data and visual/olfactory evidence to determine the approximate extent of soil impact, and resulted in the identification of probable source areas. Based on soil boring data, it appears that the soil and groundwater impact in the vicinity may have resulted from historic oil and contact water treatment and storage in the area of the current retention pond and/or a historic release from a gas well tie-in pipeline which crosses the Site. The soil impact appears to follow the pipe chase for the tie-in to the trunk line, after which the impact appears to have followed the former drainage channel discussed in the previous paragraph.

One analytical sample (SB-59) was collected to confirm the level of impact at the southern extent, and adjacent to the pipeline.

The recent additions to the groundwater monitoring network appear to fully delineate the COC plume in the vicinity of the retention pond.

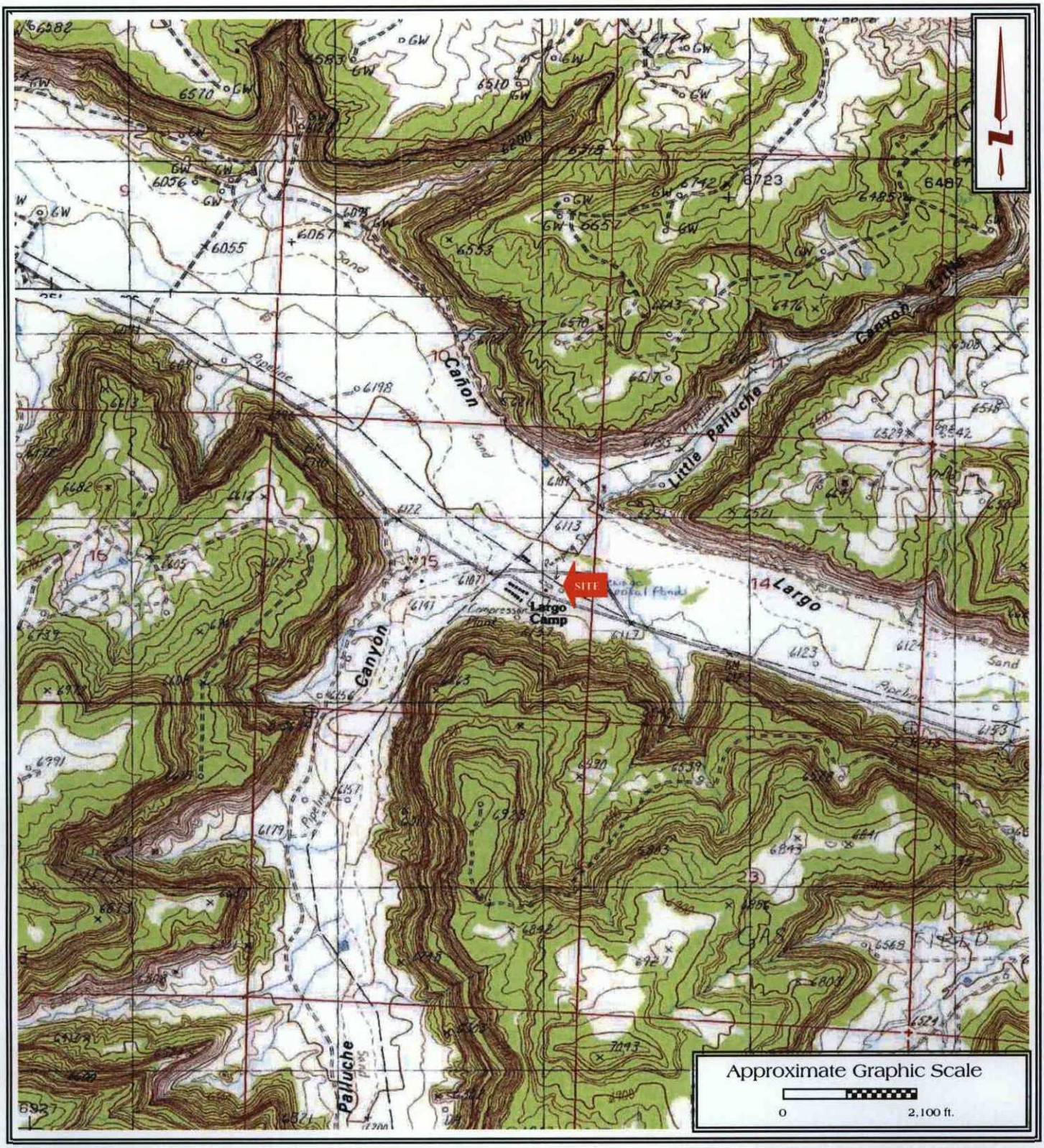
Based on the results of this supplemental investigation and groundwater monitoring activities, SWG has the following recommendations:

- **Report the results of this investigation to the OCD;**
- **Conduct periodic groundwater sampling events to monitor the COC plumes in groundwater.**
- **Prepare and submit a Corrective Action Work Plan (CAWP) to the OCD detailing potential corrective action alternatives to address LNAPL and/or COCs identified in soil and groundwater at the Site.**

Southwest GEOSCIENCE

APPENDIX A

Figures



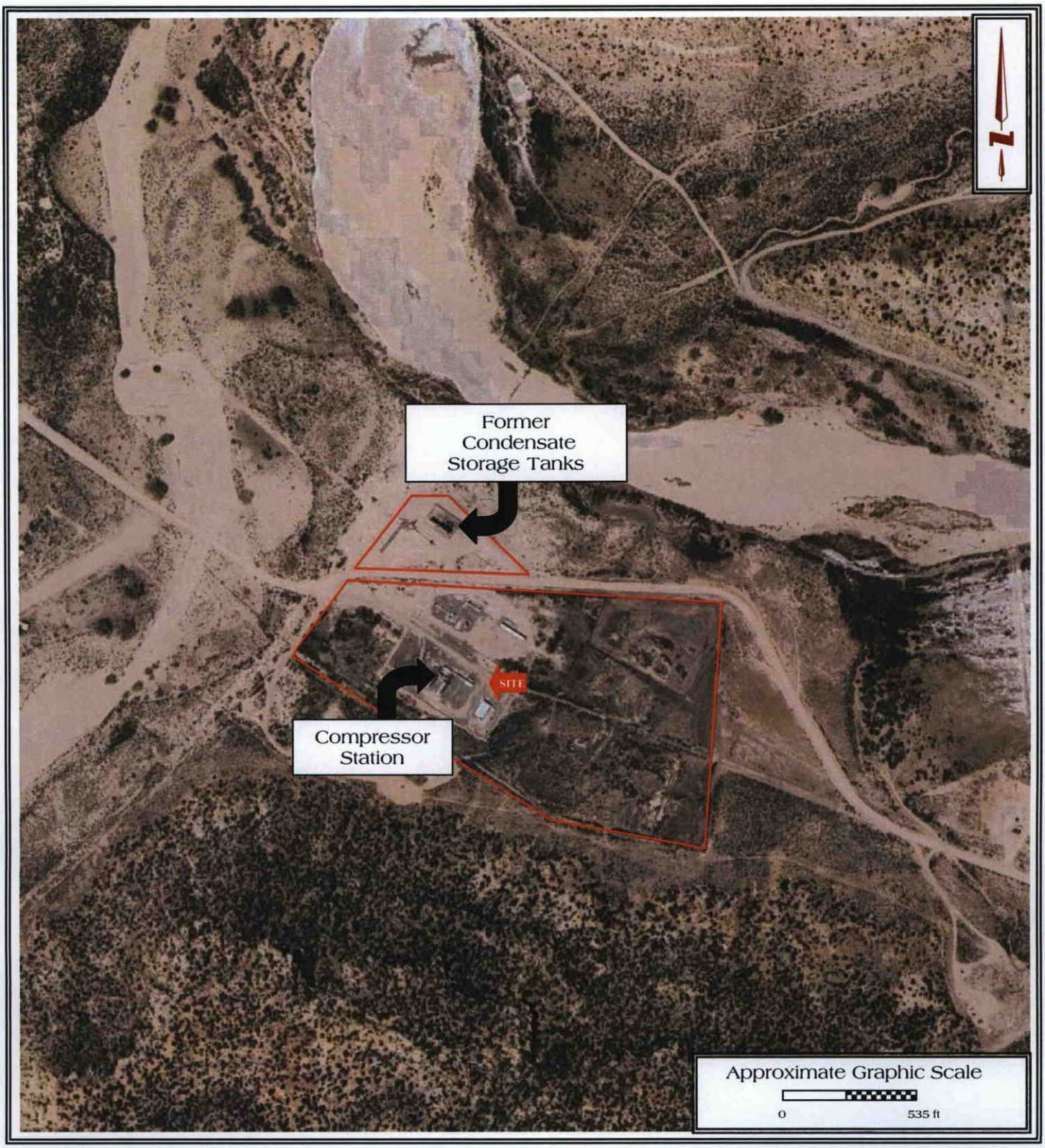
Largo Compressor Station
SE1/4 of NE1/4, S15 T26N R7W
Rio Arriba Co., New Mexico
N36° 29' 12.63"; W107° 33' 27.79"

SWG Project No. 0410002

Southwest GEOSCIENCE

FIGURE 1

Topographic Map
Smouse Mesa & Gould Pass, NM Quadrangle
Contour Interval – 20 Feet
1985



Largo Compressor Station
SE1/4 of NE1/4, S15 T26N R7W
Rio Arriba Co., New Mexico
N36° 29' 12.63"; W107° 33' 27.79"

SWG Project No. 0410002

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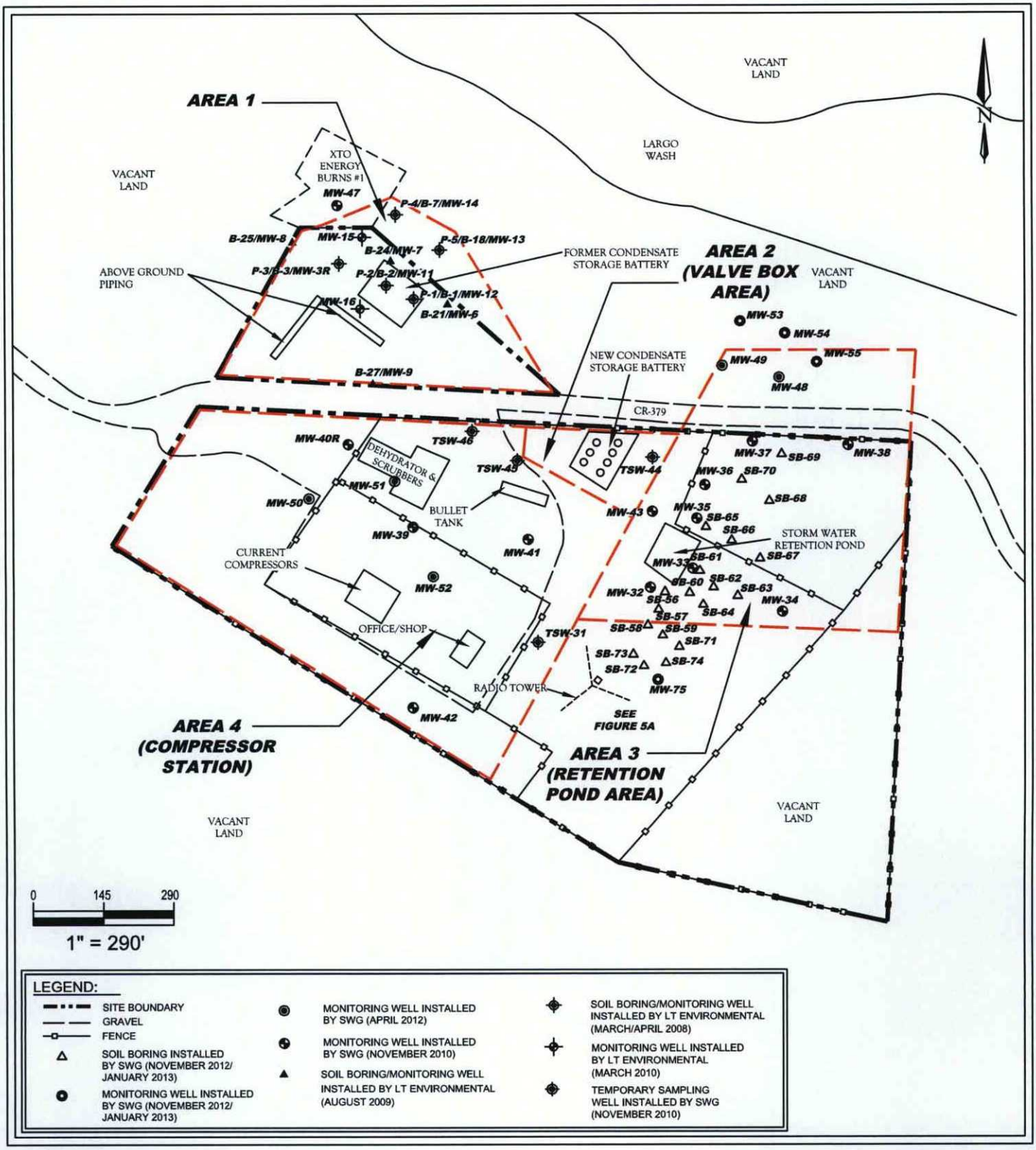
FIGURE 2
Site Vicinity Map
2010 Google Earth



Largo Compressor Station
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Rio Arriba Co., New Mexico
N36° 29' 12.63"; W107° 33' 27.79"

SWG Project No. 0410002

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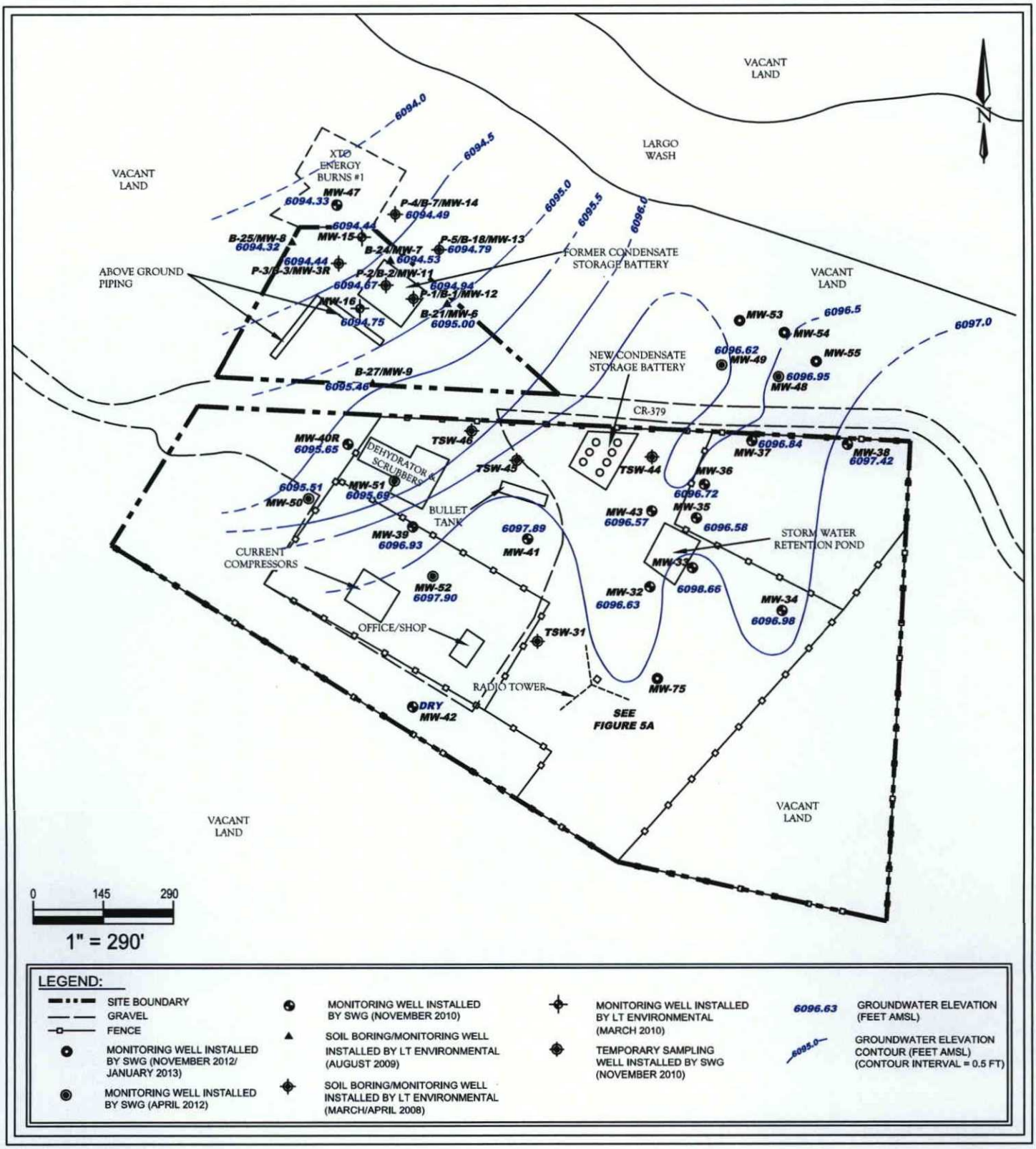
FIGURE 3

