

3R - 194

2010 AGWMR

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VIA FedEx

November 10, 2010

Mr. Glenn von Gonten
New Mexico Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87504

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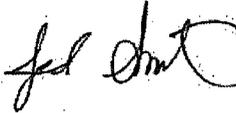
**RE: 2010 Groundwater, Soil, and Air Sampling Report
Jaquez Com C#1 and Jaquez Com E#1 Site
NMOCD Case No.: 3RP-194**

Dear Mr. von Gonten

El Paso Natural Gas Company (EPNG) hereby submits the enclosed **2010 Groundwater, Soil, and Air Sampling Report** for the above-referenced site. The report presents the results of site assessment work conducted in June, August, and September of 2010.

If you have any questions concerning the enclosed report or require additional information, please call me at (713) 420-7361.

Sincerely,

 on behalf of

Ian Yanagisawa, P.E., P.G.
Environmental Representative

cc: Buddy Shaw, BP
Mr. John Jaquez
Brandon Powell, NMOCD-Aztec

Enclosures: as stated

**2010 GROUNDWATER, SOIL, AND AIR SAMPLING
REPORT**

JAQUEZ COM. C#1 AND JAQUEZ COM. E#1

November 2010

2010 NOV 12 A 8:06

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Prepared for:

**EL PASO CORPORATION
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LIST OF ACRONYMS

bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and total xylenes
EPTPC	El Paso Tennessee Pipeline Company
IDW	Investigation-derived waste
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
µg/L	micrograms per liter
NMWQCC	New Mexico Water Quality Control Commission
NMOCD	New Mexico Oil Conservation Division
O&M	operation and maintenance
ORC	oxygen-releasing compound
PID	photoionization detector
PSH	phase-separated hydrocarbons
PVC	polyvinyl chloride
SVE	soil vapor extraction
TPH	total petroleum hydrocarbons
yd ³	cubic yards

1.0 INTRODUCTION

This report has been prepared on behalf of El Paso Tennessee Pipeline Company (EPTPC) to present the results of sampling activities performed at the Jaquez Com. C#1 and Jaquez Com. E#1 (Jaquez) meter station pit site (i.e., Jaquez Site) during June, August, and September 2010. The site is located in Township 29N, Range 9W, Section 6, in San Juan County, New Mexico, as shown in **Figure 1, Site Location**. The Jaquez Site is bisected by Citizens Ditch and is divided into the area north of Citizens Ditch and the area south of Citizens Ditch. **Figure 2, Site Layout**, presents a detailed map of the Jaquez Site.

In March 2010, EPTPC was notified that a new release had occurred from an operating gathering line where it crossed the southern embankment of Citizens Ditch. Following initial emergency response activities taken by the current operator, an on-site meeting was held between various stakeholders. As a result, EPTPC initiated the groundwater, soil, and air sampling activities documented in this report, in an effort to assess both new impacts associated with the recent release and residual impacts associated with the former EPNG pit.

Two phases of site assessment are presented in this report:

1. June 2010 Groundwater, Soil, and Air Sampling: this was a first phase investigation focusing on assessing current groundwater quality, vadose zone soils generally between the Citizens Ditch and the former El Paso excavations (see Section 2.0 for additional detail), and air quality.
2. August/September 2010 Direct Push Soil Delineation: this second phase investigation focused on defining the horizontal and vertical extents of petroleum hydrocarbon impacts, as well as the nature of the site impacts. The two key goals of this work were 1) to evaluate overall remediation targets and 2) assess impacts associated with the March 2010 release from the operator's gathering line.

This report is organized into six sections and appendices containing supporting documentation. Section 1.0 is this introduction. Section 2.0 presents the project background and the site activities conducted by El Paso prior to 2010. Section 3.0 presents and discusses the June 2010 site assessment activities. Section 4.0 presents and discusses the follow-up direct push soil sampling activities conducted in August/September 2010. Section 5.0 presents site conclusions and recommendations; and Section 6.0 documents the applicable literary references. Supporting documentation for the site assessment activities performed in June 2010 and August/September 2010 is provided in Appendices A through C.

2.0 PROJECT BACKGROUND AND PREVIOUS ACTIVITIES

This section presents a summary of previous investigations and remedial actions through 2005 (no activities were conducted between 2006 and 2010 pending a response to the 2005 annual report and closure request, submitted to the NMOCD in January 2006).

2.1 SUMMARY OF PREVIOUS INVESTIGATIONS

The Jaquez Site was identified in 1992 when the adjoining landowner expressed concern regarding potential hydrocarbon contamination in a garden area south of the two meter site locations. EPTPC, then El Paso Natural Gas Company, initiated a comprehensive soil and groundwater investigation of the meter sites and nearby garden area in March 1993, as directed by the New Mexico Oil Conservation Division (NMOCD). In June 1993, EPTPC submitted a remediation plan to NMOCD for excavation activities at areas both north and south of Citizens Ditch, and subsequently excavated hydrocarbon-contaminated soils in August and September 1993. Groundwater monitoring wells R-1 through R-5 (north of Citizens Ditch) and M-1 through M-5 (south of Citizens Ditch) were also installed and sampled.

In June 1999, the landowner encountered discolored soils while plowing in the garden area. As a result, EPTPC and NMOCD sampled the site and recommended additional soil and groundwater investigation. In November 1999, a test trench was dug across the field revealing a small area of residual contamination on the western side of the garden area. Additional investigations were conducted in December 1999 to further investigate allegations of a second pit location north of the Citizens Ditch. No evidence of an additional pit or impacted soils were found during that investigation.

In January 2000, additional downgradient monitoring wells were installed west of the site near the landowner residence, as requested by NMOCD and the landowner. In addition, a six-inch diameter irrigation well north of Citizens Ditch was sampled in February 2000. No BTEX was detected above analytical laboratory detection limits in these samples. Furthermore, in February 2000, six sediment samples were collected from the Citizens Ditch for hydrocarbon analyses during a brief closure of the conveyance. All sediment samples were below NMOCD standards. In July 2000, temporary monitoring wells TMW-1 and TMW-2 were installed and sampled near the fence line in the area south of Citizens Ditch. No detectable contamination was found in these samples. Surface water samples (above and below the site) from the Citizens Ditch were collected between June 2000 and January 2003. Sampling results did not show contaminants of concern above NMWQCC standards in surface water conveyed across the Jaquez Site by Citizens Ditch.

2.1 SUMMARY OF PREVIOUS REMEDIAL ACTIONS

Remedial activities have been ongoing since 1993 at the Jaquez Site. In addition to the excavation of contaminated soils mentioned above, passive and belt-type hydrocarbon skimmers were installed in two wells in the area north of Citizens Ditch to collect free-phase hydrocarbons from wells that indicated seasonal accumulations of free-product. By 1998, approximately 265 gallons of free-phase hydrocarbons were recovered from the

wells in the area north of Citizens Ditch. No free-phase hydrocarbons have been measured in any well since March 29, 2000. Dissolved phase hydrocarbon levels continued to decrease in 1999 and during 2000.

In January 2000, air sparging and vapor extraction activities were initiated on the north side of Citizens Ditch to address residual soil and dissolved-phase groundwater contamination in the former pit area. This aggressive remediation has considerably reduced hydrocarbon concentrations in the area north of Citizens Ditch to levels at or near the NMOCD remediation standards.

The area south of Citizens Ditch has been subjected to passive venting and nutrient amendments since 1998 in an effort to enhance biological degradation. Hydrocarbon concentrations in groundwater below the area south of Citizens Ditch exhibited a reducing trend over that time.

2.1 PROJECT CHRONOLOGY

A chronological summary of assessment and remediation activities at the Jaquez Site is provided below.

- 1992 - Landowner expressed concern regarding potential hydrocarbon contamination in a garden area near the meter site location.
- March 1993 - Comprehensive soil and groundwater investigation performed on meter site locations and nearby garden area.
- June 1993 - EPNG submits a remedial plan to NMOCD.
- July 1993 - NMOCD approves the remedial plan.
- August 1993 - Remediation activities initiated.
- September 1993 - Remediation activities completed.
- September 1993 - Monitoring wells R-1 through R-5 and M-1 through M-5 were installed north and south of Citizens Ditch. Initial sampling for benzene, toluene, ethylbenzene, and total xylenes (BTEX) indicated monitoring wells R-1, R-2, R-4, M-3, and M-4 were above NMWQCC standards.
- October 1993 to October 1996 – Phase separated hydrocarbons (PSH) were observed in monitoring wells R-1 and R-2 during the months of seasonally low groundwater levels (i.e., January through May). Passive skimmer systems were installed to remove the PSH during periods of PSH accumulation.
- November 1996 - A pumping test was initiated to determine if PSH could be removed during high seasonal groundwater by depressing the water table in and around R-1 and R-2.
- December 1996 - EPTPC injected approximately 500 gallons of urea nitrate solution into the passive vent system and installed magnesium peroxide socks in monitoring wells M-3 and M-4 to supply oxygen to enhance natural biodegradation of hydrocarbons in groundwater.

- January 1997 - EPTPC installed a belt skimmer in well R-2 to remove PSH.
- February 1997 - EPTPC installed a belt skimmer in well R-1 to remove PSH.
- November 1997 - EPTPC installed two temporary monitoring wells inside the excavated area north of well R-1 to determine if PSH could be recovered during the high groundwater season.
- June 1997 – The belt-skimmer PSH recovery system was shut down due to the seasonal reduction of product thickness related to local irrigation.
- January 1998 - EPTPC restarted the belt-skimmer system in wells R-1 and R-2.
- April 1998 – The belt-skimmer PSH recovery system was shut down due to the seasonal reduction of product thickness related to local irrigation.
- July 1998 - EPTPC injected approximately 500 gallons of urea nitrate solution into the passive vent system and installed magnesium peroxide socks in monitoring wells M-3, M-4, R-3, and R-4 to supply oxygen to enhance natural biodegradation of hydrocarbons in groundwater.
- November 1998 - EPTPC conducted an investigation of possible hydrocarbon seeps from groundwater into the surface water of an arroyo to the south of the property. No hydrocarbon seeps were found during this investigation.
- June 1999 – EPTPC submitted a soil and groundwater remediation work plan to the NMOCD for air sparging in the area north of Citizens Ditch.
- June 1999 – The landowner encountered discolored soils while plowing. EPTPC and NMOCD sampled the area of concern.
- August 1999 – One air sparging well, one soil vapor extraction (SVE) point, and five monitoring points were installed and a SVE pilot test was performed north of Citizens Ditch.
- August 1999 – EPTPC submitted soil sampling results and a work plan for additional soil and groundwater investigations, as requested by NMOCD.
- September 1999 – NMOCD approved the soil and groundwater investigation work plan with modifications.
- October 1999 – EPTPC submitted the SVE Pilot Test Report and a work plan for soil and groundwater remediation using air sparging to the NMOCD.
- November 1999 – The landowner requested a test trench across the field. The test trench revealed a small area of residual contamination on the western side of the garden area.
- December 1999 – A meeting with the landowner revealed a possible second pit location on the north side of Citizens Ditch. Four test trenches were excavated in the possible pit area. No evidences of a pit or impacted soils were found.
- January 2000 – EPTPC submitted soil investigation results and amended the work plan for the soil and groundwater investigation.
- January 2000 – EPTPC began air sparging remediation.

- January 2000 – EPTPC installed two additional downgradient monitoring wells, as requested by the landowner and the NMOCD.
- February 2000 – EPTPC sampled the existing six-inch irrigation well, as requested by the landowner and the NMOCD.
- February 2000 – EPTPC sampled sediments in Citizens Ditch, as requested by the landowner.
- May 2000 - New Mexico Air Quality Board advised on air permit requirements and notice of intent requirements for the remediation system effluent.
- June 2000 – EPTPC collected a series of air samples from the effluent of the SVE system for calculating the total estimated emissions.
- June 2000 – EPTPC sampled surface water from Citizens Ditch both upgradient and down gradient of the Jaquez Com E #1 and Com C #1 site.
- June 2000 – EPTPC excavated approximately 204 cubic yards of soil from the northwestern corner of the garden area, and backfilled the excavation with aggregate rock topped with a mixture of clean soil and livestock manure.
- June 2000 – EPTPC injected 70 gallons of urea nitrate mixed with 600 gallons of potable water into the passive vent system south of Citizens Ditch.
- July 2000 – EPTPC installed two temporary groundwater monitoring wells in the garden area south of Citizens Ditch.
- August 2000 – EPTPC sampled a seep that had developed at the toe of the Citizens Ditch embankment on the north side of the former cornfield.
- October 2000 – EPTPC began an evaluation of the remediation system to ensure optimum performance and effectiveness.
- December 2000 – EPTPC concluded the evaluation of the air sparging and SVE system and incorporated functional changes to the system.
- March 2001 - EPTPC installed two new air sparging wells and one new SVE well in the northern portion of the site.
- September 2001 – EPTPC injected aqueous urea nitrate into the passive vent system located on the southern side of Citizens Ditch.
- November 2002 – EPTPC installed two new air sparging points SP-1 and SP-2, located on the south side of Citizens Ditch immediately north of monitoring well M-4.
- November 2002 – EPTPC injected ORC into four injection locations immediately north of monitoring well M-4.
- December 2002 – EPTPC abandoned temporary wells TMW-1 and TMW-2.
- December 2002 – EPTPC installed one new monitor well M-7 at the approximate location of TMW-2.
- 2002 – EPTPC conducted on-going groundwater and surface water monitoring in the areas north and south of Citizens Ditch.

- 2003 – EPTPC evaluated the effectiveness of ORC injection near monitoring well M-4 in the area south of Citizens Ditch; conducted O&M activities associated with the air sparging and soil vapor extraction systems located in the area north of Citizens Ditch; and conducted on-going groundwater monitoring in the areas north and south of Citizens Ditch.
- April 2003 – Remediation systems were temporarily suspended for performance monitoring, and were later resumed due to groundwater concentration rebound.
- February through May 2004 – Remediation systems were shut down during this period, due to groundwater concentrations below closure criteria during the February sampling event.
- June through August 2004 - Remediation systems were restarted in June, due to a rebound in benzene concentrations at two wells (R1 and R4) during the May sampling event.
- August through November 2004 - Remediation systems were again shut down during this period, due to groundwater concentrations below closure criteria during the August sampling event.
- December 2004 - The systems were restarted on December 7th, in response to benzene concentrations above standards in two wells (R1 and R4) during the November sampling event.
- January 2005 - Remediation systems were shut down during the holidays, and then restarted on January 4, 2005. The vent blower was not operational, but the air sparging system was running.
- February 2005 – The system was shut down on February 3, 2005.
- January 2006 – The 2005 groundwater monitoring data indicated that the site groundwater had met the applicable NMWQCC standards for four consecutive quarters; therefore, closure was requested per El Paso's NMOCD-approved generic pit groundwater assessment and closure plan.

3.0 JUNE 2010 ASSESSMENT ACTIVITIES

Groundwater, soil, and air/vapor sampling activities were conducted on June 10-11, 2010. Specifically, the following work items were performed:

- Sampling of the 13 existing groundwater monitor wells.
- Conducted hand-auger soil borings at 12 locations. Screened the unsaturated zone soils for organic vapors and total petroleum hydrocarbons (TPH). Four (4) confirmatory soil samples were also collected in order to supplement and validate field TPH results.
- Screened the ambient air, the five (5) passive soil vents, and the 13 monitor well casings for organic vapors. Two (2) confirmatory air samples were also collected in order to supplement and validate the field screening results.

3.1 FIELD PROCEDURES

The following paragraphs present greater description of the June 2010 assessment work conducted at the Jaquez site. **Figure 1** shows the Jaquez site location. **Figure 2** depicts the site layout, including the groundwater monitor wells, passive vent wells, and soil boring locations.

Groundwater Sampling: On June 10, 2010, the 13 monitor wells (R-1, R-2, R-3, R-4, R-5, R-6, M-1, M-2, M-3, M-4, M-5, M-6, M-7) were sampled in accordance with the NMOCDC guidance document entitled *Guidelines for Remediation of Leaks, Spills and Releases* (August 1993). Each well was purged of three (3) casing volumes of water, unless it first bailed dry, in which case sampling commenced immediately pending sufficient water recovery. Field parameters consisting of pH, temperature, and conductivity were measured and recorded after each well volume purged and at the time of sample collection.

The 13 groundwater samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) by USEPA SW-846 Method 8260B. Analytical services were performed by Accutest Laboratories, Inc., Houston, Texas. Field sampling forms are included in **Appendix B**.

Soil Sampling and Screening: As depicted on **Figures 2 and 4**, soil screening was conducted at 12 locations primarily between Citizens Ditch and the two 1993 excavation areas. One soil boring, SB-12, was conducted within the documented footprint of the southern excavation. The soil boring locations were primarily intended to provide screening data for potentially impacted soils that were not excavated in August 1993 due to their proximity to Citizens ditch. As documented in previous reports, these soils adjacent to the ditch were instead remediated via a number of in-situ techniques, including passive venting, enhanced bioremediation via injection/emplacement of electron acceptors, air sparging, and soil vapor extraction. The soil boring locations

were reviewed with Mr. Carroll Crawford of the Bloomfield Irrigation District, who specified that borings be no closer than 3 to 4 feet from the water's edge.