SITE MAP



Largo Compressor Station
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Rio Arriba Co., New Mexico
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SWG Project No. 0410002

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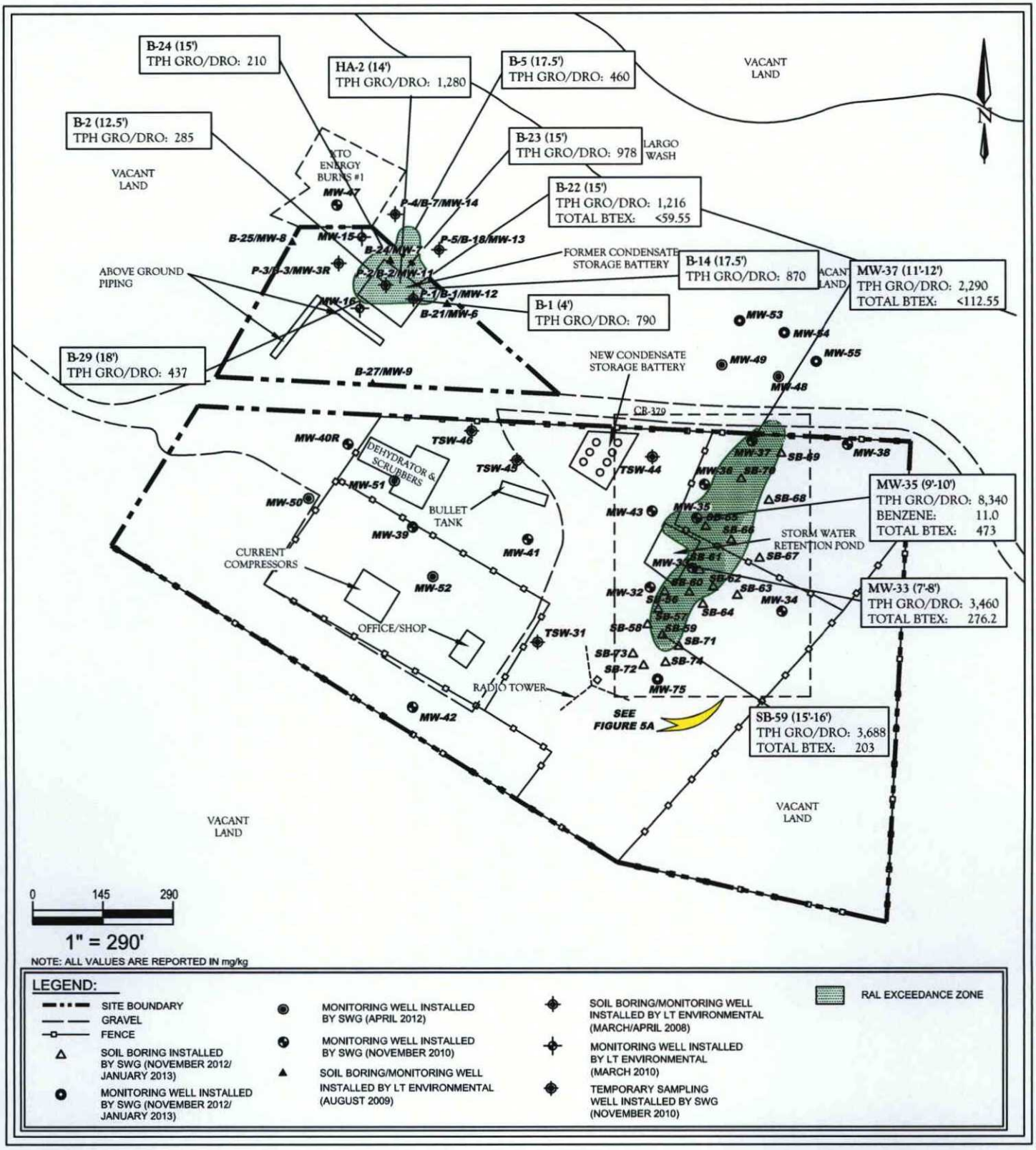
FIGURE 4

GROUNDWATER GRADIENT MAP

OCTOBER 2012



Largo Compressor Station
SE1/4 of NE1/4, S15 T26N R7W
Rio Arriba Co., New Mexico
N36° 29' 12.63"; W107° 33' 27.79"

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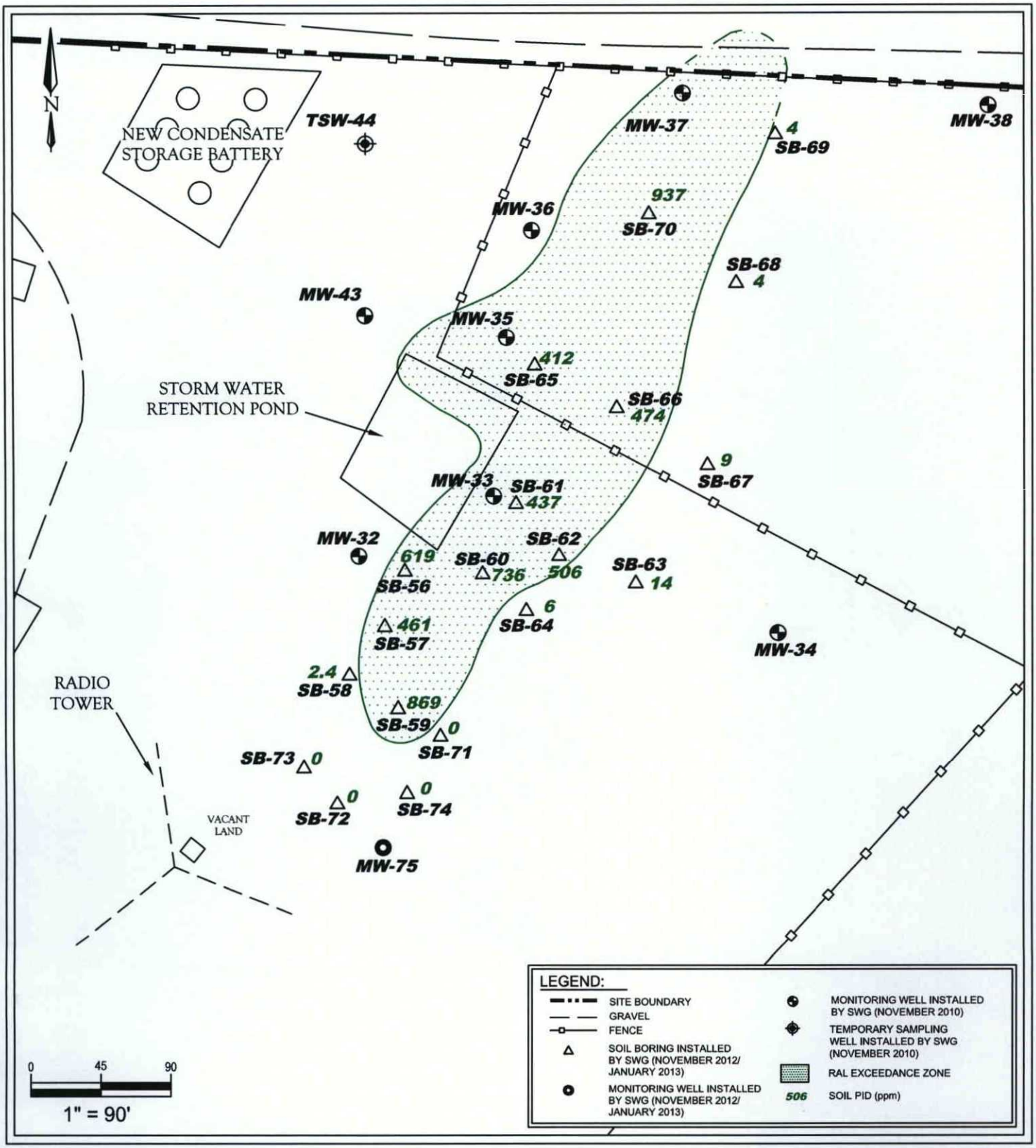
FIGURE 5

REMEDIATION ACTION LEVEL (RAL) EXCEEDANCE ZONE IN SOIL



Largo Compressor Station
SE1/4 of NE1/4, S15 T26N R7W
Rio Arriba Co., New Mexico
N36° 29' 12.63"; W107° 33' 27.79"

SWG Project No. 0410002

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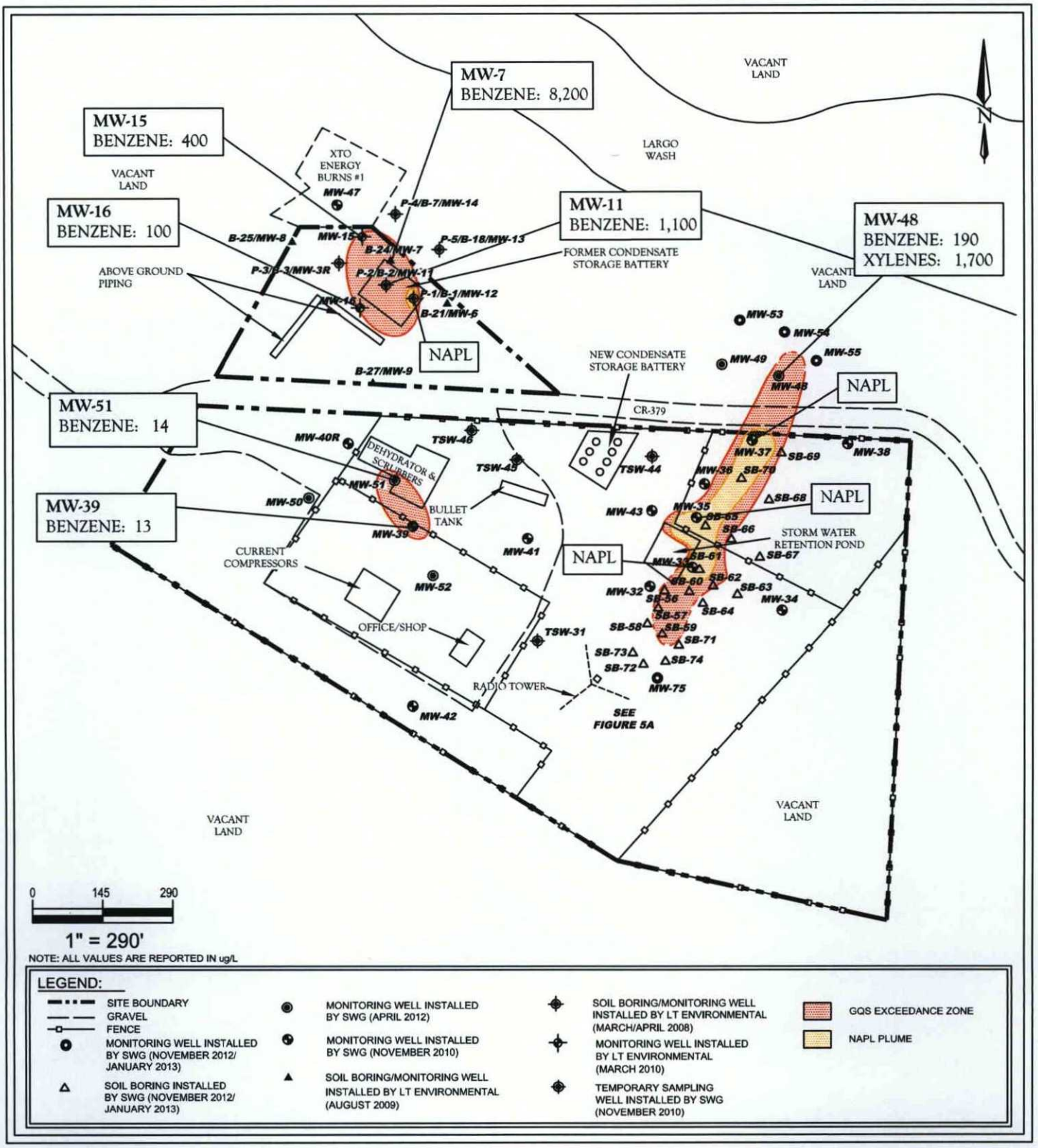
FIGURE 5A

AREA 3 REMEDIATION ACTION LEVEL (RAL) EXCEEDANCE ZONE IN SOIL



Largo Compressor Station
SE1/4 of NE1/4, S15 T26N R7W
Rio Arriba Co., New Mexico
N36° 29' 12.63"; W107° 33' 27.79"

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FIGURE 6

GROUNDWATER (GQS) EXCEEDANCE ZONE IN GROUNDWATER

OCTOBER 2012

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APPENDIX B

Tables

Southwest GEOSCIENCE

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 (mg/kg)	TPH DRO (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department, Oil Conservation Division, Remediation Action Level			10	NE	NE	NE	50	100	
Soil Boring Advanced by Lodestar/LTE									
B-1	3.31.08	4.0	<0.5	<0.5	1.5	44	<46.5	**550**	**240**
B-1	3.31.08	14.5	1.8	<0.05	0.12	0.25	<2.22	6.7	<10
B-2	3.31.08	12.5	<0.5	1.4	0.82	13	<15.72	**240**	**45**
B-2	3.31.08	21.0	1.5	<0.05	<0.05	0.23	<1.83	7.5	<10
B-3	3.31.08	21.0	<0.05	<0.05	<0.05	<0.1	<0.16	<5.0	<10
B-4	3.31.08	23.0	0.64	<0.05	0.19	0.12	<1	<5.0	<10
B-5	4.01.08	17.5	1.2	<0.1	1.7	17	<20	**400**	**60**
B-6	4.01.08	18.0	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-7	4.01.08	18.0	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-8	4.01.08	18.0	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-9	4.01.08	21.0	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-10	4.01.08	10.0	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-10	4.01.08	20.0	0.06	<0.05	0.16	2.3	<2.57	55	<10
B-11	4.01.08	20.0	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-12	4.02.08	18.5	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-12	4.02.08	20.0	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-13	4.02.08	10.0	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-13	4.02.08	12.5	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-13	4.02.08	20.0	0.092	<0.05	<0.05	<0.1	<0.292	9.8	<10
B-14	4.02.08	5.0	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-14	4.02.08	17.5	6.2	5.5	1.8	18	31.5	**870**	**<10**
B-14	4.02.08	22.0	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-15	4.02.08	17.5	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-15	4.02.08	20.0	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-16	4.02.08	20.0	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-17	4.02.08	17.5	0.47	<0.05	<0.05	<0.1	<0.67	<5.0	<10
B-17	4.02.08	20.0	0.069	<0.05	<0.05	<0.1	<0.269	<5.0	<10
B-18	4.02.08	20.0	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-19	4.02.08	20.0	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-21	8.04.09	20.0	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-22	8.04.09	15.0	10	25	5.8	62	**102.8**	**1200**	**16**
B-22	8.04.09	20.0	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-23	8.04.09	15.0	<0.25	9.3	4	46	**<59.55**	**960**	**18**
B-23	8.04.09	20.0	0.28	<0.05	<0.05	<0.1	<0.48	<5.0	<10
B-24	8.04.09	15.0	<0.25	<0.25	0.63	7.9	<9.03	**200**	**10**
B-24	8.04.09	22.0	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-25	8.04.09	20.0	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-26	8.04.09	20.0	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-27	8.04.09	20.0	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-28	8.07.09	15.0	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-28	8.07.09	20.0	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-29	8.07.09	15.0	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-29	8.07.09	20.0	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-29	8.07.09	18.0	<1.0	<1.0	1.7	18	<21.7	**420**	**17**
B-30	8.07.09	15.0	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
B-30	8.07.09	20.0	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
Hand Auger -1	8.07.09	5.0	<0.05	<0.05	<0.05	<0.1	<0.25	<5.0	<10
Hand Auger -2	8.07.09	14.0	<1.0	<1.0	<1.0	<3.0	<6.0	**980**	**300**