Soil screening was conducted by advancing a manual soil sampler (i.e., a hand-auger) from ground surface to the apparent water table, even if perched (depths varied due to significant variations in ground surface topography). A representative sample from each 6-inch section of retrieved soil core was placed in a labeled Ziploc bag, placed in a cooler (out of the sun), and allowed to equilibrate for at least 10 minutes. The bag headspace vapors were then screened via a PID; and the bags were replaced into the cooler. The field team contacted the MWH project manager with the bag headspace results; at which time sample selections were made for field screening of TPH via a PetroFLAG™ test kit (USEPA SW-846 Draft Method 9074). Following these screening analyses, the field team again contacted the MWH project manager to select locations and depths for subsequent laboratory analysis. Confirmatory soil samples were containerized using the previously bagged and stored soil. The samples were submitted to Accutest Laboratories, Inc., Houston, Texas, for analysis of BTEX by USEPA SW-846 Method 8260B. In addition, the samples were analyzed for TPH-Gasoline Range Organics (GRO), TPH (C10-C28), and TPH (>C28-C40) via USEPA SW-846 Method 8015M. The locations of the confirmation samples are shown on **Figure 5**.

The locations of the soil borings were determined via a hand-held GPS unit. The soil borings were plugged with hydrated bentonite chips. Recovered soil cuttings were collected in a DOT-rated drum and transported off-site to a nearby permitted landfarm operated by Envirotech, Inc.

Ambient Air and Well Casing Vapor Screening: Ambient air and Organic vapor screening was conducted on June 11, 2010 during a slow walk around the El Paso monitoring and remediation well network. Screening utilized an organic vapor analyzer equipped with a 10.6 eV photoionization detector (PID). The probe tip was held at waist height and the display was monitored along the entire route. Screening was also conducted at the five (5) passive soil vent wells (locations shown on **Figure 2**). These wells had been capped in May 2010; and on June 10, 2010 the field team cut the risers off to approximately three feet above ground surface, in order to facilitate screening and sampling activities. The wells were capped overnight and allowed to equilibrate with the subsurface conditions. Screening was conducted on June 11, 2010 by removing the slip cap and immediately inserting the probe tip of PID. Field notes of these activities are included in **Appendix B**.

Three confirmatory air samples were collected in Tedlar® bags and submitted to the Accutest Laboratories, Inc. laboratory in Pensacola, Florida for analysis of BTEX and TPH (as equivalent pentane) via EPA Method TO-3. The locations of these samples are shown on **Figure 6**. The samples, which were collected using a portable air sampling pump, were as follows:

- Monitor well R-1 casing vapor
- Passive Vent Well #4

- Ambient air at a location between SB-6, SB-7, and Passive Vent Well #5 (westernmost well), adjacent to an on-site trailer (see **Figure 6**).

For the samples collected from Passive Vent Well #4 and R-1, each well was purged for three minutes at a rate of 6-liters per minute. Upon completion of this purge period, extracted soil vapor was pumped into a Tedlar[®] bag for transportation and submission to the laboratory.

3.2 DISCUSSION OF RESULTS

The results of the assessment activities are presented on **Tables 1, 2, 3, and 4** and **Figures 3, 4, 5, 6, and 7**. Laboratory analytical reports are included in **Appendix C**. A brief discussion of each assessment area is presented next:

1. Groundwater. The groundwater results are presented on **Table 1** and **Figure 3**. With the exception of the sample collected from Monitor Well M-4, all groundwater samples were non-detect for the BTEX constituents. The sample from Monitor Well M-4 exhibited a benzene concentration of 147 µg/L, which exceeded the NMWQCC groundwater standard of 10 µg/L. Xylenes were also detected at 139 µg/L, which is well below the NMWQCC xylene standard of 620 µg/L.

The groundwater at this site was last sampled in November 2005, at which time all results had remained below the NMWQCC groundwater standards for four (4) consecutive quarters. Monitor Well MW-4, in particular, had met the standards since November 2002, representing three full years of NMWQCC compliance by the time closure was requested in January 2006. As shown on **Table 2** and depicted on **Figure 7**, the June 2010 sample result from Monitor Well M-4 represents a sharp increase in both benzene and total xylenes. The cause of this spike appears to be the recent gathering line release. Soil screening in the release area (discussed next) indicated elevated PID readings at SB-7 and SB-8. The shallow soil is fairly coarse-grained, with little natural resistance against contaminant mass flux to groundwater (particularly when the groundwater is elevated in the Spring.) Monitor Well MW-4 is the nearest downgradient groundwater monitor well from the gathering line release area; and this is the only well displaying BTEX impacts.

2. Soil. The June 2010 soil screening and analytical results are presented on **Table 3** and **Figures 4 and 5**. Three clear areas of soil impact were identified during this investigation phase: SB-7, SB-8, and SB-12.

At SB-7, the soil sample at 1-foot below ground surface (bgs) exhibited a bag headspace PID reading of 106 ppmv. This shallow soil interval was also screened via a PetroFLAG[™] test kit, with a result of 132 mg/kg, potentially exceeding the NMOCD standard of 100 mg/kg (as discussed later, the PetroFLAG[™] results appear to be subject to a high bias, particularly when significant natural organic matter is present). The second soil sample from this boring was at a depth of 2 feet. The PID reading was significantly lower at 30.6 ppmv. Per the protocols used during the June assessment phase, the boring was terminated at 2 feet due to the presence of perched groundwater related to channel seepage.

The most elevated impacts, based on PID screening, were encountered at SB-8. The SB-8 sample from approximately 1-foot bgs registered a bag headspace vapor reading of 230 ppmv. The PID screening results gradually decreased with depth, yet were still 43.2 ppmv at the terminal depth of 4 feet bgs. Two of the samples from SB-8 were screened with the PetroFLAG™ TPH test kit: The results were 298 mg/kg and 208 mg/kg at the 1-foot and 4-foot depths, respectively. SB-8 was the nearest soil boring to the recent gathering line release.

The third soil boring to exhibit significant hydrocarbon impacts was SB-12. This boring was conducted within the understood footprint of the 1993 excavation and was intended to be a control point showing clean soil. However, an oily black staining was encountered at approximately 3 to 4 feet bgs, slightly above the saturated terminal depth of 4.75 feet bgs. This soil sample was field screened for TPH via the PetroFLAG™ test kit, and the result was 7,045 mg/kg. Based on the low PID readings, which ranged from 1.6 to 22.9 ppmv, the impacts appear to be comprised of heavier, low vapor pressure hydrocarbons. The observed impacts likely indicate re-mobilization of residual hydrocarbons from the north wall of the 1993 excavation. Additional delineation of this stained area was conducted in August-September 2010 and is discussed in Section 4.0.

In the remaining nine (9) June 2010 soil borings, field PID screening and visual observation indicated minimal to no soil impact. As summarized on **Table 3**, the PetroFLAG™ field TPH screening tests did, however, indicate potential hydrocarbon contamination above standards in samples SB-3 (5'), SB-9 (1' and 4'), SB-10 (1'), SB-11 (2.5'), with results ranging from 123 to 222 mg/kg of TPH. These field screening results were likely biased high, based on the lack of observable impact. As a safety measure, because these screening results exceeded the TPH standard of 100 mg/kg, soil from the SB-3 (5'), SB-9 (4'), SB-11 (2.5') samples was submitted for confirmatory analysis. The laboratory results indicated that BTEX was not present and TPH ranged from non-detect to 18.1 mg/kg. It is concluded that these PetroFLAG™ field TPH screening tests were indeed biased high, likely due to natural organic matter such as that observed in follow-up direct push soil borings conducted in August and September 2010. For example, GP-15, which was located near SB-11, noted roots and black organic staining present in the upper 2.5 feet (which was the total depth of the SB-11 boring). It is also noted that organic wastes were present on the ground surface near the ranch hand trailer and in the Jaquez Garden area. Natural (or emplaced) organic matter is a documented positive bias for the PetroFLAG™ test.

One limitation of the June 2010 soils delineation activities was that soil borings, which utilized a hand-auger, were terminated at the apparent water table. Subsequent review of the site conditions indicated that the water table elevation at the time of the field work was generally at the high end of its seasonal fluctuation range. Perched water was also present at shallow depths due to seepage from Citizens Ditch. Thus, with the exception of the impacts observed in SB-12 (located in the topographically low Garden area) much of the hydrocarbon smear zone was

not accessible for screening/sampling. This limitation led to a second soil sampling effort in August/September 2010, which is discussed in Section 4.0.

3. Ambient Air and Well Casing Vapors. Vapor screening and confirmation analytical results are presented on **Table 4** and depicted spatially on **Figure 6**. Ambient air screening did not indicate the presence hydrocarbon vapors in ambient air. This was confirmed via subsequent laboratory analysis of an ambient air sample, which was non-detect for BTEX and TPH.

Hydrocarbon vapors were detected in Passive Vent Wells #4 (0.4 ppmv) and #5 (8.9 ppmv) and in the Monitor Well R-1 casing (81.2 ppmv). Subsequent laboratory analyses of the confirmatory gas samples did not indicate the presence of either BTEX or TPH; though this negative result was likely due to the purging activities. It is reasonable to expect that vapors associated with proximal hydrocarbon impacts can accumulate when wells are closed (as these were), and there are evident hydrocarbon impacts both in the Passive Vent Well #4 and #5 and the R-1 areas.

3.3 INVESTIGATION DERIVED WASTE

Purged groundwater was transported by LTE to the El Paso Rio Vista facility for management. Excess recovered soil was placed into a DOT-rated drum and transported on June 11, 2010 to the Envirotech, Inc. landfarm facility. Other investigation derived waste (e.g., sampling gloves and disposable bailers) was managed off-site by LTE as a nonhazardous solid waste.

4.0 AUGUST-SEPTEMBER 2010 SOIL SAMPLING

This section describes the results of direct-push soil sampling activities conducted during August 26 – September 2, 2010 at the Jaquez site. Specifically, the following work items were performed:

- 20 direct push rig soil borings and one (1) hand-auger soil boring were advanced into groundwater, with several borings extended to the base of the hydrocarbon smear zone to provide vertical delineation. The soil cores were logged per the Unified Soil Classification System (USCS), and organic vapor screening was conducted over each foot of core.
- 23 soil samples were collected and analyzed for the site constituents of concern.
- GPS coordinates and approximate ground surface elevations were determined for the soil boring locations.

4.1 FIELD PROCEDURES

Soil boring activities were conducted at the locations shown on **Figure 8**. The soil borings were advanced by a direct push rig equipped with a Dual Tube[®] soil sampling system. Each retrieved soil core was laid on a field truck tail gate for inspection and sampling. After cutting open each soil sample liner, a digital picture of the core was taken. The picture included depth tape markings and borehole identification. Each core was logged via the Unified Soil Classification System (USCS). During logging, portions of each foot of core were placed in individual small Ziploc bags and allowed to equilibrate for at least 5 minutes. The headspace vapor in each bag was then screened via an organic vapor analyzer equipped with a 10.6 eV photoionization detector (PID).

Based on the visual observations and the maximum PID screening results, samples from the impacted soil borings were be containerized and submitted to Accutest Laboratories, Inc., Houston, Texas for analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX) via EPA Method SW-846 8260B; and total petroleum hydrocarbons gasoline range organics (TPH-GRO) and diesel range organics (TPH-DRO) by EPA Method SW-846 8015 Modified. The soil samples were collected from fresh, undisturbed sections of the soil core (e.g., on the “bottom” side of the core). Per EPA Method SW-846 5035 protocol, the soil collected for analysis of volatile hydrocarbons was containerized in Encore[™] samplers prior to subsequent laboratory preservation and extraction. Upon collection, the samples were immediately placed into ice-filled coolers for storage during the daytime.

Particularly near the location of the recent release by the gathering line, additional shallow (i.e., vadose zone) soil samples were collected from the soil borings based on the PID results and visual observations. The intent was to demonstrate differences between newly released hydrocarbons and the historic impacts traditionally sourced from El Paso’s former pit north of Citizens Ditch.

Field quality assurance / quality control (QA/QC) samples were also collected. One equipment rinse blank, one blind duplicate, one equipment rinse blank, one field blank, and one set of matrix spike/matrix spike duplicate samples were collected during the

sampling program. In addition, one trip blank was submitted with each sample cooler, for analysis of BTEX via EPA Method SW-846 8260B.

The sample coolers were properly packed with ice, relinquished per chain-of-custody protocol, and shipped overnight to the analytical laboratory. All samples were received within acceptable temperature limits at the time of laboratory check-in.

The locations of the soil borings were documented via a hand-held GPS unit. In addition, the relative ground surface elevations of the soil boring locations were approximated via a laser level, which was tied into the known elevations at select monitor wells.

At the conclusion of sampling, the direct push contractor plugged each soil boring with hydrated bentonite chips.

4.2 DISCUSSION OF RESULTS

The August-September 2010 soil sample analytical data are summarized on **Table 5** and depicted spatially on **Figure 9**. The laboratory reports are included in Appendix C. The soil borings logs are included as Appendix A. As a high-level summary, exceedances of applicable NMOCD TPH standard of 100 mg/kg were found in soil borings GP-3, GP-4, GP-7, GP-8, GP-11, GP-12, GP-13, GP-15, and the duplicate sample of GP-23. The greatest level of impact was found in the shallow (i.e., 4'-5' depth) sample collected at GP-15, which exhibited a TPH concentration of 5,807 mg/kg. GP-15 (4-5') also was the only sample to exceed the NMOCD BTEX standard of 50 mg/kg, with a sample result of 170.8 mg/kg BTEX.

Figures 10 through 16 depict maximum concentration isopleths maps for TPH-GRO (C6-C10); TPH-DRO (C10-C28); extended range TPH-DRO (>C28-C40); benzene, toluene, ethylbenzene, and total xylenes, respectively. **Figures 17 and 18** together depict two site cross-sections drawn from the former El Paso pit area, through or near the gathering line release area, and terminating in the southern partially-vegetated "Garden"/Sheep area. These cross-sections include the PID screening results and help to show the vertical locations of volatile impacts with respect to the site hydrogeology and topography.

TPH-GRO and BTEX: TPH-GRO and BTEX were detected throughout the central region of the site, extending from the former El Paso pit area (e.g., GP-3 and GP-4) down into the Jaquez Garden area (xylenes detected at low levels in GP-23). However, the greatest concentrations were clearly found in the GP-13 and GP-15 region, immediately down-slope from the March 2010 release from the gathering line, as illustrated by **Figures 10, 13, 14, 15, and 16**. The impacts in GP-15, as documented both by the analytical data (i.e., the GP-15 4-5' sample) and by the PID screening data, are clearly above the water table and indicate a shallow soil impact quite distinct from the deeper, residual hydrocarbons. It is notable that the analytical data from soil borings GP-13 and GP-15, in particular, display both elevated BTEX concentrations and a complete distribution of the four BTEX components. The total BTEX in these two wells was as high as 170,766 ug/kg (GP-15 4-5') and 37,313 ug/kg (GP-13 8-9'), in stark contrast with the next highest BTEX

total of 13,669 ug/kg at GP-3. Similarly, and of singular importance, the elevated GP-13 (8-9') toluene concentration of 9,940 ug/kg stands in stark contrast to the site-wide toluene concentrations in soil, which are either low or non-detect. The detection of toluene in GP-15 (4-5'), though far less concentrated, is still significantly higher than the next highest result of 25 ug/kg at GP-3 (4-5'). Toluene is the quickest-attenuating BTEX component, and the presence of elevated toluene in the GP-13/GP-15 region indicates a more recent impact. Such an indication fits well with the June 2010 findings of shallow soil impacts in SB-7 and SB-8 (see **Figure 4 and Table 3, and previous discussion in Section 3.0.**). It appears that the shallow soils in this area, which have a high percentage of silt and sand content, provided relatively little resistance to the seepage of liquids into the embankment.

TPH-DRO: TPH-DRO (C10-C28) and extended range TPH-DRO (>C28-C40) were also found throughout the interior region of the site, but were more evenly distributed spatially than the TPH-GRO and BTEX impacts. The concentration isopleths are depicted on **Figures 11 and 12.** The highest concentrations of TPH-DRO were exhibited in soil boring GP-4, which had sample concentrations of 1,110 mg/kg (C10-C28) at the 13-14' depth interval and 299 mg/kg (>C28-C40) at the 16-17' depth interval.

In the area of the former pit, impacted soils were observed underneath the original 1993 excavation. Impacts such as those observed in GP-4 generally extended from the high water table down to approximately 17 feet bgs, or approximately 1 to 3 feet below the maximum achievable 1993 excavation depth of 16 feet (the record indicates that a 2-foot cap was installed over the final backfill to accommodate settling, and the degree of consolidation is unknown).

TPH DRO and extended range TPH-DRO was generally found in the residual hydrocarbon smear zone associated with the water table. The water table at the time of sampling is depicted on **Figures 17 and 18.** Based on the hydrograph of M-4 (Figure 7), and as corroborated by the deeper soil borings, the thickness of the residually-impacted zone is approximately 6 feet. It is noted that the impacted embankment soils also contain TPH DRO and that, based on the available production records online, the Jaquez Gas Com C#1 did produce both natural gas and oil/condensate until March 2010; however, no current analysis of the oil/condensate/produced water is available. The fluids are assumed to be similar to the fluids originally disposed in the former El Paso pit.

4.3 INVESTIGATION DERIVED WASTE

Recovered soil was collected in DOT-rated drums. Following profiling (in progress), these drums will be transported off-site to a Farmington-area landfarm operated by Envirotech, Inc. Other typical lightly soiled PPE (such as latex gloves) and other IDW (such as soil liners) were managed off-site by LT Environmental as municipal solid waste.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Based upon the review of data collected at the Jaquez Site during 2010, the following conclusions can be drawn:

- Residual smear zone hydrocarbon impacts are present across the center of the site, extending from north of the GP-3 and GP-4 area down to a thin strip terminating near SB-12 in the Jaquez “Garden” area. The approximate impacted area, as outlined on **Figure 9**, is approximately 13,000 square feet.
- The impacts observed on the southern embankment of Citizens Ditch are of particular concern due to their relatively high concentrations, prominence of BTEX constituents, toluene content, and location. This area of concern is roughly bounded by Citizens Ditch to the north and includes soil borings SB-7, SB-8, GP-12, GP-13, and GP-15. The impacts exhibit signs of being relatively un-weathered and appear to be associated with the recent release from the operator’s Jaquez Gas Com C#1 gathering line.
- BTEX concentrations in groundwater remain almost entirely below the NMWQCC standards. The benzene concentration in monitor well M-4, which had complied the NMWQCC groundwater standard for three (3) years prior to El Paso’s 2006 closure request, has since spiked well above where it had stabilized. M-4 is located immediately downgradient of the impacted embankment soil area, and benzene is the most soluble and least biodegradable of the BTEX components. It appears that the concentration spike in this well is due to the recent release.

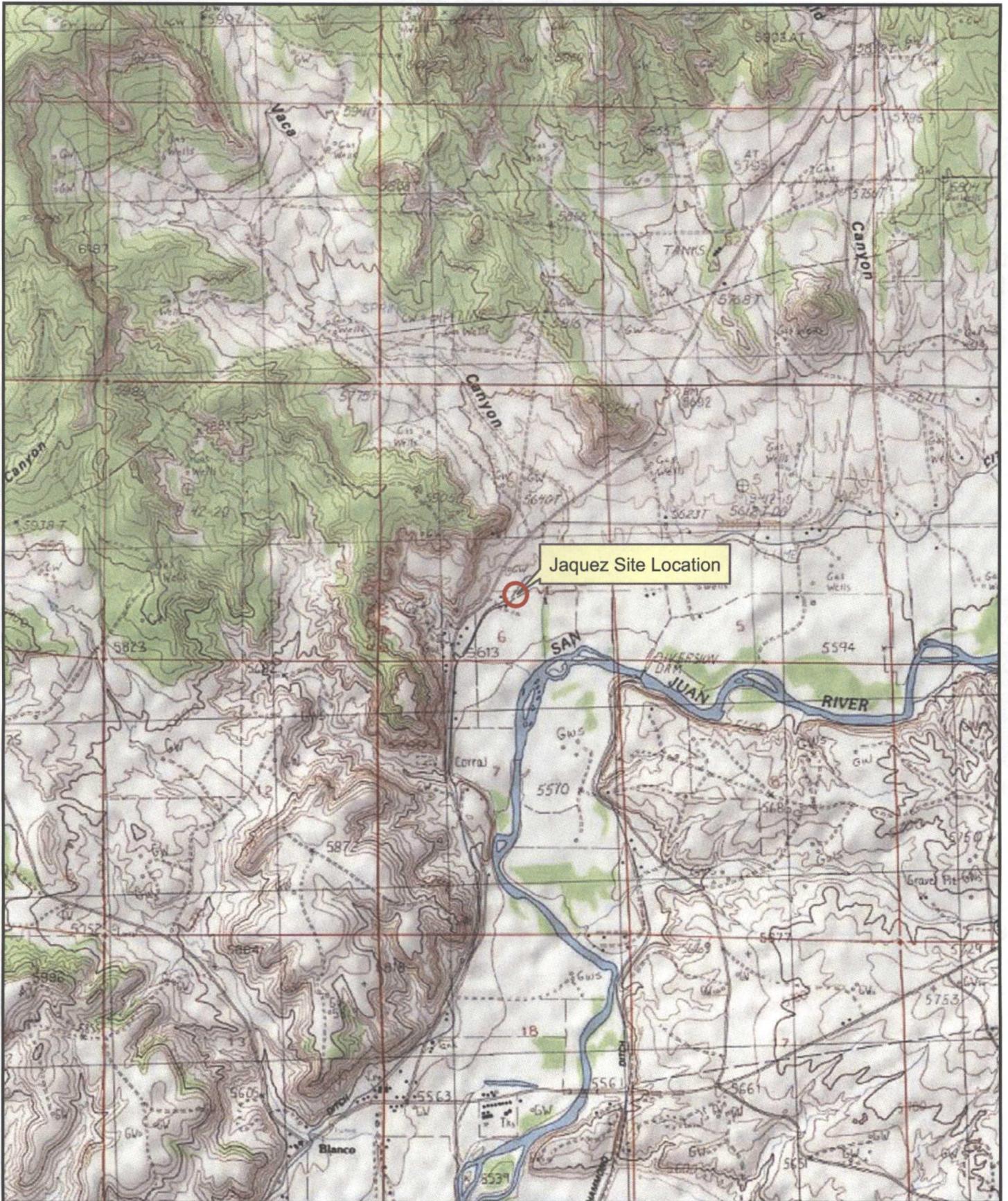
Based upon the review of data collected at the Jaquez Site during these assessment activities, the following recommendations are provided:

- More data are required regarding the recent release from the Jaquez Gas Com C#1 gathering line. Such information would include detailed delineation and/or confirmation data collected at and downhill from the area of the release. More information is also needed regarding the estimated volume and composition of the release.
- A meeting of all stakeholders is recommended to discuss the available data and potential future remedial options.

6.0 REFERENCES

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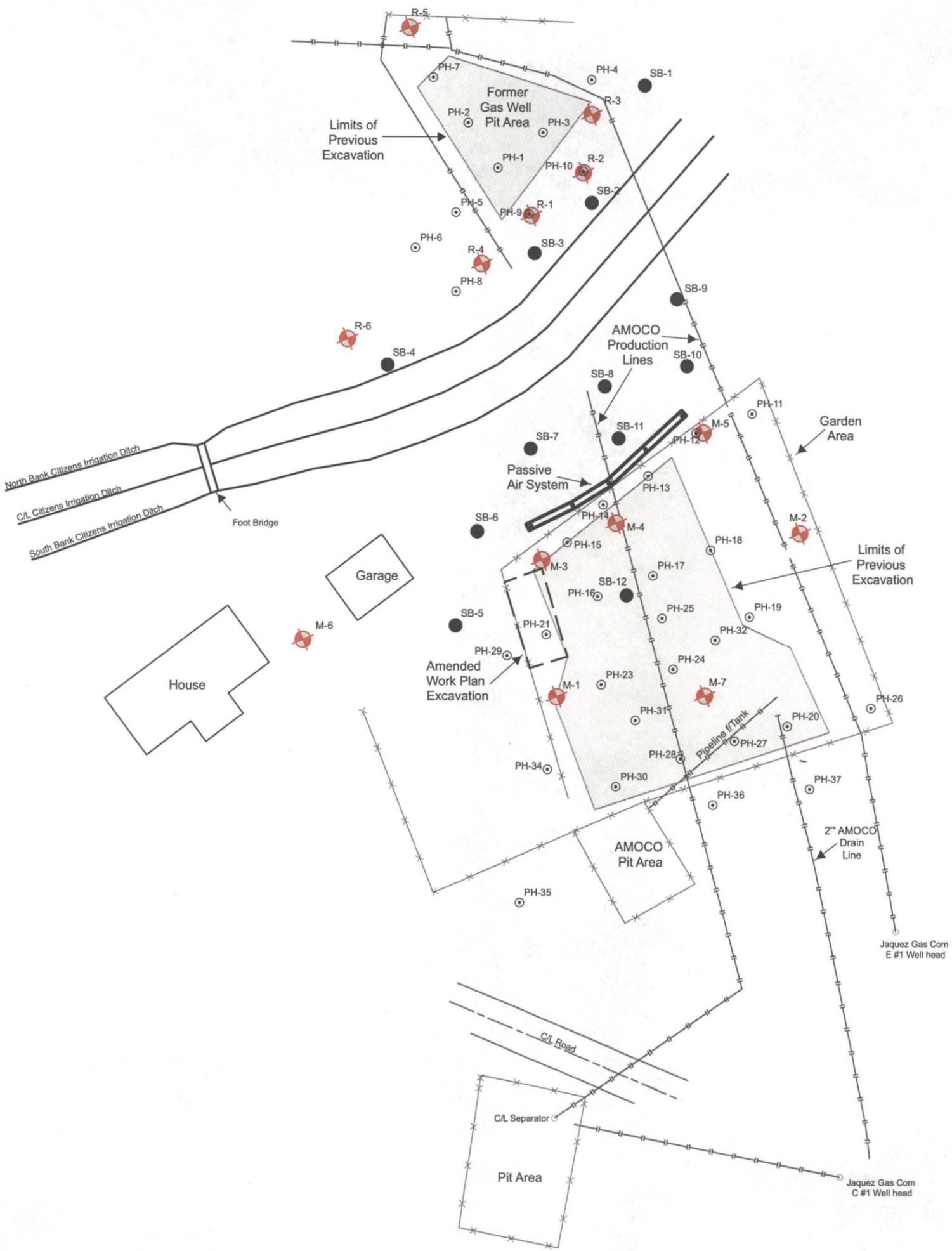
Figures



Copyright: © 2009 National Geographic Society, I-cubed Source Data: USGS

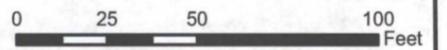


 	PROJECT:	Jaquez Site	FIGURE: 1
	TITLE:	Site Location	

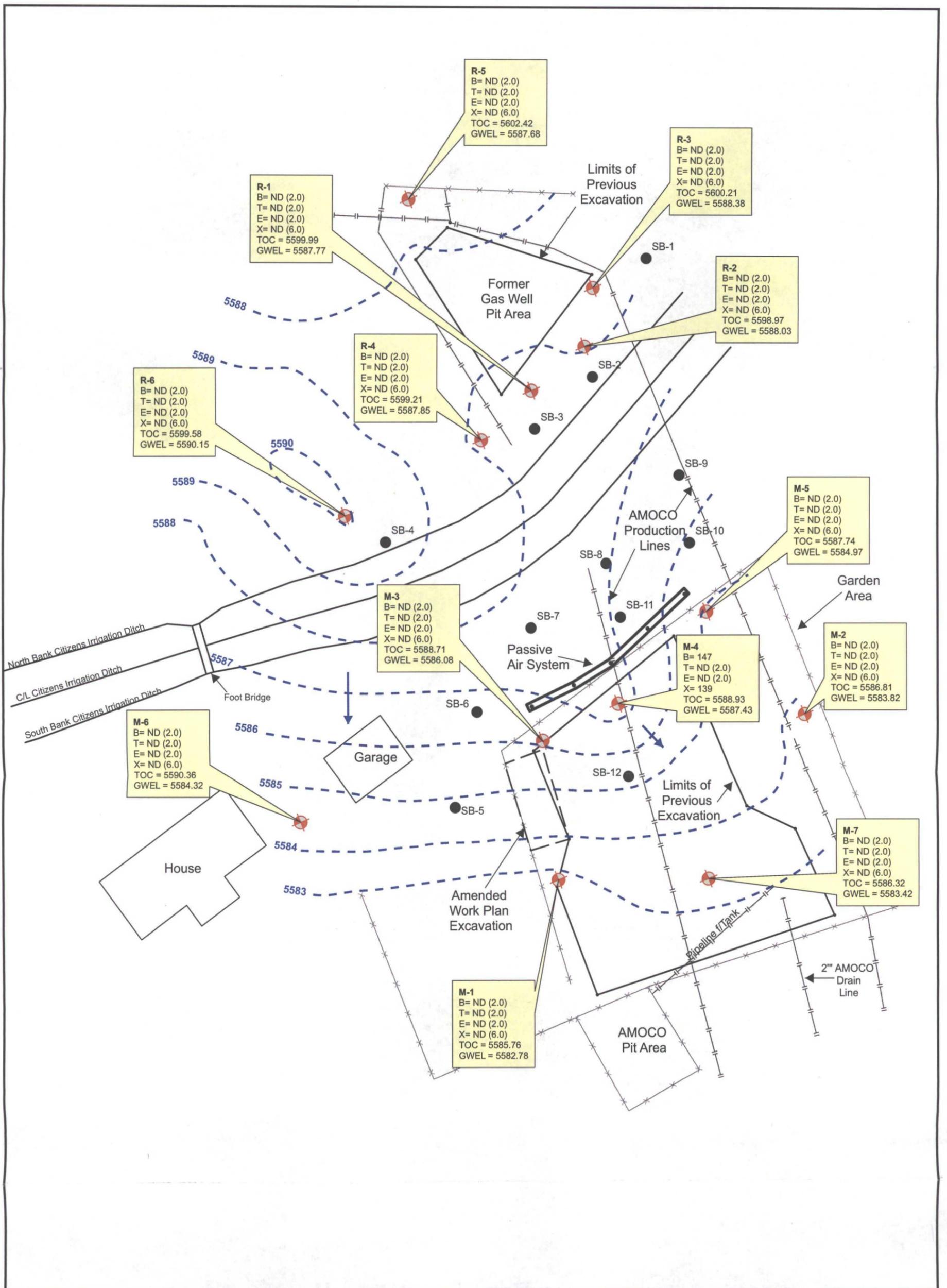


LEGEND

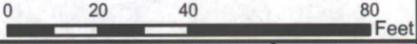
- M-4 Existing Monitoring / Observation Well
- SB-1 Soil Borings
- PH-1 Probe Hole
- Fence Line
- Pipe Line

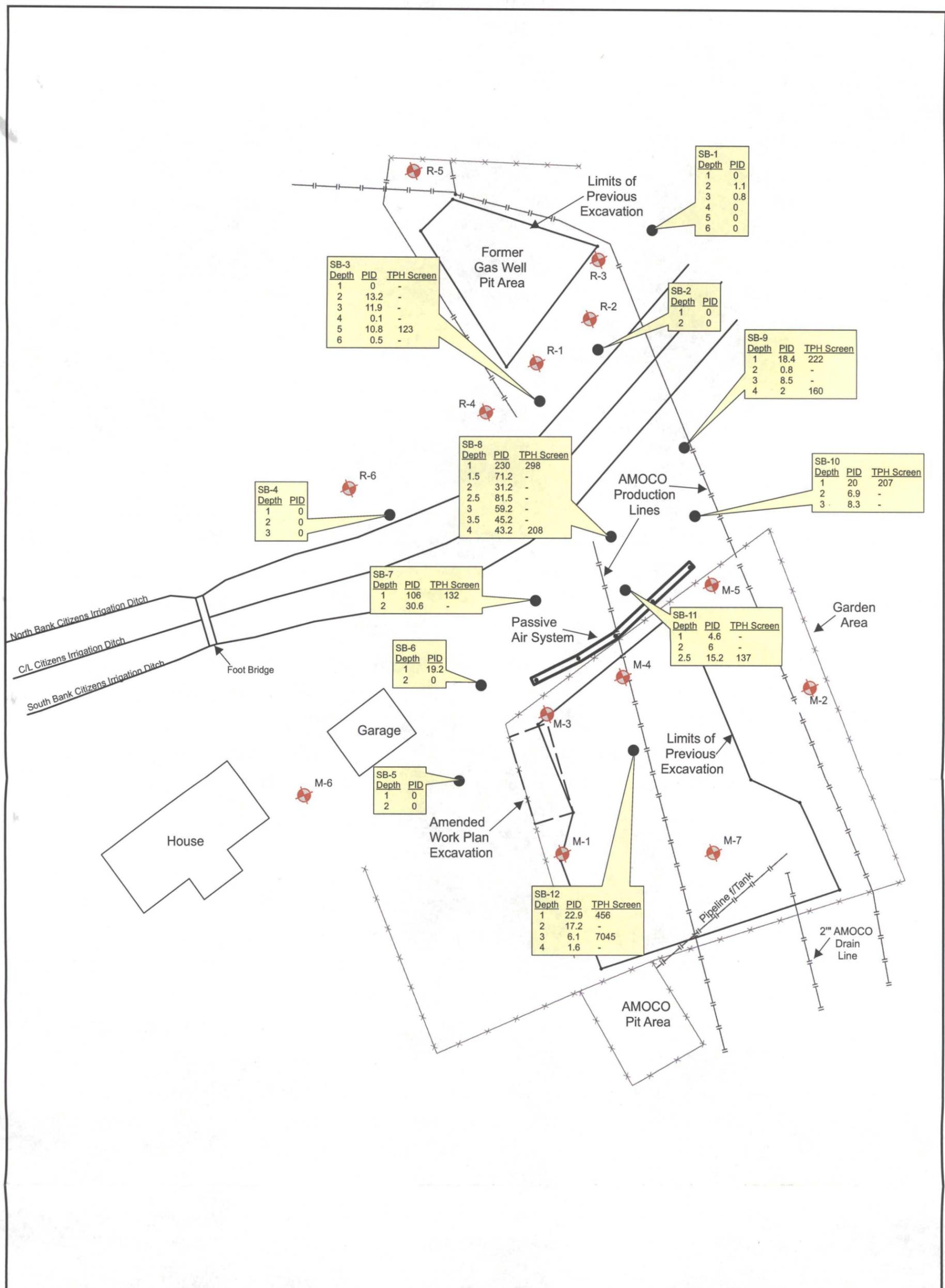


		PROJECT: Jaquez Site	FIGURE:
		TITLE: Site Layout	2



LEGEND			
M-4		B	Benzene (ug/L)
SB-1		T	Toluene (ug/L)
	Groundwater Flow Direction	E	Ethylbenzene (ug/L)
	Potentiometric Surface Contour (Inferred Where Dashed)	X	Total Xylenes (ug/L)
		TOC	Top of Casing (ft.)
		GWEL	Groundwater Elevation (ft. AMSL)
		ND	Not Detected; Reporting Limit Shown In Parenthesis