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

NA = Not Analyzed

NE = Not Established

NAPL = Non-aqueous phase liquid

* = piezometer well was replaced with associated monitoring well

Southwest GEOSCIENCE

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 (mg/kg)	TPH DRO (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department, Oil Conservation Division, Remediation Action Level			10	NE	NE	NE	50	100	
Soil Samples Collected by Souder, Miller and Associates									
Area 2 (Valve Box Area)									
Riser Wall (South)	7.01.09	5 - 10	NA	NA	NA	NA	NA	<5.0	28
South Wall (East)	7.01.11	5 - 10	NA	NA	NA	NA	NA	<5.0	17
North Wall (West)	7.01.11	5 - 10	NA	NA	NA	NA	NA	<5.0	<10
Road Wall (North)	7.09.11	13	<0.050	<0.050	<0.050	<0.10	ND	<5.0	<10
Area 3 (Retention Pond Area)									
PH-6	6.26.09	Not Avail.	NA	NA	NA	NA	NA	<10	<10
RPE	7.14.09	13.0	0.5	1.8	0.25	2.6	5.15	28	13
RPES	7.14.09	0.0	<0.050	1.2	0.07	8.4	9.72	**130**	**40**
BWT	7.15.09	20.0	**14**	210	45	460	**729**	**7,200**	**540**
NE Wall	7.15.09	Not Avail.	9.7	67	31	230	**111**	**4,000**	**360**
Soil Borings Advanced by Southwest Gesocience									
TSW-31	11.16.10	12.0 - 14.0	<0.05	<0.05	<0.05	<0.10	<0.25	<5.0	<10
MW-32	11.16.10	13.0 -14.0	<0.05	<0.05	<0.05	<0.10	<0.25	<5.0	<10
MW-33	11.16.10	7.0 - 8.0	7.2	82	17	170	**276.2**	**3,300**	**160**
MW-34	11.16.10	16.0 - 17.0	<0.05	<0.05	<0.05	<0.10	<0.25	<5.0	<10
MW-35	11.17.10	9.0 - 10.0	**11**	130	32	300	**473**	**7,900**	**440**
MW-36	11.17.10	12.0 - 13.0	<0.05	<0.05	<0.05	<0.10	<0.25	<5.0	<10
MW-37	11.17.10	11.0 - 12.0	<0.05	14	9.5	89	**<112.55**	**2,000**	**290**
MW-38	11.17.10	9.0 - 10.0	<0.05	<0.05	<0.05	<0.10	<0.25	<5.0	<10
MW-39	11.17.10	15.0 - 16.0	<0.05	<0.05	<0.05	<0.10	<0.25	<5.0	<10
MW-40	11.17.10	16.0 - 17.0	<0.05	<0.05	<0.05	<0.10	<0.25	<5.0	<10
MW-41	11.17.10	13.0 - 14.0	<0.05	<0.05	<0.05	<0.10	<0.25	<5.0	<10
MW-42	11.17.10	19.0 - 20.0	<0.05	<0.05	<0.05	<0.10	<0.25	<5.0	<10
MW-43	11.17.10	15.0 - 16.0	<0.05	<0.05	<0.05	<0.10	<0.25	<5.0	<10
TSW-44	11.17.10	15.0 - 16.0	<0.05	<0.05	<0.05	<0.10	<0.25	<5.0	<10
TSW-45	11.17.10	14.0 - 15.0	<0.05	<0.05	<0.05	<0.10	<0.25	<5.0	<10
TSW-46	11.17.10	12.0 - 13.0	<0.05	<0.05	<0.05	<0.10	<0.25	<5.0	<10
MW-47	11.22.10	16.0 - 18.0	<0.05	<0.05	<0.05	<0.10	<0.25	<5.0	<10
MW-48	3.20.12	11.0 -12.0	0.056	<0.049	<0.049	0.40	0.456	<4.9	<9.9
MW-49	3.20.12	10.0 - 11.0	<0.050	<0.050	<0.050	<0.099	<0.249	<5.0	<9.8
MW-50	3.20.12	20.0 - 21.0	<0.050	<0.050	<0.050	<0.10	<0.25	<5.0	<10.0
MW-51	3.20.12	12.0 - 13.0	0.049	0.16	<0.047	0.13	0.339	<4.7	<10.0
MW-52	3.20.12	16.0 - 17.0	<0.048	<0.048	<0.048	<0.097	<0.241	<4.8	<10
MW-53	11.28.12	9.0 - 10.0	<0.046	<0.046	<0.046	<0.092	<0.23	<4.6	<9.9
MW-54	11.28.12	9.0 - 10.0	<0.049	<0.049	<0.049	<0.098	<0.245	<4.9	<10
MW-55	11.28.12	8.5 - 9.5	<0.048	<0.048	<0.048	<0.096	<0.24	<4.8	<9.9
SB-59	11.28.12	15.0 - 16.0	3	57	13	130	**203**	**3,600**	**88**
MS-75	1.22.13	17.0 - 18.0	<0.050	<0.050	<0.050	<0.10	<0.25	<5.0	<10

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

NA = Not Analyzed

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NAPL = Non-aqueous phase liquid

* = piezometer well was replaced with associated monitoring well

Southwest GEOSCIENCE

TABLE 2
Largo Compressor Station
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Date	Total Dissolved Solids (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)
New Mexico Water Quality Control Commmission Groundwater Quality Standards		NE	10	750	750	620	NE	NE
Monitoring Wells Installed by Lodestar								
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
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
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
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

Southwest GEOSCIENCE

TABLE 2
Largo Compressor Station
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Date	Total Dissolved Solids (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)
New Mexico Water Quality Control Commmission Groundwater Quality Standards		NE	10	750	750	620	NE	NE
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-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	<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-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-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

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TABLE 2
Largo Compressor Station
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Date	Total Dissolved Solids (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)
New Mexico Water Quality Control Commmission Groundwater 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	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-9	2.25.10	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-9	4.05.10	NA	<1.0	<1.0	<1.0	<2.0	<0.05	<1.0
MW-9	5.27.10	NA	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-9	7.13.10	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	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-9	4.19.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-9	7.29.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-9	10.27.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-9	1.27.12	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-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	8.9	<1.0	<1.0	<2.0	0.19	<1.0
MW-15	2.1.11	NA	**16**	<1.0	<1.0	<2.0	0.06	<1.0
MW-15	4.18.11	NA	**13**	<1.0	<1.0	<2.0	0.14	<1.0
MW-15	7.28.11	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	**64**	<1.0	1.1	<2.0	0.22	<1.0
MW-15	10.19.12	NA	**400**	<1.0	7.2	7.8	2.0	<1.0
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	**47**	<1.0	<1.0	<2.0	0.3	<1.0
MW-16	8.26.10	NA	**16**	<1.0	<1.0	<2.0	0.095	<1.0
MW-16	11.18.10	NA	3.4	<1.0	<1.0	<2.0	0.11	<1.0
MW-16	2.1.11	NA	**61**	<1.0	1.3	2.1	0.20	<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	1.30.12	NA	**10**	<1.0	<1.0	<2.0	0.096	<1.0
MW-16	4.18.12	NA	**20**	<1.0	1.0	<2.0	0.14	<1.0
MW-16	7.31.12	NA	**46**	<1.0	1.9	<2.0	0.23	<1.0
MW-16	10.19.12	NA	**100**	<1.0	3.9	<2.0	0.38	<1.0
TSW-31	11.23.10	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
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-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-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	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-34	10.16.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0

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GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Date	Total Dissolved Solids (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)
New Mexico Water Quality Control Commission Groundwater Quality Standards		NE	10	750	750	620	NE	NE
MW-35	1.28.11	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-35	4.20.11	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-35	7.28.11	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-35	10.26.11	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-35	1.27.12	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-35	4.18.12	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-35	7.30.12	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-35	10.19.12	NA	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
MW-36	1.31.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-36	4.20.11	NA	<1.0	2.1	<1.0	<2.0	<0.050	<1.0
MW-36	7.29.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-36	10.27.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-36	1.27.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-36	4.18.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-36	7.30.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-36	10.17.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
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-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	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-38	10.17.12	3,000	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-39	1.26.11	NA	1,200	730	37	570	11	<1.0
MW-39	4.19.11	NA	120	<1.0	1.6	5.9	0.33	<1.0
MW-39	7.29.11	NA	27	14	1.9	18	0.80	<1.0
MW-39	10.27.11	NA	260	<1.0	1.2	3.5	0.44	<1.0
MW-39	1.27.12	NA	580	48	4.3	79	1.8	<1.0
MW-39	4.18.12	NA	1,500	620	36	860	12	112
MW-39	7.30.12	NA	170	<2.0	<2.0	8.6	0.58	<1.0
MW-39	10.17.12	NA	13	<2.0	<2.0	<4.0	<0.10	<1.0
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	1.27.12	NA	Dry	Dry	Dry	Dry	Dry	Dry
MW-40R	4.18.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-40R	7.30.12	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-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	10.27.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-41	1.27.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-41	4.18.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-41	7.30.12	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-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	<5.0	<5.0	<5.0	<10	<0.25	<1.0
MW-42	7.28.11	NA	Dry	Dry	Dry	Dry	Dry	Dry
MW-42	10.26.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-42	1.30.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-42	4.18.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-42	7.30.12	NA	Dry	Dry	Dry	Dry	Dry	Dry
MW-42	10.16.12	NA	Dry	Dry	Dry	Dry	Dry	Dry

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TABLE 2
Largo Compressor Station
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Date	Total Dissolved Solids (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)
New Mexico Water Quality Control Commmission Groundwater Quality Standards		NE	10	750	750	620	NE	NE
MW-43	1.28.11	NA	<1.0	<1.0	<1.0	<2.0	0.06	<1.0
MW-43	4.19.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-43	7.29.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-43	10.26.11	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-43	1.27.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-43	4.18.12	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
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
MW-47	1.28.11	NA	<5.0	<5.0	<5.0	<10	1.3	2.5
MW-47	4.18.11	NA	<5.0	<5.0	<5.0	<10	2.0	1.2
MW-47	7.28.11	NA	<5.0	<5.0	<5.0	27.0	6.6	1.1
MW-47	10.28.11	NA	<5.0	<5.0	<5.0	<10	1.4	2.7
MW-47	1.30.12	NA	<5.0	<5.0	<5.0	<10	2.6	2.5
MW-47	4.18.12	NA	**11**	<5.0	16	38	5.5	2.9
MW-47	7.31.12	NA	<10	<10	<10	<20	4.5	2.9
MW-47	10.18.12	NA	<5.0	<5.0	<5.0	91	12	1.8
MW-48	4.18.12	NA	**290**	**3,200**	360	**5,000**	25	1.3
MW-48	7.30.12	NA	**120**	**1,100**	160	**2,900**	15	<1.0
MW-48	10.17.12	NA	**190**	580	150	**1,700**	8.5	<1.0
MW-49	4.18.12	NA	<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	10.17.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-50	4.18.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-50	7.30.12	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-50	10.17.12	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	10.16.12	NA	**14**	<1.0	4.8	21	0.16	<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	10.17.12	27,000	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-53	01.29.13	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-54	01.29.13	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-55	01.29.13	NA	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-75	01.29.13	NA	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0

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

NA = Not Analyzed

NE = Not Established

NAPL = Non-aqueous phase liquid

* = piezometer well was replaced with associated monitoring well

TABLE 3
Largo Compressor Station
Groundwater Elevations

Monitoring Well ID	Measurement Date	Top-of-Casing Elevation (feet)	Depth to PSH (feet)	Depth to Water (feet)	PSH Thickness (feet)	Corrected Groundwater Elevation
MW-3R	4.5.10	6117.47	None Observed	21.83	0.0	6095.64
	5.27.10		None Observed	21.82	0.0	6095.65
	6.25.10		None Observed	22.22	0.0	6095.25
	7.13.10		None Observed	22.47	0.0	6095.00
	8.26.10		None Observed	22.24	0.0	6095.23
	11.18.10		None Observed	22.32	0.0	6095.15
	1.25.11		None Observed	22.13	0.0	6095.34
	4.22.11		None Observed	21.99	0.0	6095.48
	7.27.11		None Observed	22.81	0.0	6094.66
	10.26.11		None Observed	22.91	0.0	6094.56
	1.26.12		None Observed	22.74	0.0	6094.73
	4.19.12		None Observed	22.61	0.0	6094.86
MW-6	8.10.09	6115.47	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
	4.22.11		None Observed	19.42	0.0	6096.05
	7.27.11		None Observed	20.4	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			Not Gauged		Not Gauged
MW-7	8.10.09	6116.65	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
	4.22.11		None Observed	21.22	0.0	6095.43
	7.27.11		None Observed	21.8	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
MW-8	8.10.09	6118.28	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	23.3	0.0	6094.98
	1.25.11		None Observed	23.1	0.0	6095.18
	4.22.11		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

TABLE 3
Largo Compressor Station
Groundwater Elevations

Monitoring Well ID	Measurement Date	Top-of-Casing Elevation (feet)	Depth to PSH (feet)	Depth to Water (feet)	PSH Thickness (feet)	Corrected Groundwater Elevation
MW-9	8.10.09	6117.83	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	0.0	6096.83
	5.27.10		None Observed	21.1	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
	4.22.11		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
MW-11	4.5.10	6116.65	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
	4.22.11		None Observed	20.91	0.0	6095.74
	7.27.11		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
MW-12	4.5.10	6111.24	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
	4.22.11		None Observed	15.3	0.0	6095.94
	7.27.11		None Observed	16.1	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		None Observed	15.83	0.0	6095.41
MW-13	4.5.10	6115.46	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
	7.27.11		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
MW-14	4.5.10	6115.99	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
	7.27.11		None Observed	21.47	0.0	6094.52
	10.26.11		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

TABLE 3
Largo Compressor Station
Groundwater Elevations

Monitoring Well ID	Measurement Date	Top-of-Casing Elevation (feet)	Depth to PSH (feet)	Depth to Water (feet)	PSH Thickness (feet)	Corrected Groundwater Elevation
MW-15	4.5.10	6116.49	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
	4.22.11		None Observed	20.95	0.0	6095.54
	7.27.11		None Observed	21.95	0.0	6094.54
	10.26.11		None Observed	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	6094.93
MW-16	4.5.10	6117.57	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
	7.27.11		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
MW-32	1.25.11	6110.2	None Observed	12.67	0.0	6097.53
	4.22.11		None Observed	12.49	0.0	6097.71
	7.27.11		None Observed	13.47	0.0	6096.73
	10.26.11		None Observed	13.56	0.0	6096.64
	1.26.12		None Observed	13.23	0.0	6096.97
	4.18.12		None Observed	13.05	0.0	6097.15
MW-33	1.25.11*	6114	16.08	16.44	0.36	6097.88
	4.22.11		16.59	16.60	0.01	6097.41
	7.27.11		16.07	16.72	0.65	6097.85
	10.26.11		15.55	16.15	0.60	6098.38
	1.26.12		15.83	15.84	0.01	6098.17
	4.18.12		Not Gauged			Not Gauged
MW-34	1.25.11	6115.36	None Observed	17.38	0.0	6097.98
	4.22.11		None Observed	17.20	0.0	6098.16
	7.27.11		None Observed	18.23	0.0	6097.13
	10.26.11		None Observed	18.32	0.0	6097.04
	1.26.12		None Observed	17.98	0.0	6097.38
	4.18.12		None Observed	17.78	0.0	6097.58
MW-35	1.25.11*	6112.21	14.5	14.75	0.25	6097.68
	4.22.11		14.22	14.80	0.58	6097.92
	7.27.11		15.11	16.36	1.25	6096.95
	10.26.11		15.14	16.64	1.50	6096.89
	1.26.12		14.72	14.73	0.01	6097.49
	4.18.12		Not Gauged			Not Gauged
MW-36	1.25.11	6111.42	None Observed	13.80	0.0	6097.62
	4.22.11		None Observed	13.65	0.0	6097.77
	7.27.11		None Observed	14.69	0.0	6096.73
	10.26.11		None Observed	14.45	0.0	6096.97
	1.26.12		None Observed	14.41	0.0	6097.01
	4.18.12		None Observed	14.18	0.0	6097.24
MW-37	1.25.11	6110.79	None Observed	12.91	sheen	6097.88
	4.22.11		None Observed	12.78	0.0	6098.01
	7.27.11		13.81	13.84	0.03	6096.98
	10.26.11		13.88	13.92	0.04	6096.91
	1.26.12		13.54	13.54	0.01	6097.26
	4.18.12		Not Gauged			Not Gauged

TABLE 3
Largo Compressor Station
Groundwater Elevations

Monitoring Well ID	Measurement Date	Top-of-Casing Elevation (feet)	Depth to PSH (feet)	Depth to Water (feet)	PSH Thickness (feet)	Corrected Groundwater Elevation
MW-38	1.25.11	6110.48	None Observed	12.06	0.0	6098.42
	4.22.11		None Observed	11.87	0.0	6098.61
	7.27.11		None Observed	13.01	0.0	6097.47
	10.26.11		None Observed	13.10	0.0	6097.38
	1.26.12		None Observed	12.68	0.0	6097.80
	4.18.12		None Observed	12.11	0.0	6098.37
MW-39	1.25.11	6113.84	None Observed	16.21	0.0	6097.63
	4.22.11		None Observed	17.35	0.0	6096.49
	7.27.11		None Observed	16.43	0.0	6097.41
	10.26.11		None Observed	16.52	0.0	6097.32
	1.26.12		None Observed	16.57	0.0	6097.27
	4.18.12		None Observed	16.61	0.0	6097.23
MW-40	1.25.11	6115.69	None Observed	19.16	0.0	6096.53
	4.22.11		None Observed	dry	0.0	dry
	7.27.11		None Observed	dry	0.0	dry
	10.26.11		None Observed	dry	0.0	dry
	1.26.12		None Observed	dry	0.0	dry
MW-40R	4.18.12		None Observed	19.58	0.0	Not Yet Surveyed
MW-41	1.25.11	6112.1	None Observed	14.14	0.0	6097.96
	4.22.11		None Observed	14.18	0.0	6097.92
	7.27.11		None Observed	14.08	0.0	6098.02
	10.26.11		None Observed	14.97	0.0	6097.13
	1.26.12		None Observed	14.20	0.0	6097.90
	4.18.12		None Observed	14.27	0.0	6097.83
MW-42	1.25.11	6121.5	None Observed	24.88	0.0	6096.62
	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	6096.34
	1.26.12		None Observed	24.92	0.0	6096.58
	4.18.12		Not Gauged			Not Gauged
MW-43	1.25.11	6112.91	None Observed	15.41	0.0	6097.50
	4.22.11		None Observed	15.30	0.0	6097.61
	7.27.11		None Observed	16.27	0.0	6096.64
	10.26.11		None Observed	16.35	0.0	6096.56
	1.26.12		None Observed	16.05	0.0	6096.86
	4.18.12		None Observed	15.87	0.0	6097.04
MW-47	1.25.11	6114.42	None Observed	19.22	0.0	6095.20
	4.22.11		None Observed	19.02	0.0	6095.40
	7.27.11		None Observed	19.69	0.0	6094.73
	10.26.11		None Observed	19.86	0.0	6094.56
	1.26.12		None Observed	19.79	0.0	6094.63
	4.19.12		None Observed	19.67	0.0	6094.75
MW-48	4.18.12		None Observed	Not Gauged	0.0	Not Yet Surveyed
MW-49	4.18.12		None Observed	12.38	0.0	Not Yet Surveyed
MW-50	4.18.12		None Observed	24.64	0.0	Not Yet Surveyed
MW-51	4.18.12		None Observed	18.33	0.0	Not Yet Surveyed
MW-52	4.18.12		None Observed	21.11	0.0	Not Yet Surveyed