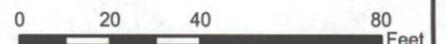




LEGEND

M-4 Existing Monitoring / Observation Well
 SB-1 Soil Borings

Depth Midpoint depth of 6" Sample Interval (feet below ground surface)
 PID Bag Headspace Vapor Screening Result (ppmv)
 TPH Screen PetroFlag™ Field Screening Result (mg/total kg)
 - (If no result is listed, sample was not tested)

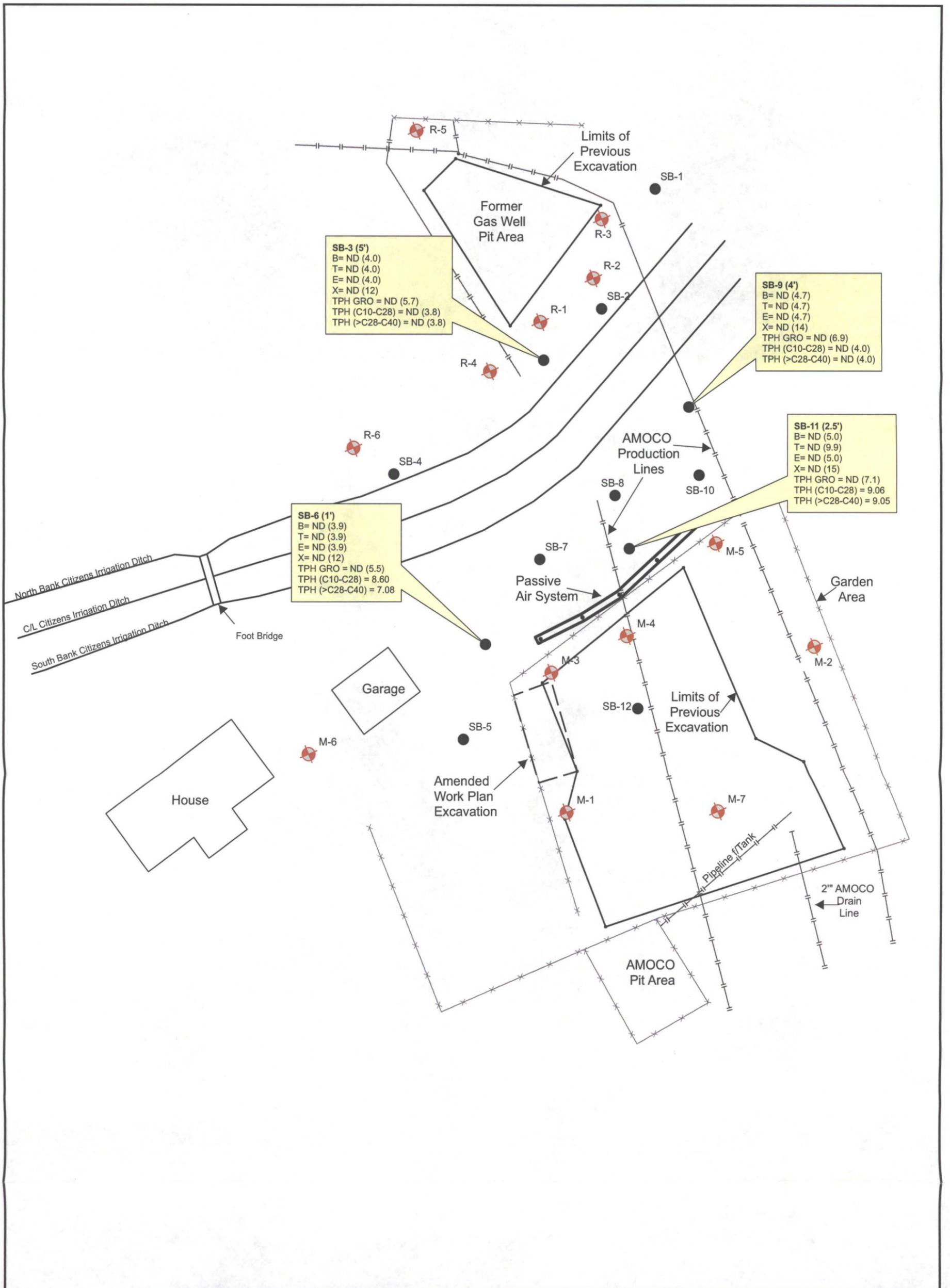


PROJECT: Jaquez Site
 TITLE: Soil Screening Results (June 11, 2010)
 FIGURE: 4



MWH





LEGEND

- M-4 Existing Monitoring / Observation Well
- SB-3 (5') Soil Borings (Depth below ground surface)

Note: Listed depth is the midpoint of each 6" sample interval.

- B Benzene (ug/kg)
- T Toluene (ug/kg)
- E Ethylbenzene (ug/kg)
- X Total Xylenes (ug/kg)
- TPH GRO Total Petroleum Hydrocarbon- Gasoline Range Organics (mg/kg)
- TPH (C10- C28) Total Petroleum Hydrocarbon (C10-C28) (mg/kg)
- TPH (>C28- C40) Total Petroleum Hydrocarbon (>C28-C40) (mg/kg)

Note: All concentrations are reported on a dry weight basis



MWH



PROJECT:

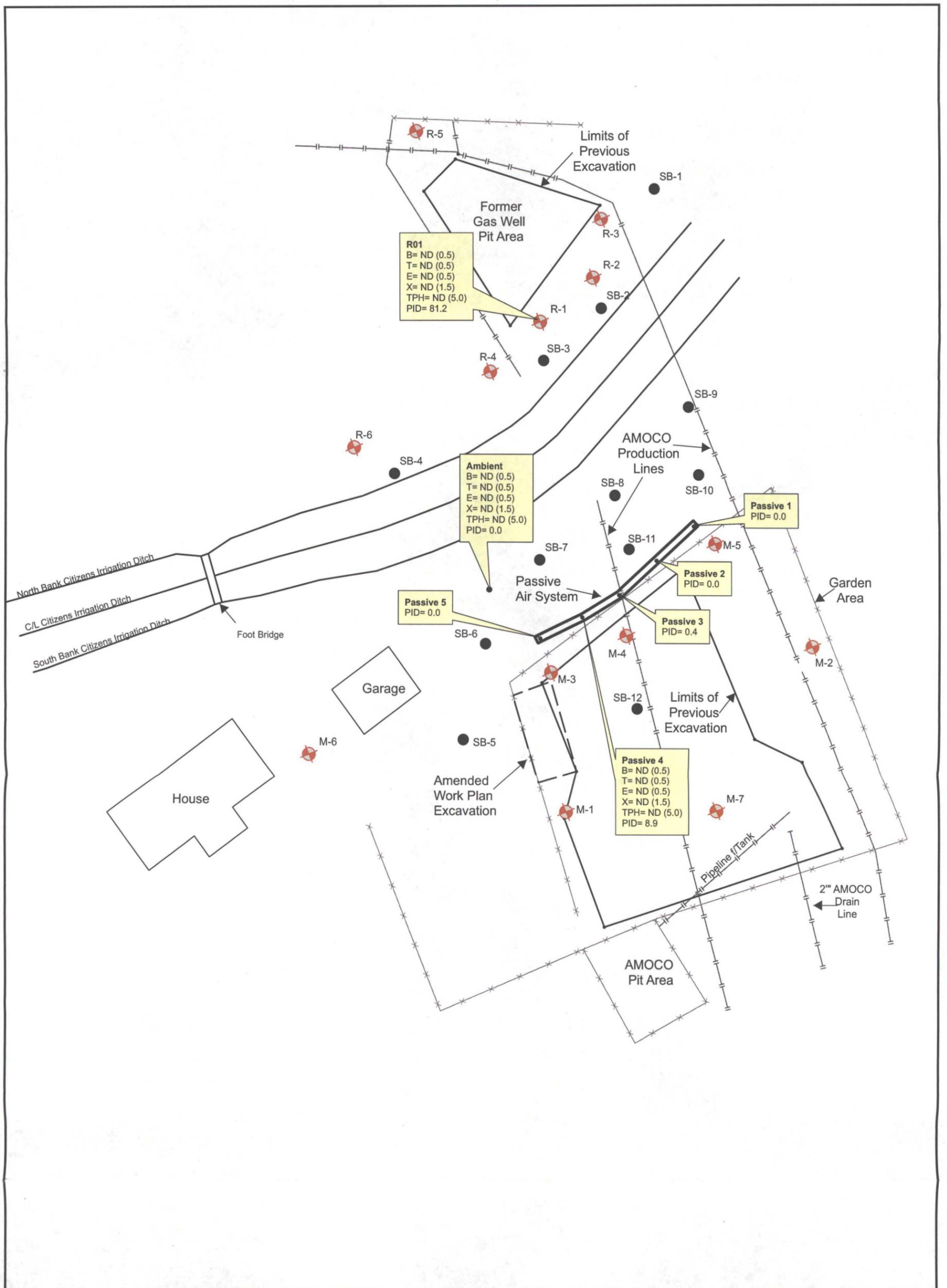
Jaquez Site

TITLE:

Soil Analytical Results
(June 11, 2010)

FIGURE:

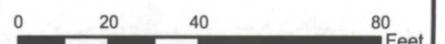
5



LEGEND

M-4 Existing Monitoring / Observation Well
 SB-3 Soil Borings

B Benzene (ppmv)
 T Toluene (ppmv)
 E Ethylbenzene (ppmv)
 X Total Xylenes (ppmv)
 TPH Total Petroleum Hydrocarbons as Equivalent Pentane (ppmv)
 PID Vapor Screening Result via Photoionization Detector (ppmv)
 ND Not Detected; Reporting Limit Shown In Parenthesis



MWH



PROJECT:

Jaquez Site

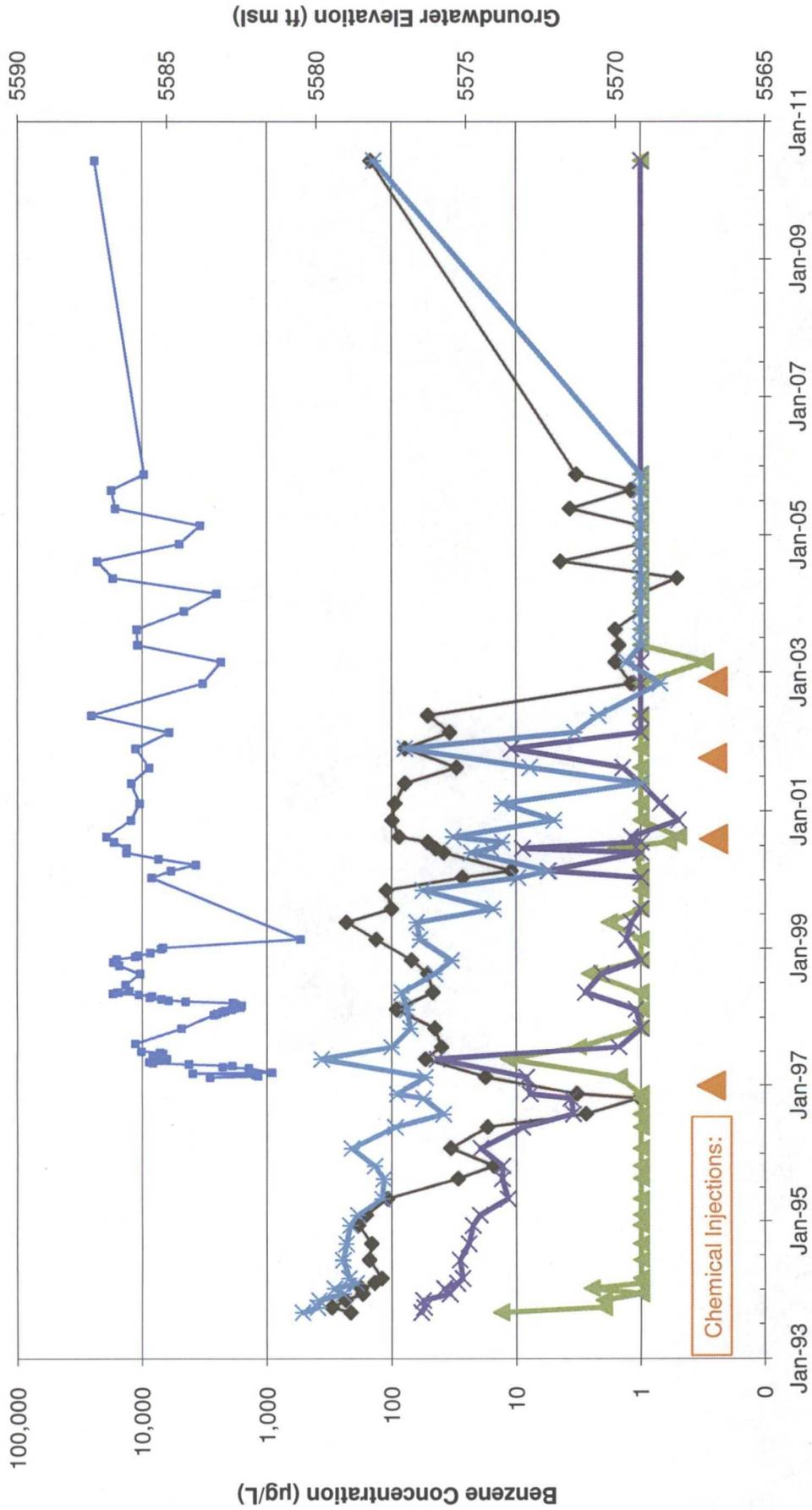
TITLE:

Vapor Field Screening and Laboratory Analytical Results
 (June 11, 2010)

FIGURE:

6

Figure 7
Monitor Well M-4 Historic Benzene Concentrations and Groundwater Elevations
Jaquez Site, San Juan County, New Mexico



Legend:
 Benzene (black diamond) Toluene (green triangle) Ethylbenzene (purple cross) Xylenes (blue cross) GW Elev. (blue square)

Laboratory non-detects are plotted as 1 µg/L.