* - Regauged 1.31.11 to confirm product thickness

** - Aberrant gauging data

Southwest GEOSCIENCE

APPENDIX C

Soil Boring/Monitoring Well Logs

Client:	**Enterprise Field Services LLC**
Project:	**Largo Compressor Station**
Project Location:	**Rio Arriba County, NM**
Project Manager:	**Kyle Summers**

DRILLING & SAMPLING INFORMATION

Date Started:	11/28/2012
Date Completed:	11/28/2012
Drilling Company:	Earth Worx
Driller:	Lous Trujillo
Boring Method:	Geoprobe
Geologist:	K. Summers
Bore Hole Diamter:	1.5"
Sampler Type:	NA

GROUNDWATER DEPTH

- ▼ Depth at Completion
- ▽ Depth at Stabilization

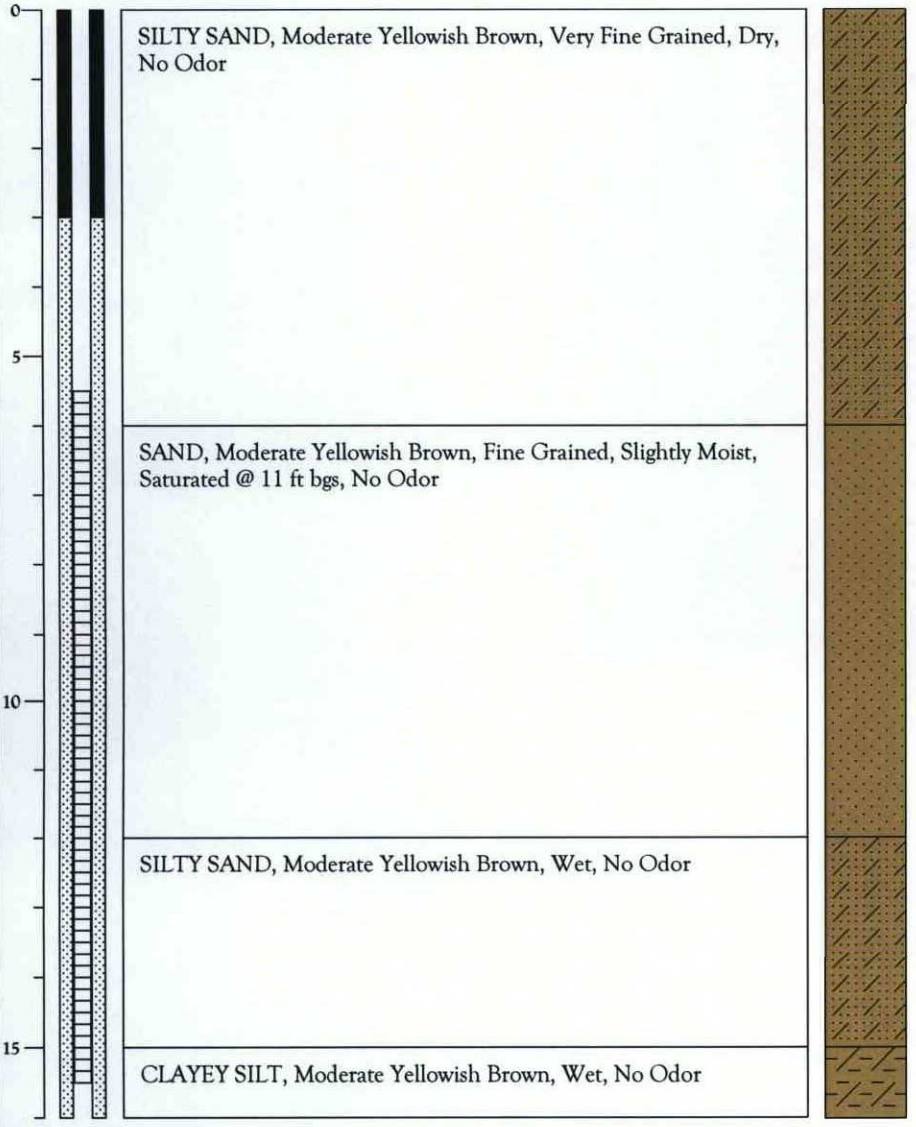
SOIL BORING/MONITORING WELL LOG

Soil Boring Number:	MW-53
Project Number:	0410002
Drawn By:	RDH
Approved by:	KS

WELL CONSTRUCTION INFORMATION

Well Diameter:	2"
Screen Size:	0.010"
Screen Length:	10'
Casing Length:	5.5'
Surface Completion:	Above Grade

MONITORING WELL CONSTRUCTION DETAIL	SOIL CLASSIFICATION	STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY	GROUNDWATER DEPTH	PID (ppm)	COMMENTS
	SILTY SAND, Moderate Yellowish Brown, Very Fine Grained, Dry, No Odor		0			100%		0	
	SAND, Moderate Yellowish Brown, Fine Grained, Slightly Moist, Saturated @ 11 ft bgs, No Odor		5			100%		0	
	SILTY SAND, Moderate Yellowish Brown, Wet, No Odor		10	9-10		100%	▼	0	
	CLAYEY SILT, Moderate Yellowish Brown, Wet, No Odor		15			100%		0	



NOTE: This log is not to be used outside the original report.

Southwest GEOSCIENCE

Client:	Enterprise Field Services LLC
Project:	Largo Compressor Station
Project Location:	Rio Arriba County, NM
Project Manager:	Kyle Summers

DRILLING & SAMPLING INFORMATION

Date Started:	11/28/2012
Date Completed:	11/28/2012
Drilling Company:	Earth Worx
Driller:	Lous Trujillo
Boring Method:	Geoprobe
Geologist:	K. Summers
Bore Hole Diamter:	1.5"
Sampler Type:	NA

GROUNDWATER DEPTH

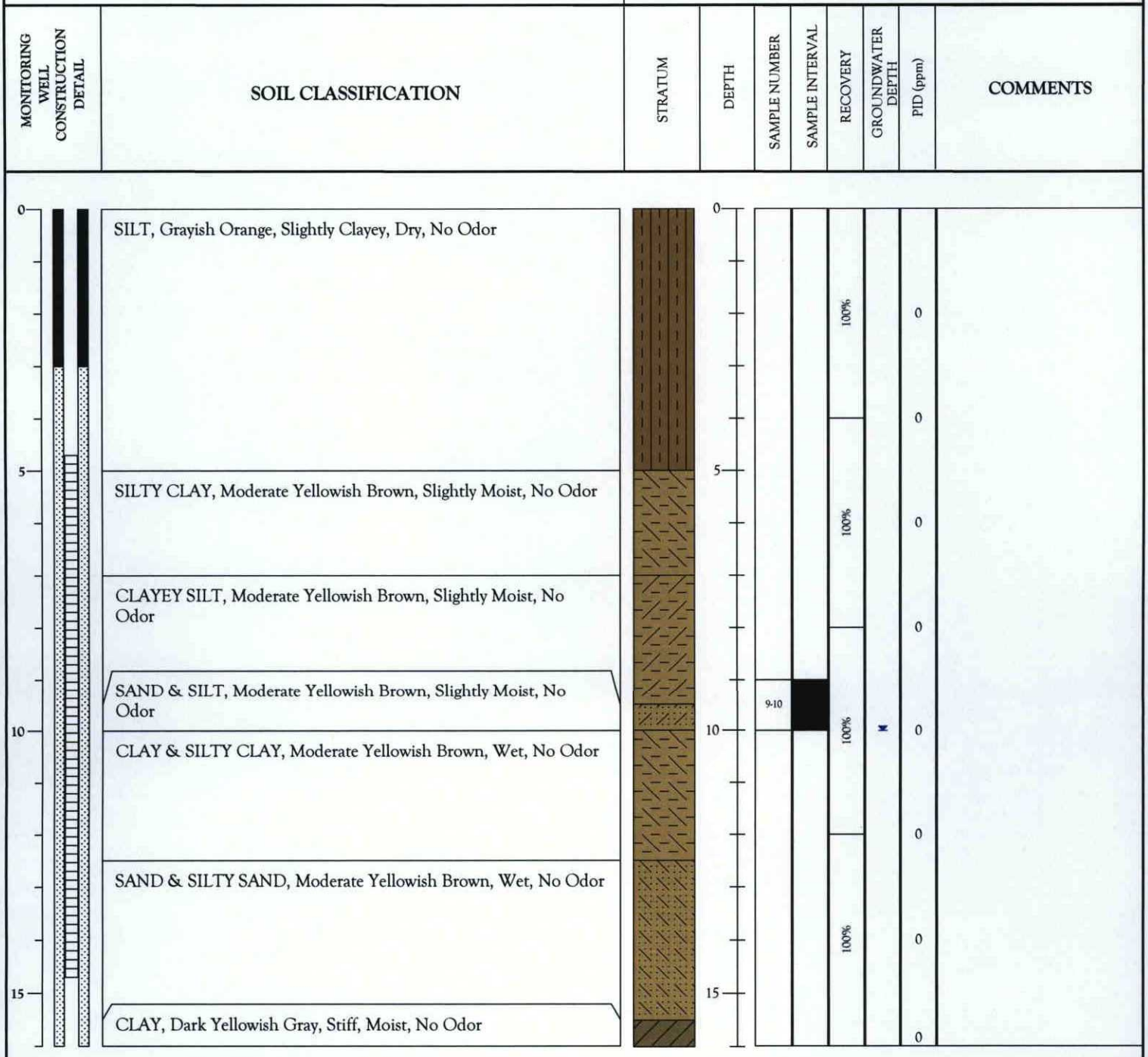
- Depth at Completion
- Depth at Stabilization

SOIL BORING/MONITORING WELL LOG

Soil Boring Number:	MW-54
Project Number:	0410002
Drawn By:	RDH
Approved by:	KS

WELL CONSTRUCTION INFORMATION

Well Diameter:	2"
Screen Size:	0.010"
Screen Length:	10'
Casing Length:	4.7'
Surface Completion:	Above Grade



NOTE: This log is not to be used outside the original report.

Southwest GEOSCIENCE

Client:	Enterprise Field Services LLC
Project:	Largo Compressor Station
Project Location:	Rio Arriba County, NM
Project Manager:	Kyle Summers

DRILLING & SAMPLING INFORMATION

Date Started:	11/28/2012
Date Completed:	11/28/2012
Drilling Company:	Earth Worx
Driller:	Lous Trujillo
Boring Method:	Geoprobe
Geologist:	K. Summers
Bore Hole Diamter:	1.5"
Sampler Type:	NA

GROUNDWATER DEPTH

- Depth at Completion
- Depth at Stabilization

SOIL BORING/MONITORING WELL LOG

Soil Boring Number:	MW-55
Project Number:	0410002
Drawn By:	RDH
Approved by:	KS

WELL CONSTRUCTION INFORMATION

Well Diameter:	2"
Screen Size:	0.010"
Screen Length:	10'
Casing Length:	4.7'
Surface Completion:	Above Grade

MONITORING WELL CONSTRUCTION DETAIL	SOIL CLASSIFICATION	STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY	GROUNDWATER DEPTH	PID (ppm)	COMMENTS
	SILT, Moderate Yellowish Brown, Dry, No Odor		0			100%		0	
	SILTY CLAY, Moderate Yellowish Brown, Fairly Stiff, Slightly Moist, No Odor		5			100%		0	
	SAND, Moderate Yellowish Brown, Wet, No Odor		10	8.5-9.5		100%	▼	0	
	CLAY, Dark Yellowish Gray, Stiff, Slightly Moist, No Odor		15			100%		0	

NOTE: This log is not to be used outside the original report.

Southwest GEOSCIENCE

Client: **Enterprise Field Services LLC**
Project: **Largo Compressor Station**
Project Location: **Rio Arriba County, NM**
Project Manager: **Kyle Summers**

DRILLING & SAMPLING INFORMATION

Date Started: 11/28/2012
Date Completed: 11/28/2012
Drilling Company: Earth Worx
Driller: Lous Trujillo
Boring Method: Geoprobe
Geologist: K. Summers
Bore Hole Diamter: 1.5"
Sampler Type: NA

GROUNDWATER DEPTH
▼ Depth at Completion
▽ Depth at Stabilization

SOIL BORING/MONITORING WELL LOG

Soil Boring Number: SB-56
Project Number: 0410002
Drawn By: RDH
Approved by: KS

WELL CONSTRUCTION INFORMATION

Well Diameter: NA
Screen Size: NA
Screen Length: NA
Casing Length: NA
Surface Completion: NA

MONITORING WELL CONSTRUCTION DETAIL	SOIL CLASSIFICATION	STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY	GROUNDWATER DEPTH	PID (ppm)	COMMENTS
	SILTY SAND, Moderate Yellowish Brown, Dry, No Odor		0			50%		0	
			5			50%		0	
	SILTY CLAY, Black Black @ 11.5 - 11.75 ft bgs, Moist @ 12 ft bgs, Hydrocarbon Odor		10			75%		0.6	
								619	

NOTE: This log is not to be used outside the original report.

Southwest GEOSCIENCE

Client:	**Enterprise Field Services LLC**
Project:	**Largo Compressor Station**
Project Location:	**Rio Arriba County, NM**
Project Manager:	**Kyle Summers**

DRILLING & SAMPLING INFORMATION

Date Started:	11/28/2012
Date Completed:	11/28/2012
Drilling Company:	Earth Worx
Driller:	Lous Trujillo
Boring Method:	Geoprobe
Geologist:	K. Summers
Bore Hole Diamter:	1.5"
Sampler Type:	NA

GROUNDWATER DEPTH

▼ Depth at Completion

▽ Depth at Stabilization

SOIL BORING/MONITORING WELL LOG

Soil Boring Number:	SB-57
Project Number:	0410002
Drawn By:	RDH
Approved by:	KS

WELL CONSTRUCTION INFORMATION

Well Diameter:	NA
Screen Size:	NA
Screen Length:	NA
Casing Length:	NA
Surface Completion:	NA

MONITORING WELL CONSTRUCTION DETAIL	SOIL CLASSIFICATION	STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY	GROUNDWATER DEPTH	PID (ppm)	COMMENTS
	SILTY SAND, Moderate Yellowish Brown, Dry, No Odor		0			100%		0	
			5			100%		0	
	SILT, Blackish Gray, Hydrocarbon Odor @ 11.5 - 12 ft bgs		10			100%		11	
								461	

NOTE: This log is not to be used outside the original report.

Southwest GEOSCIENCE

Client:	**Enterprise Field Services LLC**
Project:	**Largo Compressor Station**
Project Location:	**Rio Arriba County, NM**
Project Manager:	**Kyle Summers**

DRILLING & SAMPLING INFORMATION

Date Started:	11/28/2012
Date Completed:	11/28/2012
Drilling Company:	Earth Worx
Driller:	Lous Trujillo
Boring Method:	Geoprobe
Geologist:	K. Summers
Bore Hole Diamter:	1.5"
Sampler Type:	NA

GROUNDWATER DEPTH

- Depth at Completion
- Depth at Stabilization

SOIL BORING/MONITORING WELL LOG

Soil Boring Number:	SB-58
Project Number:	0410002
Drawn By:	RDH
Approved by:	KS

WELL CONSTRUCTION INFORMATION

Well Diameter:	NA
Screen Size:	NA
Screen Length:	NA
Casing Length:	NA
Surface Completion:	NA

MONITORING WELL CONSTRUCTION DETAIL	SOIL CLASSIFICATION	STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY	GROUNDWATER DEPTH	PID (ppm)	COMMENTS
	SILTY SAND, Moderate Yellowish Brown, Dry, No Odor		0			100%		0	
			5					0	
	SILTY CLAY, Moderate Yellowish Brown, Hard, Dry, No Odor					100%		0	
			10					0	
	CLAYEY SILT, Moderate Yellowish Brown, Dry, No Odor					50%		0	
			15					1.8	
	SILTY CLAY, Grayish Brown, Stiff, Slightly Moist, No Odor					100%		2.4	

NOTE: This log is not to be used outside the original report.