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LEGEND

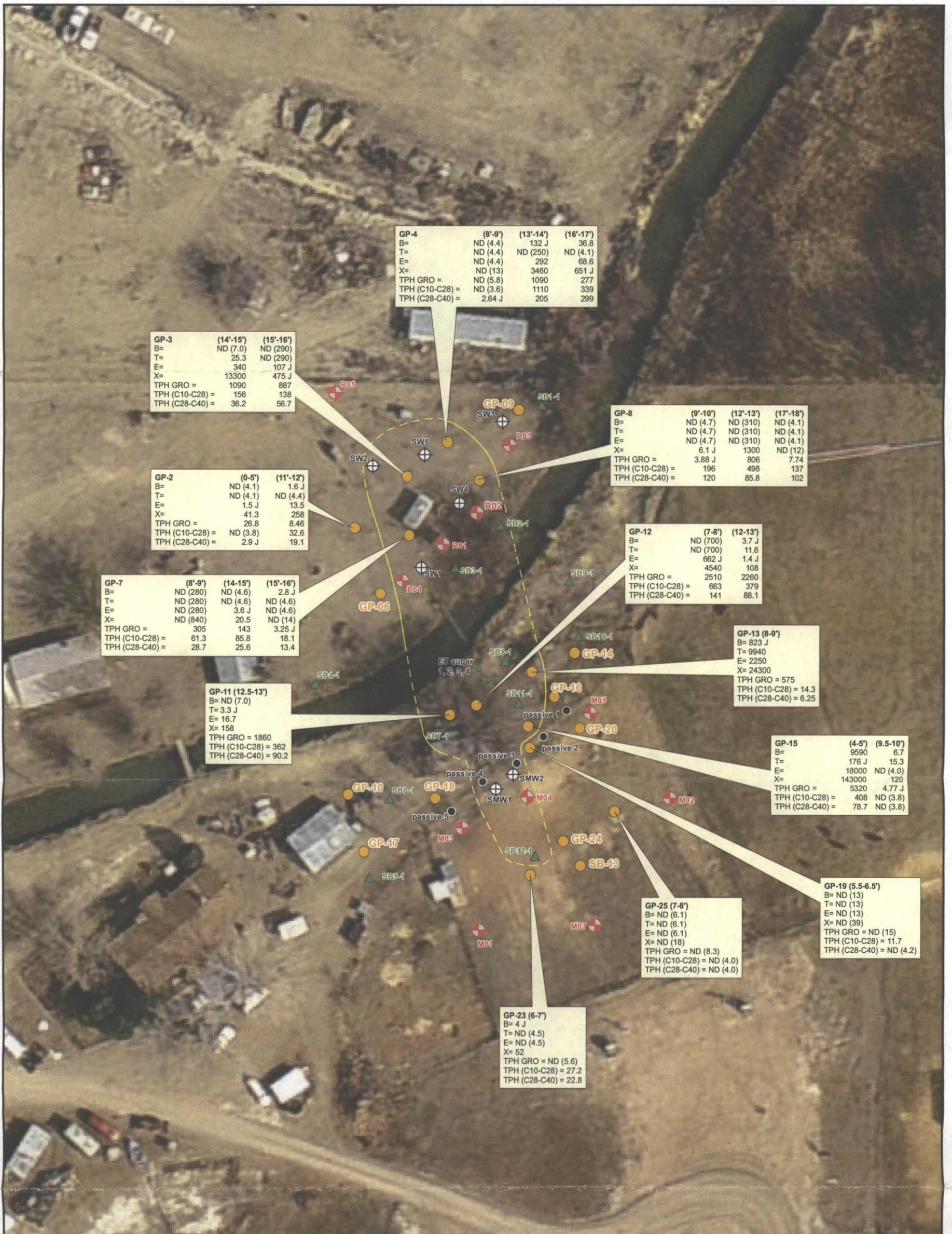
- M-4** Existing Monitoring / Observation Well*
- GP-16** Soil Borings***
- SB-1** Soil Borings**
- SW1** Sparge Wells*
- Passive 1** Passive Air Wells

GPS coordinates taken in *May 2010, **June 2010, ***Aug./Sept. 2010

Note:
 1) Locations are determined by GPS and are approximate.
 2) Aerial Photo by Pictometry, flown February 2009



		PROJECT: Jaquez Site	FIGURE:
		TITLE: Well and 2010 Soil Boring Locations	8



DRAFT

○ Approximate Extent of Soil TPH > 100 mg/kg (Dashed where inferred) **Note:**
 1) Locations are determined by GPS and are approximate.
 2) Aerial Photo by Pictometry, flown February 2009

LEGEND

M-4	◆ Existing Monitoring / Observation Well*
GP-7 (15'-16')	● Soil Borings (Depth below ground surface)***
SB-1	▲ Soil Borings**
SW1	⊕ Sparge Wells*
Passive 1	● Passive Air Wells

GPS coordinates taken in *May 2010, **June 2010, ***Aug./Sept. 2010

B	Benzene (ug/kg)
T	Toluene (ug/kg)
E	Ethylbenzene (ug/kg)
X	Total Xylenes (ug/kg)
TPH GRO	Total Petroleum Hydrocarbon- Gasoline Range Organics (mg/kg)
TPH (C10- C28)	Total Petroleum Hydrocarbon (C10-C28) (mg/kg)
TPH (>C28- C40)	Total Petroleum Hydrocarbon (>C28-C40) (mg/kg)

Note: All concentrations are reported on a dry weight basis

0 12.5 25 50 Feet

		PROJECT: Jaquez Site	FIGURE: 9
		TITLE: August/September Soil Analytical Results	



Note:
 1) Locations are determined by GPS and are approximate.
 2) Aerial Photo by Pictometry, flown February 2009

LEGEND

- M-4 Existing Monitoring / Observation Well*
- GP-7 (15'-16') 200 Soil Borings*** (Depth below ground surface) Concentration (mg/kg)
- SB-1 Soil Borings**
- SW1 Sparge Wells*
- Passive 1 Passive Air Wells

--100-- Soil Concentration Isopleth (mg/kg) (Inferred Where Dashed)

Note:
 1) All concentrations are reported on a dry weight basis.
 2) GPS coordinates taken in *May 2010, **June 2010, ***Aug./Sept. 2010



		PROJECT: Jaquez Site	FIGURE: 10
		TITLE: Maximum Concentrations of TPH-GRO in Soil (8/26/10 - 9/2/10)	



LEGEND

- M-4** Existing Monitoring / Observation Well*
- GP-7 (15'-16') 200** Soil Borings*** (Depth below ground surface) Concentration (mg/kg)
- SB-1** Soil Borings**
- SW1** Sparge Wells*
- Passive 1** Passive Air Wells

---100--- Soil Concentration Isopleth (mg/kg) (Inferred Where Dashed)

Note:
 1) All concentrations are reported on a dry weight basis.
 2) GPS coordinates taken in *May 2010, **June 2010, ***Aug./Sept. 2010



		PROJECT: Jaquez Site	FIGURE:
		TITLE: Maximum Concentrations of TPH-DRO in Soil (8/26/10 - 9/2/10)	11



LEGEND

- M-4** Existing Monitoring / Observation Well*
- GP-7 (15'-16') 200** Soil Borings*** (Depth below ground surface) Concentration (mg/kg)
- SB-1** Soil Borings**
- SW1** Sparge Wells*
- Passive 1** Passive Air Wells

-- 100 -- Soil Concentration Isopleth (mg/kg) (Inferred Where Dashed)



Note:

- 1) All concentrations are reported on a dry weight basis.
- 2) GPS coordinates taken in *May 2010, **June 2010, ***Aug./Sept. 2010



		PROJECT: Jaquez Site	FIGURE:
		TITLE: Maximum Concentrations of TPH (>C28 - C40) in Soil (8/26/10 - 9/2/10)	12



DRAFT

Note:
 1) Locations are determined by GPS and are approximate.
 2) Aerial Photo by Pictometry, flown February 2009

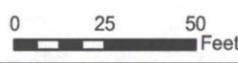
LEGEND

- M-4** Existing Monitoring / Observation Well*
- GP-7 (15'-16') 200** Soil Borings*** (Depth below ground surface) Concentration (ug/kg)
- SB-1** Soil Borings**
- SW1** Sparge Wells*
- Passive 1** Passive Air Wells

---100--- Soil Concentration Isopleth (ug/kg) (Inferred Where Dashed)



Note:
 1) All concentrations are reported on a dry weight basis.
 2) GPS coordinates taken in *May 2010, **June 2010, ***Aug./Sept. 2010



		PROJECT: Jaquez Site	FIGURE: 13
		TITLE: Maximum Concentrations of Benzene in Soil (8/26/10 - 9/2/10)	



DRAFT

Note:
 1) Locations are determined by GPS and are approximate.
 2) Aerial Photo by Pictometry, flown February 2009

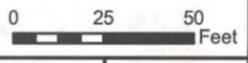
LEGEND

- M-4 Existing Monitoring / Observation Well*
- GP-7 (15'-16') 200 Soil Borings*** (Depth below ground surface) Concentration (ug/kg)
- SB-1 Soil Borings**
- SW1 Sparge Wells*
- Passive 1 Passive Air Wells

100 Soil Concentration Isopleth (ug/kg) (Inferred Where Dashed)



Note:
 1) All concentrations are reported on a dry weight basis.
 2) GPS coordinates taken in *May 2010, **June 2010, ***Aug./Sept. 2010



		PROJECT: Jaquez Site	FIGURE:
		TITLE: Maximum Concentrations of Ethylbenzene in Soil (8/26/10 - 9/2/10)	15



Note:
 1) Locations are determined by GPS and are approximate.
 2) Aerial Photo by Pictometry, flown February 2009

LEGEND

- M-4** Existing Monitoring / Observation Well*
- GP-7 (15'-16') 200** Soil Borings*** (Depth below ground surface) Concentration (ug/kg)
- SB-1** Soil Borings**
- SW1** Sparge Wells*
- Passive 1** Passive Air Wells

100 Soil Concentration Isopleth (ug/kg) (Inferred Where Dashed)

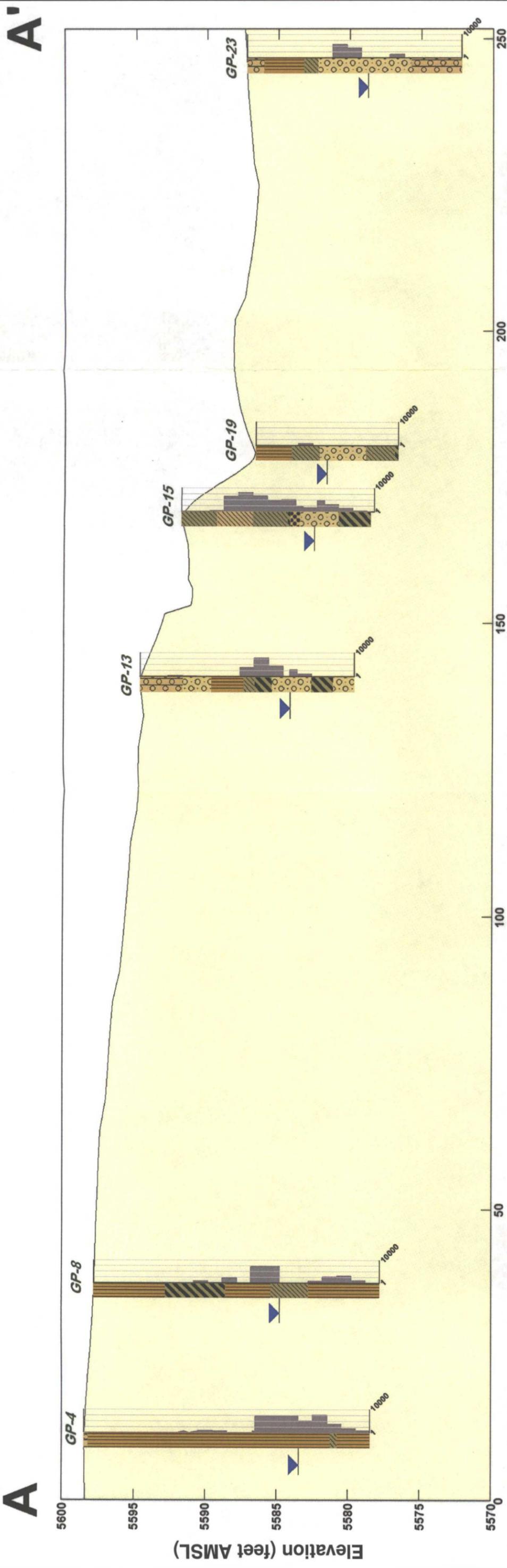
Note:

- 1) All concentrations are reported on a dry weight basis.
- 2) GPS coordinates taken in *May 2010, **June 2010, ***Aug./Sept. 2010



0 25 50 Feet

		PROJECT: Jaquez Site	FIGURE:
		TITLE: Maximum Concentrations of Total Xylenes in Soil (8/26/10 - 9/2/10)	16

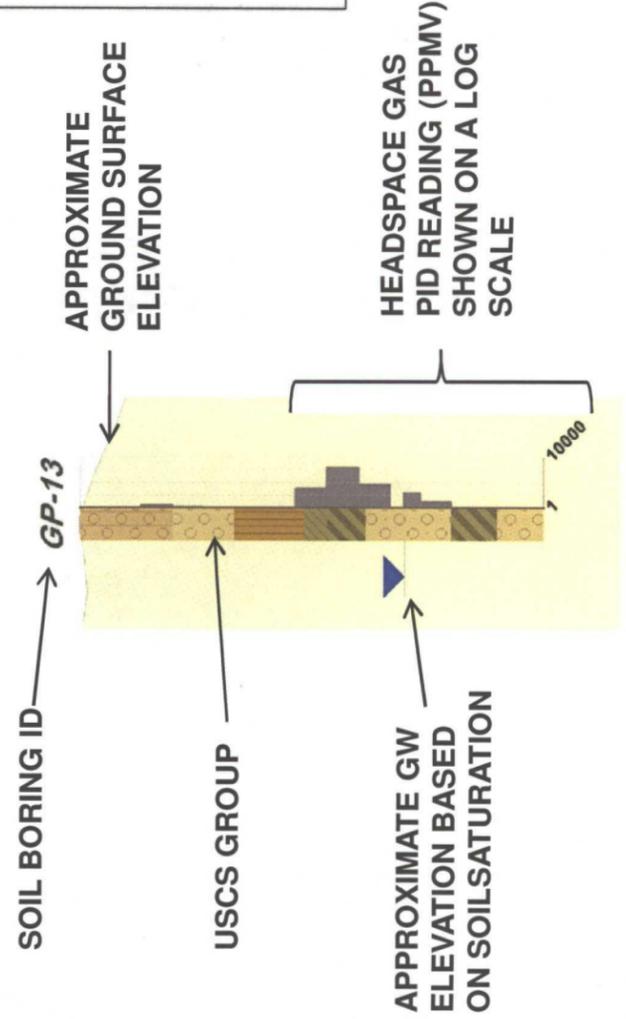


Horizontal Distance (feet)

USCS GROUP

SW	SM	SC	SC/CL	ML	CL	CH

LEGEND:



NOTES:

- AERIAL PHOTOGRAPH BY PICTOMETRY; FLOWN FEBRUARY 2009
- TOPOGRAPHY ESTIMATED FROM SITE LASER LEVEL ELEVATIONS OF THE SOIL BORING LOCATIONS, ELEVATIONS WERE TIED TO NEARBY MONITOR WELL ELEVATIONS
- PID DATA SHOWN IN UNITS OF PPMV, OR PARTS PER MILLION BY VOLUME IN THE SOIL HEADSPACE VAPOR
- ALL WATER LEVELS WERE ESTIMATED FROM THE SOIL BORINGS BASED ON OBSERVATIONS OF GROUNDWATER SATURATION
- FT AMSL - FEET ABOVE MEAN SEA LEVEL
- CITIZENS DITCH NOT SHOWN IN ABOVE PROFILE

TITLE

CROSS-SECTION A-A'

PROJECT

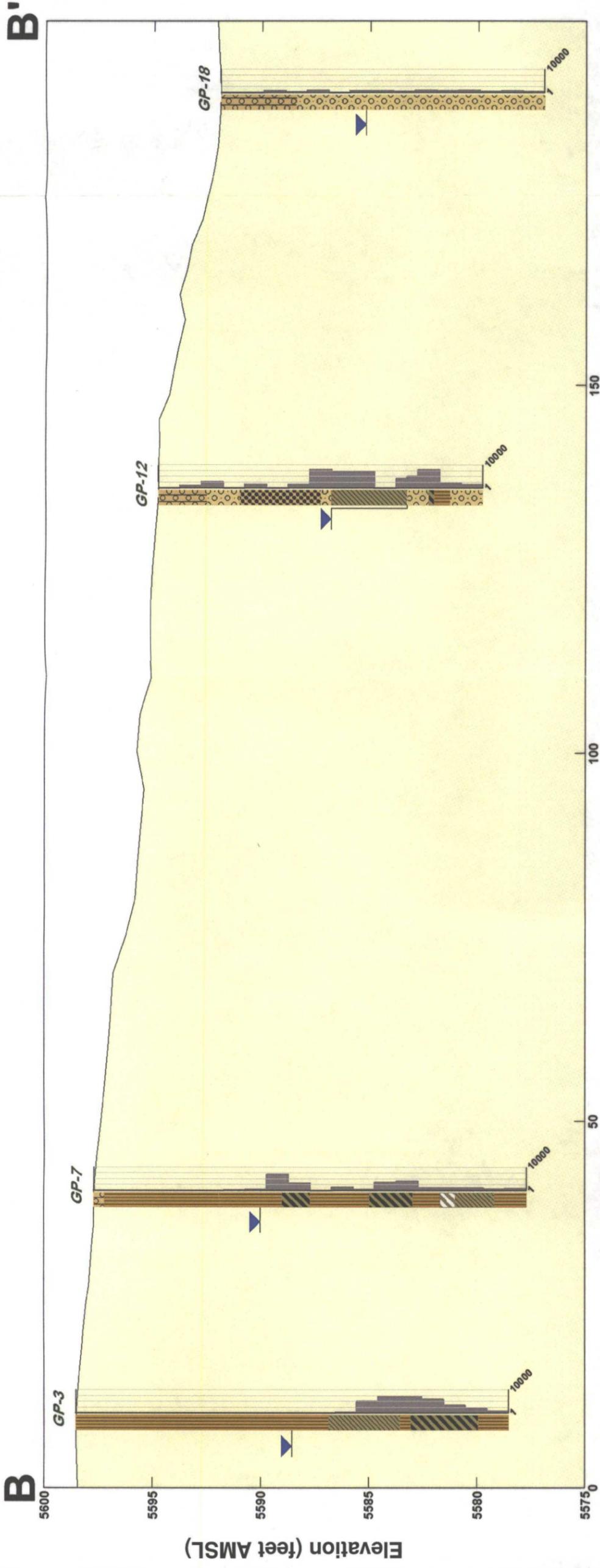
Jaquez Site Soil Delineation
El Paso Corporation

elpaso

MWH

FIGURE

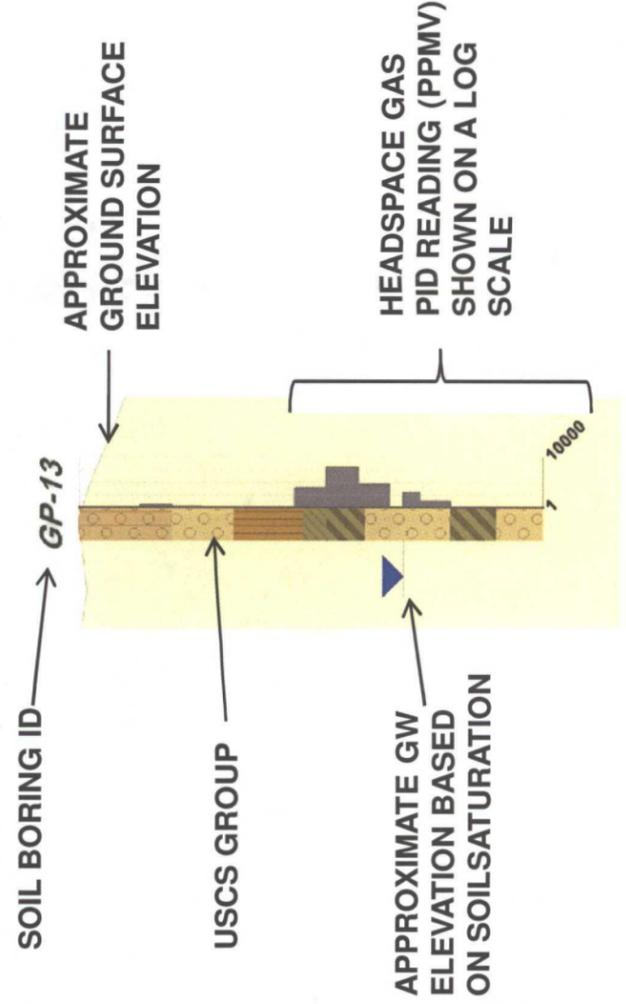
17



LEGEND:

USCS GROUP	
	SW
	SM
	SC
	ML
	CL
	CH/CL
	CH

Horizontal Distance (feet)



- NOTES:**
- AERIAL PHOTOGRAPH BY PICTOMETRY; FLOWN FEBRUARY 2009
 - TOPOGRAPHY ESTIMATED FROM SITE LASER LEVEL ELEVATIONS OF THE SOIL BORING LOCATIONS, ELEVATIONS WERE TIED TO NEARBY MONITOR WELL ELEVATIONS
 - PID DATA SHOWN IN UNITS OF PPMV, OR PARTS PER MILLION BY VOLUME IN THE SOIL HEADSPACE VAPOR
 - ALL WATER LEVELS WERE ESTIMATED FROM THE SOIL BORINGS BASED ON OBSERVATIONS OF GROUNDWATER SATURATION
 - FT AMSL - FEET ABOVE MEAN SEA LEVEL
 - CITIZENS DITCH NOT SHOWN IN ABOVE PROFILE..

TITLE: **CROSS-SECTION B-B'**

PROJECT: JAQUEZ SITE SOIL DELINEATION
EL PASO CORPORATION

elpaso

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FIGURE 18

Tables

June 2010 Groundwater Measurements and Laboratory Analytical Data
 El Paso Corporation Jaquez Site, San Juan County, New Mexico

Table 1

Sample Location	Date Sampled	TOC Elevation (ft. AMSL)	Depth To Groundwater (ft.)	Groundwater Elevation (ft. AMSL)	Laboratory Analytical Data			
					Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)
M-1	6/10/2010	5585.76	2.98	5582.78	ND (2.0)	ND (2.0)	ND (2.0)	ND (6.0)
M-2	6/10/2010	5586.81	2.99	5583.82	ND (2.0)	ND (2.0)	ND (2.0)	ND (6.0)
M-3	6/10/2010	5588.71	2.63	5586.08	ND (2.0)	ND (2.0)	ND (2.0)	ND (6.0)
M-4	6/10/2010	5588.93	1.50	5587.43	147	ND (2.0)	ND (2.0)	139
M-5	6/10/2010	5587.74	2.77	5584.97	ND (2.0)	ND (2.0)	ND (2.0)	ND (6.0)
M-6	6/10/2010	5590.36	6.04	5584.32	ND (2.0)	ND (2.0)	ND (2.0)	ND (6.0)
M-7	6/10/2010	5586.32	2.90	5583.42	ND (2.0)	ND (2.0)	ND (2.0)	ND (6.0)
R-1	6/10/2010	5599.99	12.22	5587.77	ND (2.0)	ND (2.0)	ND (2.0)	ND (6.0)
R-2	6/10/2010	5598.97	10.94	5588.03	ND (2.0)	ND (2.0)	ND (2.0)	ND (6.0)
R-3	6/10/2010	5600.21	11.83	5588.38	ND (2.0)	ND (2.0)	ND (2.0)	ND (6.0)
R-4	6/10/2010	5599.21	11.36	5587.85	ND (2.0)	ND (2.0)	ND (2.0)	ND (6.0)
R-5	6/10/2010	5602.42	14.74	5587.68	ND (2.0)	ND (2.0)	ND (2.0)	ND (6.0)
R-6	6/10/2010	5599.58	9.43	5590.15	ND (2.0)	ND (2.0)	ND (2.0)	ND (6.0)

Notes:

ft. AMSL = feet above mean sea level

ft. = feet

ug/L = micrograms per liter

ND = analyte not detected at the reporting limit (RL). Value shown is the RL.

Values appearing in bold type exceed the New Mexico Water Quality Control Commission Groundwater Standard

TABLE 2
Summary of Historical Groundwater Analytical Data
El Paso Corporation Jaquez Site, San Juan County, New Mexico

Sample Location	Date Sampled	Benzene (µg/l)	Toluene (µg /l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	Floating Product (inches)	Nitrates (mg/l)
M-1	9/8/1993	<2.0	<2.0	<2.0	<2.0	N/A	ND	NA
M-1	10/5/1993	<2.0	<2.0	<2.0	<2.0	N/A	ND	NA
M-1	11/11/1993	<2.0	<2.0	<2.0	<2.0	N/A	ND	NA
M-1	12/16/1993	<2.0	<2.0	<2.0	<2.0	N/A	ND	NA
M-1	1/13/1994	<2.0	<2.0	<2.0	<2.0	N/A	ND	NA
M-1	2/10/1994	<2.0	<2.0	<2.0	<2.0	N/A	ND	NA
M-1	3/7/1994	<0.5	<0.5	<0.5	<0.5	N/A	ND	NA
M-1	5/17/1994	No Test	No Test	No Test	No Test	No Test	ND	NA
M-1	6/13/1994	<2.0	<2.0	<2.0	<2.0	N/A	ND	NA
M-1	9/7/1994	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
M-1	12/15/1994	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
M-1	2/9/1995	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
M-1	5/8/1995	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
M-1	8/25/1995	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
M-1	11/2/1995	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
M-1	2/5/1996	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
M-1	5/28/1996	<1.0	<1.0	<1.0	<1.0	N/A	ND	NA
M-1	8/6/1996	<1.0	<1.0	<1.0	<1.0	N/A	ND	NA
M-1	10/28/1996	<1.0	<1.0	<1.0	<3.0	N/A	ND	NA
M-1	11/20/1996	<1.0	<1.0	<1.0	<3.0	N/A	ND	NA
M-1	2/19/1997	<1.0	<1.0	<1.0	<3.0	N/A	ND	NA
M-1	5/28/1997	<1.0	<1.0	<1.0	<3.0	N/A	ND	<1.2
M-1	8/21/1997	<1.0	<1.0	<1.0	<3.0	N/A	ND	<1.2
M-1	11/10/1997	<1.0	<1.0	<1.0	<3.0	N/A	ND	<1.2
M-1	2/18/1998	5.08	<1.0	<1.0	<3.0	N/A	ND	<1.2
M-1	5/19/1998	<1.0	<1.0	<1.0	<3.0	<6.0	ND	<0.1
M-1	5/25/1999	0.5	0.5	0.5	1.5	3	ND	0.05
M-1	1/19/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-1	5/30/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-1	6/22/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-1	8/22/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-1	11/17/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-1	2/14/2001	10	<0.5	<0.5	<0.5	10	ND	NA
M-1	5/31/2001	1	<0.5	<0.5	0.6	1.6	ND	NA
M-1	8/21/2001	<0.5	<0.5	<0.5	<0.5	ND	ND	NA

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M-1	11/28/2001	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-1	2/22/2002	<0.5	<1.0	<0.5	<0.5	ND	ND	NA
M-1	5/22/2002	<0.5	<0.5	<0.5	<1.0	ND	ND	NA
M-1	11/6/2002	<0.5	<0.5	<0.5	1	1	ND	NA
M-1	2/27/2003	0.1	0.2	<0.5	1.3	1.6	ND	NA
M-1	5/28/2003	<1.0	<1.0	<1.0	<3.0	ND	ND	0.90
M-1	8/20/2003	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
M-1	11/24/2003	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
M-1	2/26/2004	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
M-1	5/19/2004	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
M-1	8/17/2004	NA	NA	NA	NA	ND	ND	NA
M-1	11/17/2004	NA	NA	NA	NA	ND	ND	NA
M-1	2/22/2005	NA	NA	NA	NA	NA	ND	NA
M-1	5/24/2005	<1.0	<1.0	<1.0	<2.0	ND	ND	NA
M-1	8/29/2005	NA	NA	NA	NA	NA	ND	NA
M-1	11/21/2005	<1.0	<1.0	<1.0	<2.0	ND	ND	NA
M-1	6/10/2010	<2.0	<2.0	<2.0	<6.0	ND	ND	NA
M-2	9/8/1993	<2.0	<2.0	<2.0	<2.0	N/A	ND	NA
M-2	10/5/1993	2	2	<2.0	<2.0	4.0	ND	NA
M-2	11/11/1993	2.3	2	<2.0	<2.0	4.3	ND	NA
M-2	12/16/1993	<2.0	<2.0	<2.0	<2.0	N/A	ND	NA
M-2	1/13/1994	<2.0	<2.0	<2.0	<2.0	N/A	ND	NA
M-2	2/10/1994	<2.0	<2.0	<2.0	<2.0	N/A	ND	NA
M-2	3/7/1994	<0.5	<0.5	<0.5	<0.5	N/A	ND	NA
M-2	5/17/1994	No Test	No Test	No Test	No Test	No Test	ND	NA
M-2	6/13/1994	<2.0	<2.0	<2.0	<2.0	N/A	ND	NA
M-2	9/7/1994	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
M-2	12/15/1994	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
M-2	2/9/1995	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
M-2	5/5/1995	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
M-2	8/25/1995	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
M-2	11/2/1995	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
M-2	2/5/1996	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
M-2	5/28/1996	<1.0	<1.0	<1.0	<1.0	N/A	ND	NA
M-2	8/6/1996	<1.0	<1.0	<1.0	<1.0	N/A	ND	NA

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M-2	10/28/1996	<1.0	<1.0	<1.0	<3.0	N/A	ND	NA
M-2	11/20/1996	<1.0	<1.0	<1.0	<3.0	N/A	ND	NA
M-2	2/19/1997	<1.0	<1.0	<1.0	<3.0	N/A	ND	NA
M-2	5/28/1997	<1.0	<1.0	<1.0	<3.0	N/A	ND	<1.2
M-2	8/21/1997	<1.0	<1.0	<1.0	<3.0	N/A	ND	<1.2
M-2	11/10/1997	<1.0	<1.0	<1.0	<3.0	N/A	ND	<1.2
M-2	2/18/1998	<1.0	<1.0	<1.0	<3.0	N/A	ND	<1.2
M-2	5/19/1998	<1.0	<1.0	<1.0	<3.0	<6	ND	<0.1
M-2	5/25/1999	0.5	0.5	0.5	1.5	3	ND	0.05
M-2	1/19/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-2	5/30/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-2	6/22/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-2	8/22/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-2	11/20/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-2	2/14/2001	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-2	5/31/2001	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-2	8/21/2001	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-2	11/28/2001	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-2	2/22/2002	<0.5	<1.0	<0.5	<0.5	ND	ND	NA
M-2	5/22/2002	<0.5	<0.5	<0.5	<1.0	ND	ND	NA
M-2	11/6/2002	<0.5	<0.5	<0.5	1	1	ND	NA
M-2	2/27/2003	NA	NA	NA	NA	NA	NA	NA
M-2	5/28/2003	<1.0	<1.0	<1.0	<3.0	ND	ND	0.30
M-2	8/20/2003	NA	NA	NA	NA	NA	NA	NA
M-2	11/24/2003	NA	NA	NA	NA	NA	NA	NA
M-2	2/26/2004	NA	NA	NA	NA	NA	ND	NA
M-2	5/19/2004	<1.0	<1.0	<1.0	<3.0	NA	ND	NA
M-2	8/17/2004	NA	NA	NA	NA	NA	ND	NA
M-2	11/17/2004	NA	NA	NA	NA	NA	ND	NA
M-2	2/22/2005	NA	NA	NA	NA	NA	ND	NA
M-2	5/24/2005	<1.0	<1.0	<1.0	<2.0	ND	ND	NA
M-2	8/29/2005	NA	NA	NA	NA	NA	ND	NA
M-2	11/21/2005	<1.0	<1.0	<1.0	<2.0	ND	ND	NA
M-2	6/10/2010	<2.0	<2.0	<2.0	<6.0	ND	ND	NA
M-3	9/8/1993	116	<2.0	3	37.6	157	ND	NA

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M-3	10/5/1993	306	<2.0	4	19	329	ND	NA
M-3	11/11/1993	8.4	5.3	<2.0	2.6	16	ND	NA
M-3	12/16/1993	42	<2.0	<2.0	<2.0	42	ND	NA
M-3	1/13/1994	19	2.1	<2.0	<2.0	21	ND	NA
M-3	2/10/1994	<2.0	<2.0	<2.0	<2.0	N/A	ND	NA
M-3	3/7/1994	<0.5	<0.5	<0.5	2.5	3	ND	NA
M-3	5/17/1994	No Test	No Test	No Test	No Test	No Test	ND	NA
M-3	6/13/1994	3.65	<2.0	<2.0	<2.0	4	ND	NA
M-3	9/7/1994	2.87	<2.5	<2.5	2.5	5	ND	NA
M-3	12/15/1994	<2.5	<2.5	<2.5	5.61	6	ND	NA
M-3	2/9/1995	11.4	<2.5	<2.5	<2.5	11	ND	NA
M-3	5/8/1995	180	67.2	<2.5	53.9	301	ND	NA
M-3	8/25/1995	11.8	<2.5	<2.5	16.8	29	ND	NA
M-3	11/2/1995	<2.5	<2.5	<2.5	5.03	5	ND	NA
M-3	2/5/1996	236	<2.5	5.77	22.2	264	ND	NA
M-3	5/28/1996	88.4	<1.0	5.93	20.3	115	ND	NA
M-3	8/6/1996	96.4	<1.0	2.5	3.27	102	ND	NA
M-3	10/29/1996	17.4	<1.0	1.55	2.23	21	ND	NA
M-3	11/20/1996	70.2	<1.0	1.89	<3	72	ND	NA
M-3	2/19/1997	2.44	<1.0	2.61	7.43	12	ND	NA
M-3	5/28/1997	38	6.1	<1	13.5	58	ND	20.1
M-3	8/21/1997	<1	<1	<1	7.68	8	ND	<1.2
M-3	11/10/1997	<1	<1	<1	7.68	8	ND	<1.2
M-3	2/18/1998	<1	<1	<1	<3	<6	ND	<1.2
M-3	5/19/1998	26.7	<1	<1	2.52	29	ND	0.32
M-3	8/26/1998	<1	2.8	<1	<3	3	ND	0.3
M-3	11/5/1998	1.93	3.2	<1	<3	5	ND	NA
M-3	5/25/1999	4.2	0.8	0.5	1.5	7	ND	0.05
M-3	8/5/1999	<1	1.8	<1	<3	<6	ND	<.1
M-3	11/12/1999	6	2.2	1.7	5.4	15	ND	ND
M-3	1/19/2000	4.1	2.8	1.6	3.7	12.2	ND	NA
M-3	2/24/2000	30	21	2.3	9.4	62.7	ND	NA
M-3	5/30/2000	2.1	<0.5	0.9	2.2	5.2	ND	<0.1
M-3	6/22/2000	0.6	<0.5	<0.5	<0.5	0.6	ND	0.14
M-3	7/25/2000	<0.5	<0.5	<0.5	1.1	1.1	ND	NA