Southwest GEOSCIENCE

Client:	**Enterprise Field Services LLC**
Project:	**Largo Compressor Station**
Project Location:	**Rio Arriba County, NM**
Project Manager:	**Kyle Summers**

DRILLING & SAMPLING INFORMATION

Date Started:	11/28/2012
Date Completed:	11/28/2012
Drilling Company:	Earth Worx
Driller:	Lous Trujillo
Boring Method:	Geoprobe
Geologist:	K. Summers
Bore Hole Diamter:	1.5"
Sampler Type:	NA

GROUNDWATER DEPTH

▼ Depth at Completion

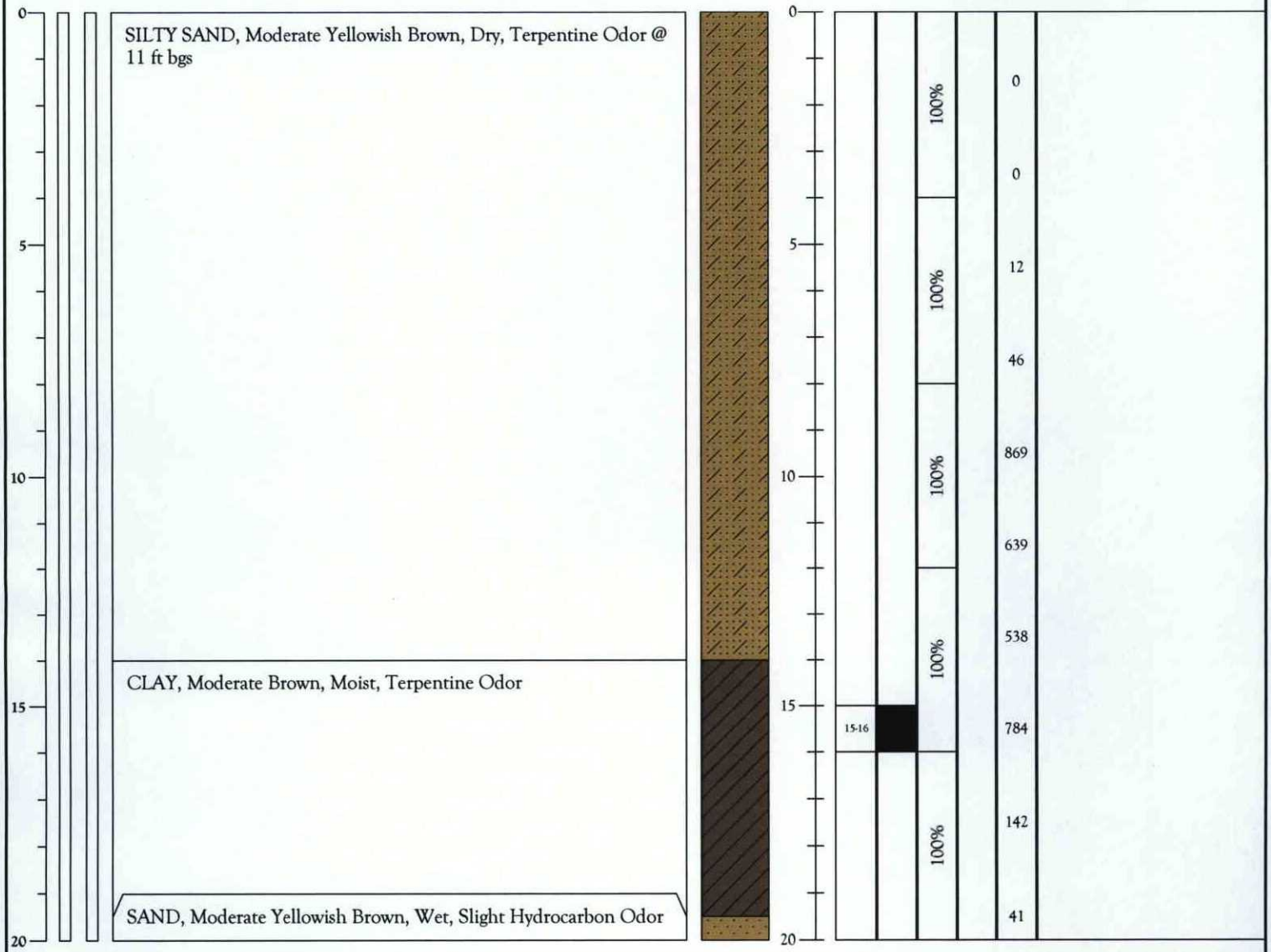
▽ Depth at Stabilization

SOIL BORING/MONITORING WELL LOG

Soil Boring Number:	SB-59
Project Number:	0410002
Drawn By:	RDH
Approved by:	KS

WELL CONSTRUCTION INFORMATION

Well Diameter:	NA
Screen Size:	NA
Screen Length:	NA
Casing Length:	NA
Surface Completion:	NA



NOTE: This log is not to be used outside the original report.

Southwest GEOSCIENCE

Client:	**Enterprise Field Services LLC**
Project:	**Largo Compressor Station**
Project Location:	**Rio Arriba County, NM**
Project Manager:	**Kyle Summers**

SOIL BORING/MONITORING WELL LOG

Soil Boring Number:	SB-60
Project Number:	0410002
Drawn By:	RDH
Approved by:	KS

DRILLING & SAMPLING INFORMATION

Date Started:	11/28/2012
Date Completed:	11/28/2012
Drilling Company:	Earth Worx
Driller:	Lous Trujillo
Boring Method:	Geoprobe
Geologist:	K. Summers
Bore Hole Diamter:	1.5"
Sampler Type:	NA

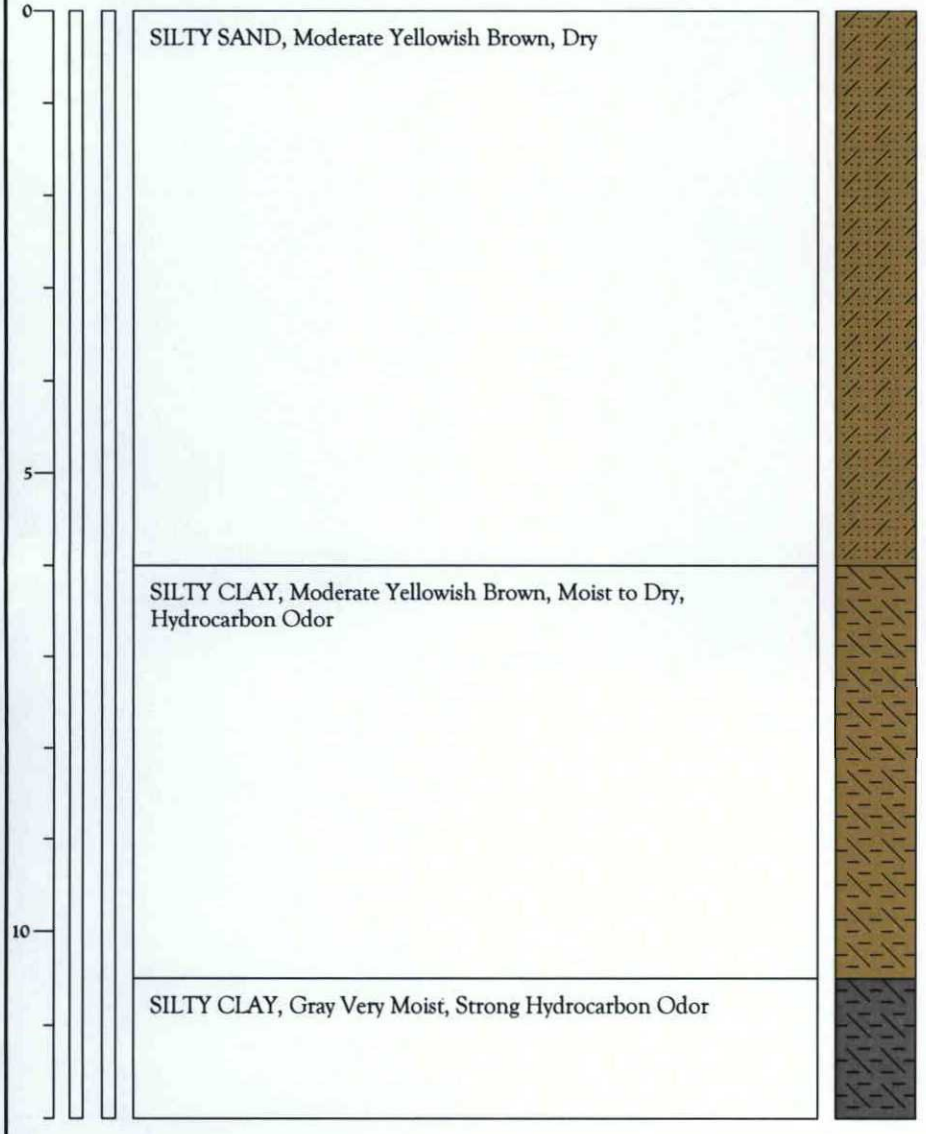
GROUNDWATER DEPTH

- Depth at Completion
- Depth at Stabilization

WELL CONSTRUCTION INFORMATION

Well Diameter:	NA
Screen Size:	NA
Screen Length:	NA
Casing Length:	NA
Surface Completion:	NA

MONITORING WELL CONSTRUCTION DETAIL	SOIL CLASSIFICATION	STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY	GROUNDWATER DEPTH	PID (ppm)	COMMENTS
	SILTY SAND, Moderate Yellowish Brown, Dry		0			100%		4.9	
			5					5.6	
	SILTY CLAY, Moderate Yellowish Brown, Moist to Dry, Hydrocarbon Odor					100%		628	
								512	
	SILTY CLAY, Gray Very Moist, Strong Hydrocarbon Odor		10			100%		736	
								591	



NOTE: This log is not to be used outside the original report.

Southwest GEOSCIENCE

Client:	**Enterprise Field Services LLC**
Project:	**Largo Compressor Station**
Project Location:	**Rio Arriba County, NM**
Project Manager:	**Kyle Summers**

DRILLING & SAMPLING INFORMATION

Date Started:	11/28/2012
Date Completed:	11/28/2012
Drilling Company:	Earth Worx
Driller:	Lous Trujillo
Boring Method:	Geoprobe
Geologist:	K. Summers
Bore Hole Diamter:	1.5"
Sampler Type:	NA

GROUNDWATER DEPTH

▼ Depth at Completion

▽ Depth at Stabilization

SOIL BORING/MONITORING WELL LOG

Soil Boring Number:	SB-61
Project Number:	0410002
Drawn By:	RDH
Approved by:	KS

WELL CONSTRUCTION INFORMATION

Well Diameter:	NA
Screen Size:	NA
Screen Length:	NA
Casing Length:	NA
Surface Completion:	NA

MONITORING WELL CONSTRUCTION DETAIL	SOIL CLASSIFICATION	STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY	GROUNDWATER DEPTH	PID (ppm)	COMMENTS
	SILTY CLAY, Moderate Yellowish Brown, Slightly Moist, No Odor		0			100%		9.3 27	
	SILTY CLAY, Gray, Wet @ 7 ft bgs		5			50%		437	

NOTE: This log is not to be used outside the original report.

Southwest GEOSCIENCE

Client:	**Enterprise Field Services LLC**
Project:	**Largo Compressor Station**
Project Location:	**Rio Arriba County, NM**
Project Manager:	**Kyle Summers**

DRILLING & SAMPLING INFORMATION

Date Started:	11/28/2012
Date Completed:	11/28/2012
Drilling Company:	Earth Worx
Driller:	Lous Trujillo
Boring Method:	Geoprobe
Geologist:	K. Summers
Bore Hole Diamter:	1.5"
Sampler Type:	NA

GROUNDWATER DEPTH

- Depth at Completion
- Depth at Stabilization

SOIL BORING/MONITORING WELL LOG

Soil Boring Number:	SB-62
Project Number:	0410002
Drawn By:	RDH
Approved by:	KS

WELL CONSTRUCTION INFORMATION

Well Diameter:	NA
Screen Size:	NA
Screen Length:	NA
Casing Length:	NA
Surface Completion:	NA

MONITORING WELL CONSTRUCTION DETAIL	SOIL CLASSIFICATION	STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY	GROUNDWATER DEPTH	PID (ppm)	COMMENTS
	CLAYEY SAND, Moderate Yellowish Brown, Hard, Dry, No Odor		0			100%		0	
	SILTY CLAY, Moderate Yellowish Brown, Staining @ 7 ft bgs, Hydrocarbon Odor		5			100%		466	
			10			100%		506	
								407	
								404	

NOTE: This log is not to be used outside the original report.

Southwest GEOSCIENCE

Client:	**Enterprise Field Services LLC**
Project:	**Largo Compressor Station**
Project Location:	**Rio Arriba County, NM**
Project Manager:	**Kyle Summers**

DRILLING & SAMPLING INFORMATION

Date Started:	11/28/2012
Date Completed:	11/28/2012
Drilling Company:	Earth Worx
Driller:	Lous Trujillo
Boring Method:	Geoprobe
Geologist:	K. Summers
Bore Hole Diamter:	1.5"
Sampler Type:	NA

GROUNDWATER DEPTH

- ▼ Depth at Completion
- ▽ Depth at Stabilization

SOIL BORING/MONITORING WELL LOG

Soil Boring Number:	SB-63
Project Number:	0410002
Drawn By:	RDH
Approved by:	KS

WELL CONSTRUCTION INFORMATION

Well Diameter:	NA
Screen Size:	NA
Screen Length:	NA
Casing Length:	NA
Surface Completion:	NA

MONITORING WELL CONSTRUCTION DETAIL	SOIL CLASSIFICATION	STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY	GROUNDWATER DEPTH	PID (ppm)	COMMENTS
	CLAYEY SAND, Moderate Yellowish Brown, Hard, Dry, No Odor		0			100%		0	
	SILTY CLAY, Moderate Yellowish Brown, Slightly Moist, No Odor		5			100%		0	
	SILTY CLAY, Moderate Yellowish Brown, Stained, No Odor		10			100%		0	
								14	

NOTE: This log is not to be used outside the original report.

Southwest GEOSCIENCE

Client:	**Enterprise Field Services LLC**
Project:	**Largo Compressor Station**
Project Location:	**Rio Arriba County, NM**
Project Manager:	**Kyle Summers**

DRILLING & SAMPLING INFORMATION

Date Started:	11/30/2012
Date Completed:	11/30/2012
Drilling Company:	Earth Worx
Driller:	Lous Trujillo
Boring Method:	Geoprobe
Geologist:	K. Summers
Bore Hole Diamter:	1.5"
Sampler Type:	NA

GROUNDWATER DEPTH

- Depth at Completion
- Depth at Stabilization

SOIL BORING/MONITORING WELL LOG

Soil Boring Number:	SB-64
Project Number:	0410002
Drawn By:	RDH
Approved by:	KS

WELL CONSTRUCTION INFORMATION

Well Diameter:	NA
Screen Size:	NA
Screen Length:	NA
Casing Length:	NA
Surface Completion:	NA

MONITORING WELL CONSTRUCTION DETAIL	SOIL CLASSIFICATION	STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY	GROUNDWATER DEPTH	PID (ppm)	COMMENTS
	SILTY SAND, Moderate Yellowish Brown, Dry, No Odor		0			100%		0	
	CLAYEY SILT, Moderate Yellowish Brown, Dry, Moist @ 7 ft bgs, No Odor		5			100%		0	
	SILTY CLAY, Moderate Yellowish Brown, Staining @ 11.5 ft bgs, Sewage Odor @ 11.5 ft bgs		10			100%		0	

NOTE: This log is not to be used outside the original report.

Southwest GEOSCIENCE

Client:	**Enterprise Field Services LLC**
Project:	**Largo Compressor Station**
Project Location:	**Rio Arriba County, NM**
Project Manager:	**Kyle Summers**

DRILLING & SAMPLING INFORMATION

Date Started:	11/30/2012
Date Completed:	11/30/2012
Drilling Company:	Earth Worx
Driller:	Lous Trujillo
Boring Method:	Geoprobe
Geologist:	K. Summers
Bore Hole Diamter:	1.5"
Sampler Type:	NA

GROUNDWATER DEPTH

- Depth at Completion
- Depth at Stabilization

SOIL BORING/MONITORING WELL LOG

Soil Boring Number:	SB-65
Project Number:	0410002
Drawn By:	RDH
Approved by:	KS

WELL CONSTRUCTION INFORMATION

Well Diameter:	NA
Screen Size:	NA
Screen Length:	NA
Casing Length:	NA
Surface Completion:	NA

MONITORING WELL CONSTRUCTION DETAIL	SOIL CLASSIFICATION	STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY	GROUNDWATER DEPTH	PID (ppm)	COMMENTS
	SILTY SAND, Moderate Yellowish Brown, Dry, No Odor		0			100%		0	
	CLAYEY SILT, Moderate Yellowish Brown, Moist, Hydrocarbon Odor		5					382	
	SAND, Black, Stained, Moist, Hydrocarbon Odor					100%		397	
	CLAYEY SILT, Moderate Yellowish Brown, Staining Stops @ 11 ft bgs, Hydrocarbon Odor		10			100%		347	
								362	
								412	

NOTE: This log is not to be used outside the original report.