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M-3	8/22/2000	0.6	<0.5	<0.5	2.2	2.8	ND	<0.05
M-3	11/20/2000	1.1	<0.5	<0.5	3.4	4.5	ND	<0.05
M-3	2/14/2001	0.6	<0.5	<0.5	0.6	1.2	ND	<0.05
M-3	5/31/2001	1.2	<0.5	<0.5	1.7	2.9	ND	0.18
M-3	8/21/2001	1.6	<0.5	1.2	4.5	7.3	ND	0.15
M-3	11/29/2001	0.7	<0.5	<0.5	<0.5	0.7	ND	0.23
M-3	2/22/2002	<0.5	<0.5	<0.5	1.1	1.1	ND	0.32
M-3	5/22/2002	<0.5	<0.5	<0.5	1	1	ND	0.31
M-3	11/6/2002	0.7	0.4	<0.5	1.2	2.300	ND	NA
M-3	2/27/2003	1.3	0.8	<0.5	2.6	4.700	ND	NA
M-3	5/28/2003	<1.0	<1.0	<1.0	<3.0	ND	ND	0.40
M-3	8/20/2003	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
M-3	11/24/2003	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
M-3	2/26/2004	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
M-3	5/19/2004	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
M-3	8/17/2004	NA	NA	NA	NA	ND	ND	NA
M-3	11/17/2004	NA	NA	NA	NA	ND	ND	NA
M-3	2/22/2005	NA	NA	NA	NA	ND	ND	NA
M-3	5/24/2005	<1.0	0.9	1.0	2.0	3.880	ND	NA
M-3	8/29/2005	NA	NA	NA	NA	ND	ND	NA
M-3	11/21/2005	<1.0	<1.0	0.4	<2.0	0.430	ND	<0.050
M-3	6/10/2010	<2.0	<2.0	<2.0	<6.0	ND	ND	ND
M-4	9/8/1993	213	13.3	58	519	803	ND	NA
M-4	10/5/1993	302	2	55	395	754	ND	NA
M-4	11/11/1993	234	2	56	383	675	ND	NA
M-4	12/16/1993	171	<2.0	34.3	244	449	ND	NA
M-4	1/13/1994	175	2.5	38	288	504	ND	NA
M-4	2/10/1994	137	<2.0	29.8	192	359	ND	NA
M-4	3/7/1994	120	<2.5	27	220	367	ND	NA
M-4	5/17/1994	No Test	No Test	No Test	No Test	No Test	ND	NA
M-4	6/13/1994	151	<2.0	28.4	246	425	ND	NA
M-4	9/7/1994	145	<2.5	24.1	231	400	ND	NA
M-4	12/15/1994	184	<2.5	22.3	215	421	ND	NA
M-4	2/9/1995	160	<2.5	19.6	186	366	ND	NA
M-4	5/8/1995	108	<2.5	11.7	119	239	ND	NA

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M-4	8/25/1995	29.3	<2.5	13	116	158	ND	NA
M-4	11/2/1995	15.1	<2.5	12.9	136	164	ND	NA
M-4	2/5/1996	33.5	<2.5	19.3	209	262	ND	NA
M-4	5/28/1996	17	<1.0	8.93	93.6	120	ND	NA
M-4	8/6/1996	2.77	<1.0	3.5	38.5	45	ND	NA
M-4	10/29/1996	1.03	<1.0	3.66	55.5	60	ND	NA
M-4	11/22/1996	3.28	<1.0	7.77	90.3	101	ND	NA
M-4	2/19/1997	17.7	1.5	8.3	54	82	ND	NA
M-4	5/28/1997	53.6	11.6	43.4	366	475	ND	225
M-4	8/1/1997	39.7	3.2	1.51	100	145	ND	20.8
M-4	11/10/1997	44.8	<1.0	<1.0	71	116	ND	1.31
M-4	2/18/1998	91	<1.0	1.1	74.9	167	ND	<1.2
M-4	5/19/1998	46.6	<1.0	2.81	83.1	133	ND	0.21
M-4	8/26/1998	51	2.6	2.08	45.1	101	ND	43.9
M-4	11/5/1998	69	<1.0	<1.0	33	102	ND	NA
M-4	2/23/1999	133	<1	1.31	59.3	194	ND	283
M-4	5/25/1999	230	1.8	1.2	63	296	ND	190
M-4	8/5/1999	100	<2	<2	15.3	115	ND	54.9
M-4	11/12/1999	110	<2.5	<2.5	56	166	ND	57
M-4	1/19/2000	27	<0.5	<0.5	9.7	36.7	ND	NA
M-4	2/24/2000	11	<0.5	5.6	5.5	22.1	ND	NA
M-4	5/30/2000	38	1.1	<0.5	23	62.1	ND	<0.1
M-4	6/22/2000	44	1.6	8.9	16	70.5	ND	<0.1
M-4	7/25/2000	51	0.6	<0.5	13	64.6	ND	NA
M-4	8/22/2000	87	0.5	1.2	32	120.7	ND	1.66
M-4	11/17/2000	99	<0.5	0.5	5	104.5	ND	2.66
M-4	2/14/2001	94	<0.5	0.7	13	107.7	ND	3.37
M-4	5/31/2001	78	<0.5	<0.5	<0.5	78	ND	9.4
M-4	8/21/2001	30	<0.5	1.4	7.8	39.2	ND	5
M-4	11/29/2001	78	<0.5	11	78	167	ND	66
M-4	2/22/2002	34	<0.5	<0.5	3.4	37.4	ND	27.2
M-4	5/22/2002	51	<0.5	<0.5	2.2	53.2	ND	16
M-4	11/6/2002	1.2	<0.5	<0.5	0.7	1.9	ND	NA
M-4	2/27/2003	1.6	0.3	<0.5	1.3	3.200	ND	NA
M-4	5/28/2003	1.5	<1.0	<1.0	<3.0	1.500	ND	4.2

TABLE 2
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Sample Location	Date Sampled	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	Floating Product (inches)	Nitrates (mg/l)
M-4	8/20/2003	1.6	<1.0	<1.0	<3.0	1.600	ND	NA
M-4	11/24/2003	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
M-4	2/26/2004	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
M-4	5/19/2004	0.5	<1.0	<1.0	<3.0	ND	ND	NA
M-4	8/17/2004	4.4	<1.0	<1.0	<3.0	ND	ND	NA
M-4	11/17/2004	<1.0	<1.0	<1.0	<2.0	ND	ND	NA
M-4	2/22/2005	<1.0	<1.0	<1.0	<2.0	ND	ND	NA
M-4	5/24/2005	3.7	<1.0	<1.0	<2.0	3.700	ND	NA
M-4	8/29/2005	1.2	<1.0	<1.0	<2.0	1.200	ND	NA
M-4	11/21/2005	3.3	<1.0	<1.0	<2.0	3.300	ND	<0.050
M-4	6/10/2010	147	<2.0	<2.0	139	286	ND	NA
M-5	9/8/1993	<2.0	<2.0	<2.0	<2.0	N/A	ND	NA
M-5	10/5/1993	<2.0	<2.0	<2.0	<2.0	N/A	ND	NA
M-5	11/11/1993	<2.0	<2.0	<2.0	<2.0	N/A	ND	NA
M-5	12/16/1993	<2.0	<2.0	<2.0	<2.0	N/A	ND	NA
M-5	1/13/1994	<2.0	<2.0	<2.0	<2.0	N/A	ND	NA
M-5	2/10/1994	<2.0	<2.0	<2.0	<2.0	N/A	ND	NA
M-5	3/7/1994	<0.5	<0.5	<0.5	<0.5	N/A	ND	NA
M-5	5/17/1994	No Test	No Test	No Test	No Test	No Test	ND	NA
M-5	6/13/1994	<2.0	<2.0	<2.0	<2.0	N/A	ND	NA
M-5	9/7/1994	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
M-5	12/15/1994	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
M-5	2/9/1995	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
M-5	5/8/1995	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
M-5	8/25/1995	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
M-5	11/2/1995	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
M-5	2/5/1996	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
M-5	5/28/1996	<1.0	<1.0	<1.0	<1.0	N/A	ND	NA
M-5	8/6/1996	<1.0	<1.0	<1.0	<3.0	N/A	ND	NA
M-5	10/29/1996	<1.0	<1.0	<1.0	<3.0	N/A	ND	NA
M-5	11/21/1996	<1.0	<1.0	<1.0	<3.0	N/A	ND	NA
M-5	2/19/1997	<1.0	<1.0	<1.0	<3.0	N/A	ND	NA
M-5	5/28/1997	<1.0	<1.0	<1.0	<3.0	N/A	ND	<1.2
M-5	8/21/1997	<1.0	<1.0	<1.0	<3.0	N/A	ND	<1.2
M-5	8/21/1997	<1.0	<1.0	<1.0	<3.0	N/A	ND	<1.2

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M-5	2/18/1998	<1.0	<1.0	<1.0	<3.0	N/A	ND	<1.2
M-5	5/19/1998	<1.0	<1.0	<1.0	<3.0	<6	ND	<0.1
M-5	5/25/1999	0.5	0.5	0.5	1.5	3	ND	0.05
M-5	1/19/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-5	5/30/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-5	6/22/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-5	8/22/2000	43	<0.5	<0.5	<0.5	43	ND	NA
M-5	11/17/2000	2.6	<0.5	<0.5	<0.5	2.6	ND	NA
M-5	2/14/2001	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-5	5/31/2001	0.6	<0.5	<0.5	<0.5	0.6	ND	NA
M-5	8/21/2001	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-5	11/29/2001	5.6	<0.5	<0.5	<0.5	5.6	ND	NA
M-5	2/22/2002	<0.5	<0.5	<0.5	<1.0	ND	ND	NA
M-5	5/22/2002	<0.5	<0.5	<0.5	<1.0	ND	ND	NA
M-5	11/6/2002	<0.5	<0.5	<0.5	0.7	0.700	ND	NA
M-5	2/27/2003	NA	NA	NA	NA	NA	NA	NA
M-5	5/28/2003	<1.0	<1.0	<1.0	<3.0	ND	ND	0.30
M-5	8/20/2003	NA	NA	NA	NA	NA	NA	NA
M-5	11/24/2003	NA	NA	NA	NA	NA	NA	NA
M-5	2/26/2004	NA	NA	NA	NA	NA	ND	NA
M-5	5/19/2004	<1.0	<1.0	<1.0	<3.0	NA	ND	NA
M-5	8/17/2004	NA	NA	NA	NA	NA	ND	NA
M-5	11/17/2004	NA	NA	NA	NA	NA	ND	NA
M-5	2/22/2005	NA	NA	NA	NA	NA	ND	NA
M-5	5/24/2005	<1.0	<1.0	<1.0	<2.0	NA	ND	NA
M-5	8/29/2005	NA	NA	NA	NA	NA	ND	NA
M-5	11/21/2005	<1.0	<1.0	<1.0	<2.0	NA	ND	NA
M-5	6/10/2010	<2.0	<2.0	<2.0	<6.0	NA	ND	NA
M-6	1/19/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-6	6/22/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-6	8/22/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-6	11/17/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-6	2/15/2001	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-6	5/31/2001	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-6	8/21/2001	<0.5	<0.5	<0.5	<0.5	ND	ND	NA

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M-6	11/28/2001	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-6	5/30/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-6	2/22/2002	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
M-6	5/22/2002	<0.5	<0.5	<0.5	<1.0	ND	ND	NA
M-6	11/6/2002	<0.5	0.4	1.1	1.3	2.800	ND	NA
M-6	2/27/2003	NA	NA	NA	NA	NA	NA	NA
M-6	5/28/2003	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
M-6	8/20/2003	NA	NA	NA	NA	NA	NA	NA
M-6	11/24/2003	NA	NA	NA	NA	NA	NA	NA
M-6	2/26/2004	NA	NA	NA	NA	NA	ND	NA
M-6	5/19/2004	0.8	0.6	<1.0	<3.0	NA	ND	NA
M-6	8/17/2004	NA	NA	NA	NA	NA	ND	NA
M-6	11/17/2004	NA	NA	NA	NA	NA	ND	NA
M-6	2/22/2005	NA	NA	NA	NA	NA	ND	NA
M-6	5/24/2005	<1.0	<1.0	<1.0	<2.0	ND	ND	NA
M-6	8/29/2005	NA	NA	NA	NA	NA	ND	NA
M-6	11/21/2005	<1.0	<1.0	<1.0	<2.0	ND	ND	NA
M-6	6/10/2010	<2.0	<2.0	<2.0	<6.0	ND	ND	NA
M-7	2/27/2003	0.2	0.2	<0.5	0.9	1.3	ND	NA
M-7	5/28/2003	<1.0	<1.0	<1.0	1.3	1.3	ND	NA
M-7	8/20/2003	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
M-7	11/24/2003	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
M-7	2/25/2004	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
M-7	5/19/2004	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
M-7	8/17/2004	NA	NA	NA	NA	ND	ND	NA
M-7	11/17/2004	NA	NA	NA	NA	ND	ND	NA
M-7	2/22/2005	NA	NA	NA	NA	ND	ND	NA
M-7	5/24/2005	<1.0	<1.0	<1.0	<2.0	ND	ND	NA
M-7	8/29/2005	NA	NA	NA	NA	ND	ND	NA
M-7	11/21/2005	<1.0	<1.0	<1.0	<2.0	ND	ND	NA
M-7	6/10/2010	<2.0	<2.0	<2.0	<6.0	ND	ND	NA
R-1	9/7/1993	991	164	113	1111	2379	ND	NA
R-1	10/4/1993	1280	1328	74	799	3481	1"	NA
R-1	11/10/1993	242	322	15	93.9	673	ND	NA
R-1	12/15/1993	328	411	26.6	196	962	ND	NA

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R-1	1/12/1994	1830	1965	90.3	1053	4938	17"	NA
R-1	2/9/1994	1255	1504	42.3	730	3531	32"	NA
R-1	3/7/1994	7600	8500	280	2700	19080	4"	NA
R-1	5/17/1994	No Test	No Test	No Test	No Test	No Test	10"	NA
R-1	6/13/1994	1450	1930	70	944	4394	11"	NA
R-1	9/7/1994	No Test	No Test	No Test	No Test	No Test	2"	NA
R-1	12/15/1994	1890	2130	105	990	5115	TR	NA
R-1	8/25/1995	No Test	No Test	No Test	No Test	No Test	TR	NA
R-1	11/2/1995	2330	2400	108	946	5784	ND	NA
R-1	2/5/1996	No Test	No Test	No Test	No Test	No Test	0.24"	NA
R-1	5/28/1996	No Test	No Test	No Test	No Test	No Test	4.8"	NA
R-1	8/6/1996	2970	3080	130	1200	7380	TR	NA
R-1	10/28/1996	1690	1970	60.8	800	4520	ND	NA
R-1	11/20/1996	1240	1540	61.9	600	3450	ND	NA
R-1	2/19/1997	No Test	No Test	No Test	No Test	No Test	29.76"	NA
R-1	2/24/1999	No Test	No Test	No Test	No Test	No Test	.09'	NA
R-1	5/25/1999	No Test	No Test	No Test	No Test	No Test	TR	NA
R-1	1/20/2000	2500	3800	180	1900	8380	NO	NA
R-1	5/31/2000	2300	1000	120	2000	5420	TR	NA
R-1	6/26/2000	2400	690	150	2000	5420	TR	NA
R-1	7/26/2000	4900	2900	150	3100	11050	TR	NA
R-1	8/23/2000	2500	1400	180	2200	6280	TR	NA
R-1	11/20/2000	3500	2700	210	2900	9310	TR	NA
R-1	2/15/2001	120	<10	<10	190	310	NO	NA
R-1	6/1/2001	17	<2.5	<2.5	19	36	ND	NA
R-1	7/5/2001	17	1.8	1.2	18	38	ND	NA
R-1	8/23/2001	22	1.2	1	4.2	28.4	ND	NA
R-1	11/28/2001	100	17	3.9	24	144.9	ND	NA
R-1	2/21/2002	23	1.3	2.1	6.1	32.5	ND	NA
R-1	5/23/2002	<0.5	<0.5	<0.5	<1.0	ND	ND	NA
R-1	8/8/2002	0.4	2.5	1.2	2.4	6.5	ND	NA
R-1	11/6/2002	6	0.5	1.1	2.4	10	ND	NA
R-1	2/20/2003	0.5	2.2	1.7	5.7	10.1	ND	NA
R-1	5/29/2003	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
R-1	8/20/2003	25.6	0.6	0.9	<3.0	27.1	ND	NA

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R-1	11/24/2003	18.0	<1.0	<1.0	<3.0	18.0	ND	NA
R-1	2/25/2004	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
R-1	5/19/2004	13.0	<1.0	<1.0	<3.0	ND	ND	NA
R-1	8/17/2004	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
R-1	11/17/2004	20.6	3.8	0.6	2.5	ND	ND	NA
R-1	2/22/2005	<1.0	<1.0	<1.0	<2.0	ND	ND	NA
R-1	5/24/2005	8.8	0.4	<1.0	<2.0	9.2	ND	NA
R-1	8/29/2005	6.0	0.40	<1.0	<2.0	6.4	ND	NA
R-1	11/21/2005	9.8	<1.0	0.4	0.9	ND	ND	NA
R-1	6/10/2010	<2.0	<2.0	<2.0	<6.0	ND	ND	NA
R-2	9/7/1993	278	651	59	538	1526	ND	NA
R-2	10/4/1993	509	789	73	741	2112	ND	NA
R-2	11/10/1993	284	470	38	401	1193	ND	NA
R-2	12/15/1993	529	864	65.3	709	2167	1"	NA
R-2	1/12/1994	1722	2501	150	1702	6075	24"	NA
R-2	2/9/1994	2806	3667	89.5	1520	8083	26"	NA
R-2	3/7/1994	5600	6800	290	2700	15390	4"	NA
R-2	5/17/1994	No Test	No Test	No Test	No Test	No Test	7"	NA
R-2	6/13/1994	3210	3790	139	1670	8809	7"	NA
R-2	9/7/1994	No Test	No Test	No Test	No Test	No Test	ND	NA
R-2	12/15/1994	1140	2200	148	1520	5008	0.6"	NA
R-2	8/25/1995	No Test	No Test	No Test	No Test	No Test	TR	NA
R-2	11/2/1995	1250	2030	116	1010	4406	TR	NA
R-2	2/5/1996	No Test	No Test	No Test	No Test	No Test	2.52	NA
R-2	5/28/1996	No Test	No Test	No Test	No Test	No Test	2.04"	NA
R-2	8/6/1996	2610	3960	165	1540	8275	0.72"	NA
R-2	10/28/1996	1100	2300	85.4	1100	4585	0.96"	NA
R-2	11/20/1996	428	1340	87.3	821	2680	0.48"	NA
R-2	2/19/1997	No Test	No Test	No Test	No Test	No Test	NA	NA
R-2	2/24/1999	No Test	No Test	No Test	No Test	No Test	0.07	NA
R-2	5/25/1999	No Test	No Test	No Test	No Test	No Test	TR	NA
R-2	1/20/2000	1200	2000	<130	1500	4700	NO	NA
R-2	5/31/2000	2300	3200	280	3000	8780	TR	NA
R-2	6/26/2000	1300	1300	79	1100	3779	TR	NA
R-2	7/26/2000	3600	3200	150	2300	9250	TR	NA