Southwest GEOSCIENCE

Client:	**Enterprise Field Services LLC**
Project:	**Largo Compressor Station**
Project Location:	**Rio Arriba County, NM**
Project Manager:	**Kyle Summers**

DRILLING & SAMPLING INFORMATION

Date Started:	11/30/2012
Date Completed:	11/30/2012
Drilling Company:	Earth Worx
Driller:	Lous Trujillo
Boring Method:	Geoprobe
Geologist:	K. Summers
Bore Hole Diamter:	1.5"
Sampler Type:	NA

GROUNDWATER DEPTH

▼ Depth at Completion

▽ Depth at Stabilization

SOIL BORING/MONITORING WELL LOG

Soil Boring Number:	SB-66
Project Number:	0410002
Drawn By:	RDH
Approved by:	KS

WELL CONSTRUCTION INFORMATION

Well Diameter:	NA
Screen Size:	NA
Screen Length:	NA
Casing Length:	NA
Surface Completion:	NA

MONITORING WELL CONSTRUCTION DETAIL	SOIL CLASSIFICATION	STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY	GROUNDWATER DEPTH	PID (ppm)	COMMENTS
	SILTY SAND, Moderate Yellowish Brown, Dry, No Odor		0			100%		5	
	CLAYEY SILT, Moderate Yellowish Brown, Dry							24	
	CLAYEY SILT, Moderate Yellowish Brown, Staining @ 10 - 12 ft bgs, Moist, Terpentine Odor		5			100%		474	
								440	
			10			100%		474	
								196	

NOTE: This log is not to be used outside the original report.

Southwest GEOSCIENCE

Client:	**Enterprise Field Services LLC**
Project:	**Largo Compressor Station**
Project Location:	**Rio Arriba County, NM**
Project Manager:	**Kyle Summers**

DRILLING & SAMPLING INFORMATION

Date Started:	11/30/2012
Date Completed:	11/30/2012
Drilling Company:	Earth Worx
Driller:	Lous Trujillo
Boring Method:	Geoprobe
Geologist:	K. Summers
Bore Hole Diamter:	1.5"
Sampler Type:	NA

GROUNDWATER DEPTH

- Depth at Completion
- Depth at Stabilization

SOIL BORING/MONITORING WELL LOG

Soil Boring Number:	SB-67
Project Number:	0410002
Drawn By:	RDH
Approved by:	KS

WELL CONSTRUCTION INFORMATION

Well Diameter:	NA
Screen Size:	NA
Screen Length:	NA
Casing Length:	NA
Surface Completion:	NA

MONITORING WELL CONSTRUCTION DETAIL	SOIL CLASSIFICATION	STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY	GROUNDWATER DEPTH	PID (ppm)	COMMENTS
	SILTY SAND, Moderate Yellowish Brown, No Odor, Dry		0			100%		0	
	CLAYEY SILT, Moderate Yellowish Brown, Dry, No Odor, Sewage Odor @ 11.5 ft bgs, Very Moist @ 12 ft bgs		5			100%		0	
			10			100%		0	
								8	
								6	
								9	

NOTE: This log is not to be used outside the original report.

Southwest GEOSCIENCE

Client:	**Enterprise Field Services LLC**
Project:	**Largo Compressor Station**
Project Location:	**Rio Arriba County, NM**
Project Manager:	**Kyle Summers**

DRILLING & SAMPLING INFORMATION

Date Started:	11/30/2012
Date Completed:	11/30/2012
Drilling Company:	Earth Worx
Driller:	Lous Trujillo
Boring Method:	Geoprobe
Geologist:	K. Summers
Bore Hole Diamter:	1.5"
Sampler Type:	NA

GROUNDWATER DEPTH

- Depth at Completion
- Depth at Stabilization

SOIL BORING/MONITORING WELL LOG

Soil Boring Number:	SB-68
Project Number:	0410002
Drawn By:	RDH
Approved by:	KS

WELL CONSTRUCTION INFORMATION

Well Diameter:	NA
Screen Size:	NA
Screen Length:	NA
Casing Length:	NA
Surface Completion:	NA

MONITORING WELL CONSTRUCTION DETAIL	SOIL CLASSIFICATION	STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY	GROUNDWATER DEPTH	PID (ppm)	COMMENTS
	CLAYEY SILT & CLAY, Moderate Yellowish Brown, Clay @ 11 ft bgs, Slightly Moist, Wet @ 12 ft bgs		5 10			100% 100%		2 3 4 2	

NOTE: This log is not to be used outside the original report.

Southwest GEOSCIENCE

Client:	**Enterprise Field Services LLC**
Project:	**Largo Compressor Station**
Project Location:	**Rio Arriba County, NM**
Project Manager:	**Kyle Summers**

DRILLING & SAMPLING INFORMATION

Date Started:	11/30/2012
Date Completed:	11/30/2012
Drilling Company:	Earth Worx
Driller:	Lous Trujillo
Boring Method:	Geoprobe
Geologist:	K. Summers
Bore Hole Diamter:	1.5"
Sampler Type:	NA

GROUNDWATER DEPTH

▼ Depth at Completion

▽ Depth at Stabilization

SOIL BORING/MONITORING WELL LOG

Soil Boring Number:	SB-69
Project Number:	0410002
Drawn By:	RDH
Approved by:	KS

WELL CONSTRUCTION INFORMATION

Well Diameter:	NA
Screen Size:	NA
Screen Length:	NA
Casing Length:	NA
Surface Completion:	NA

MONITORING WELL CONSTRUCTION DETAIL	SOIL CLASSIFICATION	STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY	GROUNDWATER DEPTH	PID (ppm)	COMMENTS
	CLAYEY SILT & SILTY CLAY, Moderate Yellowish Brown, Dry, No Odor		0			100%		0	
			5			100%		0	
								4	
								4	
			10			100%		3	
	SAND, Moderate Yellowish Brown, Wet @ 11 ft bgs, No Odor							3	

NOTE: This log is not to be used outside the original report.

Southwest GEOSCIENCE

Client:	**Enterprise Field Services LLC**
Project:	**Largo Compressor Station**
Project Location:	**Rio Arriba County, NM**
Project Manager:	**Kyle Summers**

DRILLING & SAMPLING INFORMATION

Date Started:	11/30/2012
Date Completed:	11/30/2012
Drilling Company:	Earth Worx
Driller:	Lous Trujillo
Boring Method:	Geoprobe
Geologist:	K. Summers
Bore Hole Diamter:	1.5"
Sampler Type:	NA

GROUNDWATER DEPTH

- ▼ Depth at Completion
- ▽ Depth at Stabilization

SOIL BORING/MONITORING WELL LOG

Soil Boring Number:	SB-70
Project Number:	0410002
Drawn By:	RDH
Approved by:	KS

WELL CONSTRUCTION INFORMATION

Well Diameter:	NA
Screen Size:	NA
Screen Length:	NA
Casing Length:	NA
Surface Completion:	NA

MONITORING WELL CONSTRUCTION DETAIL	SOIL CLASSIFICATION	STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY	GROUNDWATER DEPTH	PID (ppm)	COMMENTS
	CLAYEY SILT, Moderate Yellowish Brown, Dry, No Odor		0			100%		0	
	SILTY SAND, Moderate Yellowish Brown, Slightly Moist, No Odor							4	
	SILTY SAND, Moderate Yellowish Brown, Grades to Black & Gray, Hydrocarbon Staining, Slightly Moist, Hydrocarbon Odor		5			100%		936	
	SILTY CLAY, Black & Gray, Grades to Moderate Yellowish Brown, Decreased Hydrocarbon Staining with Depth, Wet @ 11 ft bgs							521	
			10			100%		937	
	SAND, Moderate Yellowish Brown, Wet, Hydrocarbon Odor							477	

NOTE: This log is not to be used outside the original report.

Southwest GEOSCIENCE

Client:	**Enterprise Field Services LLC**
Project:	**Largo Compressor Station**
Project Location:	**Rio Arriba County, NM**
Project Manager:	**Kyle Summers**

DRILLING & SAMPLING INFORMATION

Date Started:	1/22/2013
Date Completed:	1/22/2013
Drilling Company:	Earth Worx
Driller:	Lous Trujillo
Boring Method:	Geoprobe
Geologist:	K. Summers
Bore Hole Diamter:	1.5"
Sampler Type:	NA

GROUNDWATER DEPTH

- Depth at Completion
- Depth at Stabilization

SOIL BORING/MONITORING WELL LOG

Soil Boring Number:	SB-71
Project Number:	0410002
Drawn By:	RDH
Approved by:	KS

WELL CONSTRUCTION INFORMATION

Well Diameter:	NA
Screen Size:	NA
Screen Length:	NA
Casing Length:	NA
Surface Completion:	NA

MONITORING WELL CONSTRUCTION DETAIL	SOIL CLASSIFICATION	STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY	GROUNDWATER DEPTH	PID (ppm)	COMMENTS
	SILTY SAND, Moderate Yellowish Brown, Dry, No Odor		0			100%		0	
			5			100%		0	
			10			100%		0	
			15			100%		0	
	SANDY SILT & CLAY, Moderate Yellowish Brown, Moist, No Odor							0	
	CLAY, Moderate Yellowish Brown, Wet, No Odor		20			100%		0	

NOTE: This log is not to be used outside the original report.

Southwest GEOSCIENCE

Client:	**Enterprise Field Services LLC**
Project:	**Largo Compressor Station**
Project Location:	**Rio Arriba County, NM**
Project Manager:	**Kyle Summers**

DRILLING & SAMPLING INFORMATION

Date Started:	1/22/2013
Date Completed:	1/22/2013
Drilling Company:	Earth Worx
Driller:	Lous Trujillo
Boring Method:	Geoprobe
Geologist:	K. Summers
Bore Hole Diamter:	1.5"
Sampler Type:	NA

GROUNDWATER DEPTH

▼ Depth at Completion

▽ Depth at Stabilization

SOIL BORING/MONITORING WELL LOG

Soil Boring Number:	SB-72
Project Number:	0410002
Drawn By:	RDH
Approved by:	KS

WELL CONSTRUCTION INFORMATION

Well Diameter:	NA
Screen Size:	NA
Screen Length:	NA
Casing Length:	NA
Surface Completion:	NA

MONITORING WELL CONSTRUCTION DETAIL	SOIL CLASSIFICATION	STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY	GROUNDWATER DEPTH	PID (ppm)	COMMENTS
	SILTY SAND, Moderate Yellowish Brown, Dry, No Odor		0			100%		0	
			5					0	
	SILT, Moderate Yellowish Brown, Dry, No Odor					100%		0	
			10					0	
	CLAYEY SILT, Moderate Yellowish Brown, Dry, No Odor					100%		0	
			15					0	
	CLAY, Moderate Yellowish Brown, Moist, Wet @ 17 ft bgs, No Odor					100%		0	
			20					0	
	SAND, Moderate Yellowish Brown, Wet, No Odor					100%		0	

NOTE: This log is not to be used outside the original report.

Southwest GEOSCIENCE

Client:	Enterprise Field Services LLC
Project:	Largo Compressor Station
Project Location:	Rio Arriba County, NM
Project Manager:	Kyle Summers

DRILLING & SAMPLING INFORMATION

Date Started:	1/22/2013
Date Completed:	1/22/2013
Drilling Company:	Earth Worx
Driller:	Lous Trujillo
Boring Method:	Geoprobe
Geologist:	K. Summers
Bore Hole Diamter:	1.5"
Sampler Type:	NA

GROUNDWATER DEPTH

- Depth at Completion
- Depth at Stabilization

SOIL BORING/MONITORING WELL LOG

Soil Boring Number:	SB-73
Project Number:	0410002
Drawn By:	RDH
Approved by:	KS

WELL CONSTRUCTION INFORMATION

Well Diameter:	NA
Screen Size:	NA
Screen Length:	NA
Casing Length:	NA
Surface Completion:	NA

MONITORING WELL CONSTRUCTION DETAIL	SOIL CLASSIFICATION	STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY	GROUNDWATER DEPTH	PID (ppm)	COMMENTS
	SILTY SAND, Moderate Yellowish Brown, Dry, No Odor		0			100%		0	
	SILT, Moderate Yellowish Brown, Dry, No Odor		5			100%		0	
	CLAY, Moderate Yellowish Brown, No Odor, Slightly Moist @ 18 ft bgs		10			100%		0	
	SAND, Moderate Yellowish Brown, No Odor, Very Wet @ 20 ft bgs		15			100%		0	
			20			100%		0	

NOTE: This log is not to be used outside the original report.

Southwest GEOSCIENCE

Client:	**Enterprise Field Services LLC**
Project:	**Largo Compressor Station**
Project Location:	**Rio Arriba County, NM**
Project Manager:	**Kyle Summers**

DRILLING & SAMPLING INFORMATION

Date Started:	1/22/2013
Date Completed:	1/22/2013
Drilling Company:	Earth Worx
Driller:	Lous Trujillo
Boring Method:	Geoprobe
Geologist:	K. Summers
Bore Hole Diamter:	1.5"
Sampler Type:	NA

GROUNDWATER DEPTH

- Depth at Completion
- Depth at Stabilization

SOIL BORING/MONITORING WELL LOG

Soil Boring Number:	SB-74
Project Number:	0410002
Drawn By:	RDH
Approved by:	KS

WELL CONSTRUCTION INFORMATION

Well Diameter:	NA
Screen Size:	NA
Screen Length:	NA
Casing Length:	NA
Surface Completion:	NA

MONITORING WELL CONSTRUCTION DETAIL	SOIL CLASSIFICATION	STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY	GROUNDWATER DEPTH	PID (ppm)	COMMENTS
	SILTY SAND, Moderate Yellowish Brown, Dry, No Odor		0			100%		0	
	SILT, Moderate Yellowish Brown, Dry, No Odor		5			100%		0	
	CLAY, Moderate Yellowish Brown, Moist, No Odor		10			100%		0	
	SAND, Moderate Yellowish Brown, No Odor, Wet @ 19 ft bgs		15			100%		0	
			20					0	

NOTE: This log is not to be used outside the original report.

Southwest GEOSCIENCE

Client:	**Enterprise Field Services LLC**
Project:	**Largo Compressor Station**
Project Location:	**Rio Arriba County, NM**
Project Manager:	**Kyle Summers**

DRILLING & SAMPLING INFORMATION

Date Started:	1/22/2013
Date Completed:	1/22/2013
Drilling Company:	Earth Worx
Driller:	Lous Trujillo
Boring Method:	Geoprobe
Geologist:	K. Summers
Bore Hole Diamter:	2"
Sampler Type:	NA

GROUNDWATER DEPTH

▼ Depth at Completion

▽ Depth at Stabilization

SOIL BORING/MONITORING WELL LOG

Soil Boring Number:	MW-75
Project Number:	0410002
Drawn By:	RDH
Approved by:	KS

WELL CONSTRUCTION INFORMATION

Well Diameter:	1.5"
Screen Size:	0.010"
Screen Length:	15"
Casing Length:	10"
Surface Completion:	Above Grade

MONITORING WELL CONSTRUCTION DETAIL	SOIL CLASSIFICATION	STRATUM	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	RECOVERY	GROUNDWATER DEPTH	PID (ppm)	COMMENTS
	SILTY SAND, Moderate Yellowish Brown, Dry, No Odor		0			100%		0	
			5			100%		0	
	SILT, Moderate Yellowish Brown, Dry, No Odor		10			100%		0	
	CLAY, Moderate Yellowish Brown, Wet @ 20 ft bgs, No Odor		15			100%		0	
			20	19-20		100%	▼	0	
	CLAY & SAND, Moderate Yellowish Brown, Wet, No Odor		25			100%		0	

NOTE: This log is not to be used outside the original report.

Southwest GEOSCIENCE

Southwest GEOSCIENCE

APPENDIX D

Laboratory Data Reports & Chain of Custody Documentation

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

December 10, 2012

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.: 1211B09

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 3 sample(s) on 11/30/2012 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. 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. 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.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1211B09**
Date Reported: **12/10/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience
Client Sample ID: MW-53
Project: Largo CS
Collection Date: 11/28/2012 9:45:00 AM
Lab ID: 1211B09-001 **Matrix:** SOIL **Received Date:** 11/30/2012 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **MMD**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/5/2012 6:26:40 AM
Surr: DNOP	84.5	72.4-120		%REC	1	12/5/2012 6:26:40 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/4/2012 1:37:10 PM
Surr: BFB	84.0	84-116		%REC	1	12/4/2012 1:37:10 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.046		mg/Kg	1	12/4/2012 1:37:10 PM
Toluene	ND	0.046		mg/Kg	1	12/4/2012 1:37:10 PM
Ethylbenzene	ND	0.046		mg/Kg	1	12/4/2012 1:37:10 PM
Xylenes, Total	ND	0.092		mg/Kg	1	12/4/2012 1:37:10 PM
Surr: 4-Bromofluorobenzene	88.0	80-120		%REC	1	12/4/2012 1:37:10 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience
Project: Largo CS
Lab ID: 1211B09-002 **Matrix:** SOIL

Client Sample ID: MW-54
Collection Date: 11/28/2012 10:40:00 AM
Received Date: 11/30/2012 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **MMD**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/5/2012 7:33:18 AM
Surr: DNOP	87.0	72.4-120		%REC	1	12/5/2012 7:33:18 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/4/2012 2:05:58 PM
Surr: BFB	85.2	84-116		%REC	1	12/4/2012 2:05:58 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.049		mg/Kg	1	12/4/2012 2:05:58 PM
Toluene	ND	0.049		mg/Kg	1	12/4/2012 2:05:58 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/4/2012 2:05:58 PM
Xylenes, Total	ND	0.098		mg/Kg	1	12/4/2012 2:05:58 PM
Surr: 4-Bromofluorobenzene	89.7	80-120		%REC	1	12/4/2012 2:05:58 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience
Project: Largo CS
Lab ID: 1211B09-003 **Matrix:** SOIL

Client Sample ID: MW-55
Collection Date: 11/28/2012 11:20:00 AM
Received Date: 11/30/2012 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **MMD**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/5/2012 7:54:58 AM
Surr: DNOP	89.5	72.4-120		%REC	1	12/5/2012 7:54:58 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/4/2012 2:34:44 PM
Surr: BFB	86.9	84-116		%REC	1	12/4/2012 2:34:44 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.048		mg/Kg	1	12/4/2012 2:34:44 PM
Toluene	ND	0.048		mg/Kg	1	12/4/2012 2:34:44 PM
Ethylbenzene	ND	0.048		mg/Kg	1	12/4/2012 2:34:44 PM
Xylenes, Total	ND	0.096		mg/Kg	1	12/4/2012 2:34:44 PM
Surr: 4-Bromofluorobenzene	92.3	80-120		%REC	1	12/4/2012 2:34:44 PM

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211B09**

10-Dec-12

Client: Southwest Geoscience

Project: Largo CS

Sample ID **MB-5091**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **5091**	RunNo: **7297**
Prep Date: **12/4/2012**	Analysis Date: **12/5/2012**	SeqNo: **211708** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.2		10.00		92.5	72.4	120			

Sample ID **LCS-5091**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **5091**	RunNo: **7297**
Prep Date: **12/4/2012**	Analysis Date: **12/5/2012**	SeqNo: **211709** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.9	47.4	122			
Surr: DNOP	4.1		5.000		81.9	72.4	120			

Sample ID **1211B09-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **MW-53**	Batch ID: **5091**	RunNo: **7297**
Prep Date: **12/4/2012**	Analysis Date: **12/5/2012**	SeqNo: **211719** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	9.9	49.55	0	100	12.6	148			
Surr: DNOP	3.5		4.955		71.0	72.4	120			S

Sample ID **1211B09-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **MW-53**	Batch ID: **5091**	RunNo: **7297**
Prep Date: **12/4/2012**	Analysis Date: **12/5/2012**	SeqNo: **211720** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.10	0	85.8	12.6	148	14.3	22.5	
Surr: DNOP	3.9		5.010		78.0	72.4	120	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211B09**

10-Dec-12

Client: Southwest Geoscience
Project: Largo CS

Sample ID **MB-5078**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **5078**	RunNo: **7285**
Prep Date: **12/3/2012**	Analysis Date: **12/4/2012**	SeqNo: **211244** 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	840		1000		84.0	84	116			

Sample ID **LCS-5078**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **5078**	RunNo: **7285**
Prep Date: **12/3/2012**	Analysis Date: **12/4/2012**	SeqNo: **211253** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	85.5	74	117			
Surr: BFB	850		1000		85.3	84	116			

Sample ID **1211B09-002AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **MW-54**	Batch ID: **5078**	RunNo: **7285**
Prep Date: **12/3/2012**	Analysis Date: **12/4/2012**	SeqNo: **211305** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.7	23.52	0	103	70	130			
Surr: BFB	910		940.7		96.8	84	116			

Sample ID **1211B09-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **MW-54**	Batch ID: **5078**	RunNo: **7285**
Prep Date: **12/3/2012**	Analysis Date: **12/4/2012**	SeqNo: **211310** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.7	23.50	0	99.6	70	130	3.57	22.1	
Surr: BFB	910		939.8		96.4	84	116	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211B09**

10-Dec-12

Client: Southwest Geoscience
Project: Largo CS

Sample ID **MB-5078**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **5078**	RunNo: **7285**
Prep Date: **12/3/2012**	Analysis Date: **12/4/2012**	SeqNo: **211349** 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	0.88		1.000		88.5	80	120			

Sample ID **LCS-5078**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **5078**	RunNo: **7285**
Prep Date: **12/3/2012**	Analysis Date: **12/4/2012**	SeqNo: **211350** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.050	1.000	0	98.4	76.3	117			
Toluene	0.97	0.050	1.000	0	97.3	80	120			
Ethylbenzene	1.0	0.050	1.000	0	99.8	77	116			
Xylenes, Total	2.9	0.10	3.000	0	98.1	76.7	117			
Surr: 4-Bromofluorobenzene	0.88		1.000		88.5	80	120			

Sample ID **1211B09-001AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **MW-53**	Batch ID: **5078**	RunNo: **7285**
Prep Date: **12/3/2012**	Analysis Date: **12/4/2012**	SeqNo: **211353** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.048	0.9579	0	99.4	67.2	113			
Toluene	0.95	0.048	0.9579	0	98.9	62.1	116			
Ethylbenzene	0.97	0.048	0.9579	0	102	67.9	127			
Xylenes, Total	2.9	0.096	2.874	0	101	60.6	134			
Surr: 4-Bromofluorobenzene	0.98		0.9579		102	80	120			

Sample ID **1211B09-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **MW-53**	Batch ID: **5078**	RunNo: **7285**
Prep Date: **12/3/2012**	Analysis Date: **12/4/2012**	SeqNo: **211354** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.048	0.9579	0	101	67.2	113	1.17	14.3	
Toluene	0.95	0.048	0.9579	0	99.7	62.1	116	0.805	15.9	
Ethylbenzene	0.98	0.048	0.9579	0	102	67.9	127	0.508	14.4	
Xylenes, Total	2.9	0.096	2.874	0	102	60.6	134	0.165	12.6	
Surr: 4-Bromofluorobenzene	0.99		0.9579		104	80	120	0	0	

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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 Order Number: 1211B09

Received by/date: LM 11/30/12

Logged By: Michelle Garcia 11/30/2012 9:45:00 AM Michelle Garcia

Completed By: Michelle Garcia 11/30/2012 1:39:07 PM Michelle Garcia

Reviewed By: mg 12/03/12

Chain of Custody

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

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

17. 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: _____

18. Additional remarks:

19. Cooler Information

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

CHAIN OF CUSTODY RECORD

Southwest GEOSCIENCE
Environmental & Hydrogeologic Consultants

Office Location: Aztec
Project Manager: Summers

Laboratory: Hall
Address: ABQ
Contact: Andy Freeman
Phone:
PO/SO #: 0410002

Sampler's Name: Kyle Summers
Sampler's Signature:

Proj. No: 0410002
Project Name: Largo CS

Lab use only
Due Date:

Temp. of coolers when received (C°): 1.0

1 | 2 | 3 | 4 | 5

Page 1 of 1

ANALYSIS REQUESTED: BTEX 8021B; TPH DRO/GRO 8015

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lt.	250 ml	P/O	BTEX	TPH DRO/GRO 8015	Lab Sample ID (Lab Use Only)
S	11/28/12	0945		X	MW-53	9	10				1	X	X	1211B09-001
↓	↓	1040		↓	MW-54	9	10				1	X	X	-002
↓	↓	1120		↓	MW-55	8.5	9.5				1	X	X	-003

KS
NFS

Turn around time: X Normal ☐ 25% Rush ☐ 50% Rush ☐ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	11/29/12	1445	Heather Woods	11/29/12	1445
Heather Woods	11/29/12	1725		11/30/12	0945

NOTES:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

December 10, 2012

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

RE: Largo CS OrderNo.: 1212205

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 12/5/2012 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. 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. 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.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1212205**
Date Reported: **12/10/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience
Project: Largo CS
Lab ID: 1212205-001 **Matrix:** SOIL

Client Sample ID: SB-59
Collection Date: 11/28/2012 1:55:00 PM
Received Date: 12/5/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **MMD**
Diesel Range Organics (DRO)	88	10		mg/Kg	1	12/6/2012 11:18:19 AM
Surr: DNOP	93.1	72.4-120		%REC	1	12/6/2012 11:18:19 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	3600	240		mg/Kg	50	12/6/2012 12:50:36 PM
Surr: BFB	194	84-116	S	%REC	50	12/6/2012 12:50:36 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	3.0	2.4		mg/Kg	50	12/6/2012 12:50:36 PM
Toluene	57	2.4		mg/Kg	50	12/6/2012 12:50:36 PM
Ethylbenzene	13	2.4		mg/Kg	50	12/6/2012 12:50:36 PM
Xylenes, Total	130	4.8		mg/Kg	50	12/6/2012 12:50:36 PM
Surr: 4-Bromofluorobenzene	108	80-120		%REC	50	12/6/2012 12:50:36 PM

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1212205**

10-Dec-12

Client: Southwest Geoscience
Project: Largo CS

Sample ID **MB-5122**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **5122**	RunNo: **7319**
Prep Date: **12/5/2012**	Analysis Date: **12/6/2012**	SeqNo: **212356** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.8		10.00		98.0	72.4	120			

Sample ID **LCS-5122**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **5122**	RunNo: **7319**
Prep Date: **12/5/2012**	Analysis Date: **12/6/2012**	SeqNo: **212357** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.2	47.4	122			
Surr: DNOP	4.2		5.000		84.5	72.4	120			

Sample ID **1212091-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **5122**	RunNo: **7319**
Prep Date: **12/5/2012**	Analysis Date: **12/6/2012**	SeqNo: **212656** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	790	10	51.98	567.8	424	12.6	148			S
Surr: DNOP	6.1		5.198		117	72.4	120			

Sample ID **1212091-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **5122**	RunNo: **7319**
Prep Date: **12/5/2012**	Analysis Date: **12/6/2012**	SeqNo: **212678** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	900	9.9	49.60	567.8	663	12.6	148	12.9	22.5	S
Surr: DNOP	7.0		4.960		141	72.4	120	0	0	S

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1212205**

10-Dec-12

Client: Southwest Geoscience
Project: Largo CS

Sample ID **MB-5125**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **5125**	RunNo: **7329**
Prep Date: **12/5/2012**	Analysis Date: **12/6/2012**	SeqNo: **213035** 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	910		1000		90.7	84	116			

Sample ID **LCS-5125**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **5125**	RunNo: **7329**
Prep Date: **12/5/2012**	Analysis Date: **12/6/2012**	SeqNo: **213036** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	88.2	74	117			
Surr: BFB	930		1000		92.5	84	116			

Sample ID **1212182-003AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC**	Batch ID: **5125**	RunNo: **7329**
Prep Date: **12/5/2012**	Analysis Date: **12/6/2012**	SeqNo: **213071** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.8	24.08	0	88.5	70	130			
Surr: BFB	920		963.4		95.3	84	116			

Sample ID **1212182-003AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC**	Batch ID: **5125**	RunNo: **7329**
Prep Date: **12/5/2012**	Analysis Date: **12/6/2012**	SeqNo: **213077** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.8	24.25	0	83.0	70	130	5.67	22.1	
Surr: BFB	890		969.9		91.4	84	116	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1212205**

10-Dec-12

Client: Southwest Geoscience
Project: Largo CS

Sample ID **MB-5125**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **5125**	RunNo: **7329**
Prep Date: **12/5/2012**	Analysis Date: **12/6/2012**	SeqNo: **213118** 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	0.97		1.000		97.0	80	120			

Sample ID **LCS-5125**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **5125**	RunNo: **7329**
Prep Date: **12/5/2012**	Analysis Date: **12/6/2012**	SeqNo: **213119** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.050	1.000	0	98.6	76.3	117			
Toluene	0.99	0.050	1.000	0	99.0	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	77	116			
Xylenes, Total	3.0	0.10	3.000	0	100	76.7	117			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID **1212159-001AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC**	Batch ID: **5125**	RunNo: **7329**
Prep Date: **12/5/2012**	Analysis Date: **12/6/2012**	SeqNo: **213123** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.049	0.9709	0	104	67.2	113			
Toluene	1.0	0.049	0.9709	0	105	62.1	116			
Ethylbenzene	1.0	0.049	0.9709	0.004829	107	67.9	127			
Xylenes, Total	3.1	0.097	2.913	0	107	60.6	134			
Surr: 4-Bromofluorobenzene	0.95		0.9709		97.6	80	120			

Sample ID **1212159-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC**	Batch ID: **5125**	RunNo: **7329**
Prep Date: **12/5/2012**	Analysis Date: **12/6/2012**	SeqNo: **213124** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.048	0.9699	0	103	67.2	113	1.58	14.3	
Toluene	1.0	0.048	0.9699	0	105	62.1	116	0.511	15.9	
Ethylbenzene	1.0	0.048	0.9699	0.004829	106	67.9	127	0.756	14.4	
Xylenes, Total	3.1	0.097	2.910	0	106	60.6	134	0.915	12.6	
Surr: 4-Bromofluorobenzene	0.97		0.9699		99.6	80	120	0	0	

Qualifiers:

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

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HALL ENVIRONMENTAL ANALYSIS LABORATORY

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 Aztec** Work Order Number: **1212205**

Received by/date: 12/05/12

Logged By: **Ashley Gallegos** 12/5/2012 10:00:00 AM

Completed By: **Ashley Gallegos** 12/5/2012 11:00:06 AM

Reviewed By: 12/05/12

Chain of Custody

1. Were seals intact?	Yes	No	Not Present ✓
2. Is Chain of Custody complete?	Yes ✓	No	Not Present
3. How was the sample delivered?	Courier		

Log In

4. Coolers are present? (see 19. for cooler specific information)	Yes ✓	No	NA
5. Was an attempt made to cool the samples?	Yes ✓	No	NA
6. Were all samples received at a temperature of >0° C to 6.0°C	Yes ✓	No	NA
7. Sample(s) in proper container(s)?	Yes ✓	No	
8. Sufficient sample volume for indicated test(s)?	Yes ✓	No	
9. Are samples (except VOA and ONG) properly preserved?	Yes ✓	No	
10. Was preservative added to bottles?	Yes	No ✓	NA
11. VOA vials have zero headspace?	Yes	No	No VOA Vials ✓
12. Were any sample containers received broken?	Yes	No ✓	
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ✓	No	# of preserved bottles checked for pH:
14. Are matrices correctly identified on Chain of Custody?	Yes ✓	No	(<2 or >12 unless noted)
15. Is it clear what analyses were requested?	Yes ✓	No	Adjusted?
16. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ✓	No	Checked by:

Special Handling (if applicable)

17. 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:

18. Additional remarks:

19. **Cooler Information**

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

CHAIN OF CUSTODY RECORD

Southwest GEOSCIENCE
Environmental & Hydrogeologic Consultants

Office Location: Aztec
Project Manager: Summers

Laboratory: Hall
Address: ABQ
Contact: Andy Freeman
Phone:
PO/SO #: 0410002

Sampler's Name: Kyle Summers
Sampler's Signature:

Proj. No: 0410002
Project Name: Largo Cr

Lab use only
Due Date:
Temp. of coolers when received (C°): 1.0
1 2 3 4 5
Page 1 of 1

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No/Type of Containers: VOA	A/G 1 Lt.	250 ml	P/O	ANALYSIS REQUESTED: BTEX 8021B	TPH GRO/DRO 8015	Lab Sample ID (Lab Use Only)
S	11/28/12	1355		X	SB-59		16				1	X	X	1212205-001
					NFS									
					NS									

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

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	12/4/12	956		12/4/12	956
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	12/4/12	1757		12/05/12	1000
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

NOTES: 50% rush.

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

January 31, 2013

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.: 1301798

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/24/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. 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. 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.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1301798**
Date Reported: **1/31/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience
Project: Largo CS
Lab ID: 1301798-001 **Matrix:** SOIL

Client Sample ID: MW-75
Collection Date: 1/22/2013 1:09:00 PM
Received Date: 1/24/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **MMD**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	1/31/2013 11:12:10 AM
Surr: DNOP	97.0	72.4-120		%REC	1	1/31/2013 11:12:10 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/28/2013 12:10:52 PM
Surr: BFB	94.9	84-116		%REC	1	1/28/2013 12:10:52 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	1/28/2013 12:10:52 PM
Toluene	ND	0.050		mg/Kg	1	1/28/2013 12:10:52 PM
Ethylbenzene	ND	0.050		mg/Kg	1	1/28/2013 12:10:52 PM
Xylenes, Total	ND	0.10		mg/Kg	1	1/28/2013 12:10:52 PM
Surr: 4-Bromofluorobenzene	103	80-120		%REC	1	1/28/2013 12:10:52 PM

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1301798**

31-Jan-13

Client: Southwest Geoscience
Project: Largo CS

Sample ID **MB-5902**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **5902**	RunNo: **8358**
Prep Date: **1/30/2013**	Analysis Date: **1/31/2013**	SeqNo: **241455** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.9		10.00		99.1	72.4	120			

Sample ID **LCS-5902**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **5902**	RunNo: **8358**
Prep Date: **1/30/2013**	Analysis Date: **1/31/2013**	SeqNo: **241456** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.1	47.4	122			
Surr: DNOP	4.9		5.000		98.1	72.4	120			

Sample ID **1301798-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **MW-75**	Batch ID: **5902**	RunNo: **8358**
Prep Date: **1/30/2013**	Analysis Date: **1/31/2013**	SeqNo: **241458** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	9.7	48.50	0	86.9	12.6	148			
Surr: DNOP	4.2		4.850		86.3	72.4	120			

Sample ID **1301798-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **MW-75**	Batch ID: **5902**	RunNo: **8358**
Prep Date: **1/30/2013**	Analysis Date: **1/31/2013**	SeqNo: **241462** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.97	0	93.9	12.6	148	12.6	22.5	
Surr: DNOP	4.9		5.097		95.6	72.4	120	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1301798**

31-Jan-13

Client: Southwest Geoscience
Project: Largo CS

Sample ID **MB-5845**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **5845**	RunNo: **8306**
Prep Date: **1/25/2013**	Analysis Date: **1/28/2013**	SeqNo: **239872** 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	960		1000		96.0	84	116			

Sample ID **LCS-5845**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **5845**	RunNo: **8306**
Prep Date: **1/25/2013**	Analysis Date: **1/28/2013**	SeqNo: **239873** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.0	74	117			
Surr: BFB	980		1000		98.1	84	116			

Sample ID **1301798-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **MW-75**	Batch ID: **5845**	RunNo: **8306**
Prep Date: **1/25/2013**	Analysis Date: **1/28/2013**	SeqNo: **239875** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	24.93	0	90.0	70	130			
Surr: BFB	1100		997.0		108	84	116			

Sample ID **1301798-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **MW-75**	Batch ID: **5845**	RunNo: **8306**
Prep Date: **1/25/2013**	Analysis Date: **1/28/2013**	SeqNo: **239876** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	24.93	0	86.2	70	130	4.27	22.1	
Surr: BFB	1100		997.0		107	84	116	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1301798**

31-Jan-13

Client: Southwest Geoscience
Project: Largo CS

Sample ID **MB-5845**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **5845**	RunNo: **8306**
Prep Date: **1/25/2013**	Analysis Date: **1/28/2013**	SeqNo: **239889** 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	1.1		1.000		106	80	120			

Sample ID **LCS-5845**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **5845**	RunNo: **8306**
Prep Date: **1/25/2013**	Analysis Date: **1/28/2013**	SeqNo: **239890** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	101	80	120			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	1.0	0.050	1.000	0	103	80	120			
Xylenes, Total	3.1	0.10	3.000	0	102	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		110	80	120			

Sample ID **1301798-001A MS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **MW-75**	Batch ID: **5845**	RunNo: **8306**
Prep Date: **1/25/2013**	Analysis Date: **1/28/2013**	SeqNo: **239892** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.050	0.9950	0	95.9	67.2	113			
Toluene	0.97	0.050	0.9950	0	97.1	62.1	116			
Ethylbenzene	0.99	0.050	0.9950	0	100	67.9	127			
Xylenes, Total	2.9	0.10	2.985	0	98.6	60.6	134			
Surr: 4-Bromofluorobenzene	1.1		0.9950		114	80	120			

Sample ID **1301798-001A MSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **MW-75**	Batch ID: **5845**	RunNo: **8306**
Prep Date: **1/25/2013**	Analysis Date: **1/28/2013**	SeqNo: **239893** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.050	0.9970	0	95.5	67.2	113	0.293	14.3	
Toluene	0.97	0.050	0.9970	0	96.9	62.1	116	0.0353	15.9	
Ethylbenzene	0.99	0.050	0.9970	0	99.5	67.9	127	0.338	14.4	
Xylenes, Total	3.0	0.10	2.991	0	99.6	60.6	134	1.14	12.6	
Surr: 4-Bromofluorobenzene	1.1		0.9970		112	80	120	0	0	

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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 Order Number:	1301798
Received by/date:		01/24/13	
Logged By:	Lindsay Mangin	1/24/2013 10:00:00 AM	
Completed By:	Lindsay Mangin	1/24/2013 10:18:24 AM	
Reviewed By:	IO	01/24/2013	

Chain of Custody

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

Log In

4. Coolers are present? (see 19. for cooler specific information)	Yes ☑	No ☐	NA ☐
5. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
7. Sample(s) in proper container(s)?	Yes ☑	No ☐	
8. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
9. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
10. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
11. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
12. Were any sample containers received broken?	Yes ☐	No ☑	
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
14. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
15. Is it clear what analyses were requested?	Yes ☑	No ☐	
16. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

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

Special Handling (if applicable)

17. 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: _____

18. Additional remarks:

19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Yes			

CHAIN OF CUSTODY RECORD

Southwest GEOSCIENCE
Environmental & Hydrogeologic Consultants

Office Location: Aztec
Project Manager: Summers

Laboratory: Hall
Address: ABQ
Contact:
Phone:
PO/SO #: 0410002

Sampler's Name: Kyle Summers
Sampler's Signature: Largo CS

Proj. No.: 0410002
Project Name: Hall

ANALYSIS REQUESTED: BTEX 8021B; TPH GRO/DRO 8015

Lab use only
Due Date:

Temp. of coolers when received (C°): 1.8

1 | 2 | 3 | 4 | 5

Page 1 of 1

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No/Type of Containers: VOA	A/G 1 Lt.	250 ml	P/O	BTEX	TPH	Lab Sample ID (Lab Use Only)
S	1/22/13	1309		X	MW-75	17	18				1	X	X	1301798-001

KS
NFS

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

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
[signature]	1/23/13	1521	Chantra Walter	1/23/13	1521
Chantra Walter	1/23/13	1745	[signature]	01/24/13	1000

NOTES:

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

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

February 04, 2013

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.: 1301949

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 4 sample(s) on 1/30/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. 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. 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.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1301949**
Date Reported: **2/4/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience
Client Sample ID: MW-75
Project: Largo CS
Collection Date: 1/29/2013 9:30:00 AM
Lab ID: 1301949-001
Matrix: AQUEOUS
Received Date: 1/30/2013 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **MMD**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	2/1/2013 5:20:52 PM
Surr: DNOP	110	75.4-146		%REC	1	2/1/2013 5:20:52 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.10		mg/L	2	1/31/2013 1:57:55 PM
Surr: BFB	97.2	51.9-148		%REC	2	1/31/2013 1:57:55 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	2.0		µg/L	2	1/31/2013 1:57:55 PM
Toluene	ND	2.0		µg/L	2	1/31/2013 1:57:55 PM
Ethylbenzene	ND	2.0		µg/L	2	1/31/2013 1:57:55 PM
Xylenes, Total	ND	4.0		µg/L	2	1/31/2013 1:57:55 PM
Surr: 4-Bromofluorobenzene	97.6	69.7-152		%REC	2	1/31/2013 1:57:55 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience
Client Sample ID: MW-53
Project: Largo CS
Collection Date: 1/29/2013 10:30:00 AM
Lab ID: 1301949-002 **Matrix:** AQUEOUS **Received Date:** 1/30/2013 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **MMD**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	2/1/2013 5:47:50 PM
Surr: DNOP	107	75.4-146		%REC	1	2/1/2013 5:47:50 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	1/31/2013 2:28:00 PM
Surr: BFB	93.4	51.9-148		%REC	1	1/31/2013 2:28:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	1/31/2013 2:28:00 PM
Toluene	ND	1.0		µg/L	1	1/31/2013 2:28:00 PM
Ethylbenzene	ND	1.0		µg/L	1	1/31/2013 2:28:00 PM
Xylenes, Total	ND	2.0		µg/L	1	1/31/2013 2:28:00 PM
Surr: 4-Bromofluorobenzene	94.7	69.7-152		%REC	1	1/31/2013 2:28:00 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience
Project: Largo CS
Lab ID: 1301949-003 **Matrix:** AQUEOUS

Client Sample ID: MW-54
Collection Date: 1/29/2013 11:30:00 AM
Received Date: 1/30/2013 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **MMD**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	2/1/2013 6:14:37 PM
Surr: DNOP	111	75.4-146		%REC	1	2/1/2013 6:14:37 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	1/31/2013 2:58:06 PM
Surr: BFB	91.1	51.9-148		%REC	1	1/31/2013 2:58:06 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	1/31/2013 2:58:06 PM
Toluene	ND	1.0		µg/L	1	1/31/2013 2:58:06 PM
Ethylbenzene	ND	1.0		µg/L	1	1/31/2013 2:58:06 PM
Xylenes, Total	ND	2.0		µg/L	1	1/31/2013 2:58:06 PM
Surr: 4-Bromofluorobenzene	89.6	69.7-152		%REC	1	1/31/2013 2:58:06 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience
Project: Largo CS
Lab ID: 1301949-004
Matrix: AQUEOUS
Client Sample ID: MW-55
Collection Date: 1/29/2013 11:00:00 AM
Received Date: 1/30/2013 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **MMD**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	2/1/2013 6:41:36 PM
Surr: DNOP	109	75.4-146		%REC	1	2/1/2013 6:41:36 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	1/31/2013 3:28:08 PM
Surr: BFB	92.4	51.9-148		%REC	1	1/31/2013 3:28:08 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	1/31/2013 3:28:08 PM
Toluene	ND	1.0		µg/L	1	1/31/2013 3:28:08 PM
Ethylbenzene	ND	1.0		µg/L	1	1/31/2013 3:28:08 PM
Xylenes, Total	ND	2.0		µg/L	1	1/31/2013 3:28:08 PM
Surr: 4-Bromofluorobenzene	90.1	69.7-152		%REC	1	1/31/2013 3:28:08 PM

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1301949**

04-Feb-13

Client: Southwest Geoscience

Project: Largo CS

Sample ID **MB-5951**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range**
Client ID: **PBW**	Batch ID: **5951**	RunNo: **8400**
Prep Date: **2/1/2013**	Analysis Date: **2/1/2013**	SeqNo: **242084** 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	1.1		1.000		111	75.4	146			

Sample ID **LCS-5951**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range**
Client ID: **LCSW**	Batch ID: **5951**	RunNo: **8400**
Prep Date: **2/1/2013**	Analysis Date: **2/1/2013**	SeqNo: **242095** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.0	1.0	5.000	0	119	64.4	132			
Surr: DNOP	0.53		0.5000		107	75.4	146			

Sample ID **LCSD-5951**	SampType: **LCSD**	TestCode: **EPA Method 8015B: Diesel Range**
Client ID: **LCSS02**	Batch ID: **5951**	RunNo: **8400**
Prep Date: **2/1/2013**	Analysis Date: **2/1/2013**	SeqNo: **242149** 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	64.4	132	1.08	20	
Surr: DNOP	0.61		0.5000		122	75.4	146	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1301949**

04-Feb-13

Client: Southwest Geoscience

Project: Largo CS

Sample ID **5ML RB**	SampType: **MBLK**			TestCode: **EPA Method 8015B: Gasoline Range**					
Client ID: **PBW**	Batch ID: **R8394**			RunNo: **8394**					
Prep Date:	Analysis Date: **1/31/2013**			SeqNo: **242013**		Units: **mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		91.0	51.9	148			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**			TestCode: **EPA Method 8015B: Gasoline Range**					
Client ID: **LCSW**	Batch ID: **R8394**			RunNo: **8394**					
Prep Date:	Analysis Date: **1/31/2013**			SeqNo: **242014**		Units: **mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.52	0.050	0.5000	0	104	73.2	124			
Surr: BFB	19		20.00		97.4	51.9	148			

Sample ID **1301949-001AMS**	SampType: **MS**			TestCode: **EPA Method 8015B: Gasoline Range**					
Client ID: **MW-75**	Batch ID: **R8394**			RunNo: **8394**					
Prep Date:	Analysis Date: **1/31/2013**			SeqNo: **242021**		Units: **mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	1.1	0.10	1.000	0	105	63.5	131			
Surr: BFB	41		40.00		102	51.9	148			

Sample ID **1301949-001AMSD**	SampType: **MSD**			TestCode: **EPA Method 8015B: Gasoline Range**					
Client ID: **MW-75**	Batch ID: **R8394**			RunNo: **8394**					
Prep Date:	Analysis Date: **1/31/2013**			SeqNo: **242022**		Units: **mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.99	0.10	1.000	0	98.7	63.5	131	6.51	16.7	
Surr: BFB	40		40.00		101	51.9	148	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1301949**

04-Feb-13

Client: Southwest Geoscience
Project: Largo CS

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **R8394**	RunNo: **8394**
Prep Date:	Analysis Date: **1/31/2013**	SeqNo: **242029** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	19		20.00		93.8	69.7	152			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **R8394**	RunNo: **8394**
Prep Date:	Analysis Date: **1/31/2013**	SeqNo: **242030** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	80	120			
Toluene	20	1.0	20.00	0	99.9	80	120			
Ethylbenzene	20	1.0	20.00	0	101	80	120			
Xylenes, Total	61	2.0	60.00	0	102	80	120			
Surr: 4-Bromofluorobenzene	21		20.00		103	69.7	152			

Sample ID **1301949-002AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **MW-53**	Batch ID: **R8394**	RunNo: **8394**
Prep Date:	Analysis Date: **1/31/2013**	SeqNo: **242036** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	74.1	124			
Toluene	21	1.0	20.00	0	103	75.2	124			
Ethylbenzene	21	1.0	20.00	0	103	69	125			
Xylenes, Total	62	2.0	60.00	0	104	73.1	126			
Surr: 4-Bromofluorobenzene	21		20.00		103	69.7	152			

Sample ID **1301949-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **MW-53**	Batch ID: **R8394**	RunNo: **8394**
Prep Date:	Analysis Date: **1/31/2013**	SeqNo: **242037** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	94.8	74.1	124	7.66	11.2	
Toluene	19	1.0	20.00	0	94.4	75.2	124	8.30	11.9	
Ethylbenzene	19	1.0	20.00	0	95.6	69	125	7.37	13.5	
Xylenes, Total	58	2.0	60.00	0	96.0	73.1	126	7.90	13	
Surr: 4-Bromofluorobenzene	20		20.00		101	69.7	152	0	0	

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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 Order Number:	1301949
Received by/date:	AG 01/30/13		
Logged By:	Michelle Garcia	1/30/2013 10:30:00 AM	Michelle Garcia
Completed By:	Michelle Garcia	1/30/2013 10:45:16 AM	Michelle Garcia
Reviewed By:	[illegible]	01/30/2013	

Chain of Custody

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

Log In

4. Coolers are present? (see 19. for cooler specific information)	Yes ☑	No ☐	NA ☐
5. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
7. Sample(s) in proper container(s)?	Yes ☑	No ☐	
8. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
9. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
10. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
11. VOA vials have zero headspace?	Yes ☑	No ☐	No VOA Vials ☐
12. Were any sample containers received broken?	Yes ☐	No ☑	
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
14. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
15. Is it clear what analyses were requested?	Yes ☑	No ☐	
16. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

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

Special Handling (if applicable)

17. 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: _____

18. Additional remarks:

19. Cooler Information

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

CHAIN OF CUSTODY RECORD

Southwest GEOSCIENCE
Environmental & Hydrogeologic Consultants

Office Location: Aztec
Project Manager: Summers

Laboratory: Hall
Address: Abq
Contact: Freeman
Phone:
PO/SO #: 0410002

Sampler's Name: Kyle Summers
Sampler's Signature:

Proj. No: 0410002
Project Name: Largo CS

Lab use only
Due Date:
Temp. of coolers when received (C°): 1.0
1 | 2 | 3 | 4 | 5
Page 1 of 1

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No/Type of Containers: VOA	A/G 1 Lt.	250 ml	P/O	ANALYSIS REQUESTED: BTEX 8021B	TPH GRO/DRO 8015B	Lab Sample ID (Lab Use Only)
W	01/29/13	0930		X	MW-75			5				X	X	1301949-001
		1030			MW-53									-002
		1170			MW-54									-003
		1100			MW-55									-004

HFX
RLS

Turn around time: X Normal ☐ 25% Rush ☐ 50% Rush ☐ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	1/29/13	1447	Christine Walter	1/29/13	1447
Relinquished by (Signature) Christine Walter	1/29/13	1710		01/30/13	10:30
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

NOTES:

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