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R-2	8/23/2000	1600	1500	82	1100	4282	TR	NA
R-2	11/20/2000	770	1300	170	1500	3740	TR	NA
R-2	2/15/2001	620	400	43	440	1503	0.03	NA
R-2	6/1/2001	120	12	15	70	217	ND	NA
R-2	7/5/2001	39	31	18	220	308	ND	NA
R-2	8/23/2001	<2.5	22	22	310	354	ND	NA
R-2	11/28/2001	26	5.8	<5.0	85	116.8	ND	NA
R-2	2/21/2002	<20	1.0	<3.1	35	36	ND	NA
R-2	5/23/2002	<0.5	<0.5	2.4	30	32.4	ND	NA
R-2	8/8/2002	11.4	0.6	2	9.3	23.3	ND	NA
R-2	11/6/2002	19.8	0.6	1.6	7.6	29.6	ND	NA
R-2	2/20/2003	6.1	1.4	1.6	6.5	15.6	ND	NA
R-2	5/29/2003	<1.0	<1.0	<1.0	1.7	1.7	ND	NA
R-2	8/20/2003	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
R-2	11/24/2003	<1.0	<1.0	<1.0	2.7	2.7	ND	NA
R-2	2/25/2004	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
R-2	5/19/2004	1.2	2.1	<1.0	1.1	ND	ND	NA
R-2	8/17/2004	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
R-2	11/17/2004	<1.0	<1.0	<1.0	1.1	ND	ND	NA
R-2	2/22/2005	<1.0	<1.0	<1.0	<2.0	ND	ND	NA
R-2	5/24/2005	<1.0	4.9	<1.0	1.3	6.2	ND	NA
R-2	8/29/2005	<1.0	<1.0	<1.0	1.2	1.2	ND	NA
R-2	11/21/2005	<1.0	<1.0	<1.0	1.1	1.1	ND	NA
R-2	6/10/2010	<2.0	<2.0	<2.0	<6.0	ND	ND	NA
R-3	9/7/1993	<2.0	61.4	22	207	290	ND	NA
R-3	10/4/1993	21	179	32	310	542	ND	NA
R-3	11/10/1993	6.19	27.7	10.4	89.2	134	ND	NA
R-3	12/15/1993	26	88.4	19.4	178	312	ND	NA
R-3	1/12/1994	4.4	2.9	2.7	18	28	ND	NA
R-3	2/9/1994	<2.0	10.9	8.3	59.6	79	ND	NA
R-3	3/7/1994	7.7	43	24	220	295	ND	NA
R-3	5/17/1994	No Test	No Test	No Test	No Test	No Test	ND	NA
R-3	6/13/1994	3.03	41.4	18.4	188	251	ND	NA
R-3	9/7/1994	<2.5	18	6.9	67.9	93	ND	NA
R-3	12/15/1994	11.7	12.2	12.4	114	150	ND	NA

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Summary of Historical Groundwater Analytical Data
El Paso Corporation Jaquez Site, San Juan County, New Mexico

Sample Location	Date Sampled	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	Floating Product (inches)	Nitrates (mg/l)
R-3	2/9/1995	7.36	2.7	2.68	20.8	34	ND	NA
R-3	5/8/1995	16.6	11.7	13.9	126	168	ND	NA
R-3	8/25/1995	<2.5	15.2	13.6	101	130	ND	NA
R-3	11/2/1995	<2.5	14	9.3	82	105	ND	NA
R-3	2/5/1996	5.34	14	12.8	108	140	ND	NA
R-3	5/28/1996	1.05	18.7	22.9	203	246	ND	NA
R-3	8/6/1996	1.24	24.7	25.9	236	288	ND	NA
R-3	10/28/1996	<1.0	10.7	12.6	109	132	ND	NA
R-3	11/20/1996	<1.0	12.5	12.4	114	139	ND	NA
R-3	2/19/1997	2.12	1.9	2.29	12.6	19	ND	NA
R-3	5/28/1997	<1.0	15.3	13.5	130	159	ND	<1.2
R-3	8/21/1997	<1.0	20.8	18.6	176	215	ND	<1.2
R-3	11/10/1997	<1.0	13.6	17.2	149	180	ND	<1.2
R-3	2/18/1998	<1.0	<1.0	<1.0	<3	<6	ND	<1.2
R-3	5/19/1998	<1.0	11.9	12.5	125	150	ND	NA
R-3	5/25/1999	0.5	3.3	6.3	26	36	ND	NA
R-3	1/20/2000	<0.5	<0.5	0.5	5.2	5.7	ND	NA
R-3	5/31/2000	1	1.4	0.5	5.4	8.3	ND	NA
R-3	7/26/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
R-3	8/23/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
R-3	11/20/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
R-3	2/15/2001	2.2	<0.5	<0.5	<0.5	2.2	ND	NA
R-3	6/1/2001	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
R-3	7/5/2001	<0.5	<0.5	<0.5	1.8	1.8	ND	NA
R-3	8/23/2001	1.3	<0.5	<0.5	<0.5	1.3	ND	NA
R-3	11/28/2001	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
R-3	6/26/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
R-3	2/21/2002	<0.5	<0.5	<0.5	<1.0	ND	ND	NA
R-3	5/23/2002	<0.5	<0.5	<0.5	<1.0	ND	ND	NA
R-3	8/8/2002	<0.5	0.5	0.9	1	2.4	ND	NA
R-3	11/6/2002	<0.5	<0.5	<0.5	0.8	0.8	ND	NA
R-3	2/27/2003	NA	NA	NA	NA	NA	NA	NA
R-3	5/29/2003	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
R-3	8/20/2003	NA	NA	NA	NA	NA	NA	NA
R-3	11/24/2003	NA	NA	NA	NA	NA	NA	NA

TABLE 2
Summary of Historical Groundwater Analytical Data
El Paso Corporation Jaquez Site, San Juan County, New Mexico

Sample Location	Date Sampled	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	Floating Product (inches)	Nitrates (mg/l)
R-3	2/25/2004	NA	NA	NA	NA	NA	NA	NA
R-3	5/19/2004	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
R-3	8/17/2004	NA	NA	NA	NA	NA	NA	NA
R-3	11/17/2004	NA	NA	NA	NA	NA	ND	NA
R-3	2/22/2005	NA	NA	NA	NA	NA	NA	NA
R-3	5/24/2005	<1.0	<1.0	<1.0	<2.0	ND	ND	NA
R-3	8/29/2005	NA	NA	NA	NA	NA	NA	NA
R-3	11/21/2005	<1.0	<1.0	<1.0	<2.0	ND	ND	NA
R-3	6/10/2010	<2.0	<2.0	<2.0	<6.0	ND	ND	NA
R-4	9/7/1993	104	267	39.9	370	781	ND	NA
R-4	10/4/1993	118	266	41	364	789	ND	NA
R-4	11/10/1993	93.6	132	40.4	347	613	ND	NA
R-4	12/15/1993	102	161	48.4	418	729	ND	NA
R-4	1/12/1994	124	101	38.5	353	617	ND	NA
R-4	2/9/1994	120	51.4	20.8	150	342	ND	NA
R-4	3/7/1994	150	63	20	190	423	ND	NA
R-4	5/17/1994	No Test	No Test	No Test	No Test	No Test	ND	NA
R-4	6/13/1994	179	60.6	17.2	176	433	ND	NA
R-4	9/7/1994	238	102	26	218	584	ND	NA
R-4	12/15/1994	222	63.3	26.9	213	525	ND	NA
R-4	2/9/1995	273	61	20.4	165	519	ND	NA
R-4	5/8/1995	278	251	23.1	220	772	ND	NA
R-4	8/25/1995	646	278	50.8	544	1519	ND	NA
R-4	11/2/1995	343	60.4	35.1	284	723	ND	NA
R-4	2/5/1996	218	43.3	23.1	200	484	ND	NA
R-4	5/28/1996	716	199	36.6	394	1346	ND	NA
R-4	8/6/1996	384	156	24	275	839	ND	NA
R-4	10/28/1996	320	53.4	20.1	237	631	ND	NA
R-4	11/20/1996	289	31.2	19.3	220	560	ND	NA
R-4	2/19/1997	162	65.9	34.4	337	599	ND	NA
R-4	5/28/1997	189	92.5	13.3	144	439	ND	<1.2
R-4	8/21/1997	343	377	45.5	408	1174	ND	<1.2
R-4	11/10/1997	542	129	31.1	267	969	ND	<1.2
R-4	2/18/1998	98	15.9	10	79.3	203	ND	<1.2
R-4	5/19/1998	916	244	38.1	304	1502	ND	NA

TABLE 2
Summary of Historical Groundwater Analytical Data
El Paso Corporation Jaquez Site, San Juan County, New Mexico

Sample Location	Date Sampled	Benzene (µg/l)	Toluene (µg /l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	Floating Product (inches)	Nitrates (mg/l)
R-4	5/25/1999	110	63	15	144	332	ND	NA
R-4	1/20/2000	280	89	60	690	1,119	ND	NA
R-4	5/31/2000	960	980	29	1900	3869	ND	NA
R-4	6/26/2000	950	1000	43	2500	4493	ND	NA
R-4	7/26/2000	520	400	50	1600	2570	ND	NA
R-4	8/23/2000	1500	1800	110	1800	5210	ND	NA
R-4	11/20/2000	590	580	110	1800	3080	ND	NA
R-4	2/15/2001	19	<10	<10	36	55	ND	NA
R-4	6/1/2001	3.4	0.5	<0.5	2.2	6.1	ND	NA
R-4	7/5/2001	370	85	<2.5	14	469	ND	NA
R-4	8/23/2001	86	20	<2.5	12	118	ND	NA
R-4	11/28/2001	79	0.5	1.5	13	94	ND	NA
R-4	2/21/2002	120	2.6	0.56	7.5	130.66	ND	NA
R-4	5/23/2002	<0.5	<0.5	<0.5	<1.0	ND	ND	NA
R-4	8/8/2002	<0.5	0.4	0.8	0.7	1.9	ND	NA
R-4	11/6/2002	15.8	0.6	0.9	20.9	38.2	ND	NA
R-4	2/20/2003	0.5	0.9	<0.5	2.4	3.800	ND	NA
R-4	5/28/2003	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
R-4	8/20/2003	10.0	<1.0	<1.0	3.1	13.100	ND	NA
R-4	11/24/2003	6.1	<1.0	<1.0	1.1	7.200	ND	NA
R-4	2/25/2004	<1.0	<1.0	<1.0	<3.0	0.000	ND	NA
R-4	5/19/2004	10.0	<1.0	<1.0	4.2	14.200	ND	NA
R-4	8/17/2004	0.6	<1.0	<1.0	<3.0	0.580	ND	NA
R-4	11/17/2004	14.8	<1.0	0.5	3.1	18.360	ND	NA
R-4	2/22/2005	<1.0	<1.0	<1.0	<2.0	ND	ND	NA
R-4	5/24/2005	1.1	<1.0	<1.0	<2.0	1.100	ND	NA
R-4	8/29/2005	0.7	<1.0	<1.0	<2.0	0.700	ND	NA
R-4	11/21/2005	1.0	<1.0	<1.0	<2.0	1.000	ND	NA
R-4	6/10/2010	<2.0	<2.0	<2.0	<6.0	ND	ND	NA
R-5	9/7/1993	<2.0	<2.0	<2.0	<2.0	N/A	ND	NA
R-5	10/4/1993	<2.0	<2.0	<2.0	<2.0	N/A	ND	NA
R-5	11/10/1993	<2.0	<2.0	<2.0	<2.0	N/A	ND	NA
R-5	12/15/1993	<2.0	<2.0	<2.0	<2.0	N/A	ND	NA
R-5	1/12/1994	<2.0	<2.0	<2.0	<2.0	N/A	ND	NA
R-5	2/9/1994	<2.0	<2.0	<2.0	<2.0	N/A	ND	NA

TABLE 2
Summary of Historical Groundwater Analytical Data
El Paso Corporation Jaquez Site, San Juan County, New Mexico

Sample Location	Date Sampled	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	Floating Product (inches)	Nitrates (mg/l)
R-5	3/7/1994	<0.5	<0.5	<0.5	<0.5	N/A	ND	NA
R-5	5/17/1994	No Test	No Test	No Test	No Test	No Test	ND	NA
R-5	6/13/1994	<2.0	<2.0	<2.0	<2.0	N/A	ND	NA
R-5	9/7/1994	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
R-5	12/15/1994	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
R-5	2/9/1995	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
R-5	5/8/1995	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
R-5	8/25/1995	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
R-5	11/2/1995	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
R-5	2/5/1996	<2.5	<2.5	<2.5	<2.5	N/A	ND	NA
R-5	5/28/1996	<1.0	<1.0	<1.0	<1.0	N/A	ND	NA
R-5	8/6/1996	<1.0	<1.0	<1.0	<1.0	N/A	ND	NA
R-5	10/28/1996	<1.0	<1.0	<1.0	<3.0	N/A	ND	NA
R-5	11/20/1996	<1.0	<1.0	<1.0	<3.0	N/A	ND	NA
R-5	2/19/1997	<1.0	<1.0	<1.0	<3.0	N/A	ND	NA
R-5	5/28/1997	<1.0	<1.0	<1.0	<3.0	N/A	ND	<1.2
R-5	8/21/1997	<1.0	<1.0	<1.0	<3.0	N/A	ND	<1.2
R-5	11/10/1997	<1.0	<1.0	<1.0	<3.0	N/A	ND	<1.2
R-5	2/18/1998	<1.0	<1.0	<1.0	<3.0	N/A	ND	<1.2
R-5	5/19/1998	<1.0	<1.0	<1.0	<3.0	<6	ND	NA
R-5	5/25/1999	0.5	0.5	0.5	1.5	3	ND	NA
R-5	1/20/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
R-5	5/31/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
R-5	6/26/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
R-5	8/23/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
R-5	11/20/2000	<0.5	<0.5	<0.5	0.9	0.9	ND	NA
R-5	2/15/2001	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
R-5	6/1/2001	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
R-5	7/5/2001	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
R-5	8/23/2001	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
R-5	11/28/2001	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
R-5	2/21/2002	<0.5	<1.0	<0.5	<0.5	ND	ND	NA
R-5	5/23/2002	<0.5	<0.5	<0.5	<1.0	ND	ND	NA
R-5	8/8/2002	<0.5	0.4	0.9	0.9	2.2	ND	NA
R-5	11/6/2002	<0.5	<0.5	<0.5	0.8	0.8	ND	NA

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Summary of Historical Groundwater Analytical Data
El Paso Corporation Jaquez Site, San Juan County, New Mexico

Sample Location	Date Sampled	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	Floating Product (inches)	Nitrates (mg/l)
R-5	2/27/2003	NA	NA	NA	NA	NA	NA	NA
R-5	5/29/2003	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
R-5	8/20/2003	NA	NA	NA	NA	NA	NA	NA
R-5	11/24/2003	NA	NA	NA	NA	NA	NA	NA
R-5	2/25/2004	NA	NA	NA	NA	NA	ND	NA
R-5	5/19/2004	<1.0	<1.0	<1.0	<3.0	NA	ND	NA
R-5	8/17/2004	NA	NA	NA	NA	NA	NA	NA
R-5	11/17/2004	NA	NA	NA	NA	NA	NA	NA
R-5	2/22/2005	NA	NA	NA	NA	NA	NA	NA
R-5	5/24/2005	<1.0	<1.0	<1.0	<2.0	ND	ND	NA
R-5	8/29/2005	NA	NA	NA	NA	NA	NA	NA
R-5	11/21/2005	<1.0	<1.0	<1.0	<2.0	ND	ND	NA
R-5	6/10/2010	<2.0	<2.0	<2.0	<6.0	ND	ND	NA
R-6	1/20/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
R-6	5/31/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
R-6	6/26/2000	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
R-6	8/23/2000	<0.5	<0.5	2.6	13	15.6	ND	NA
R-6	11/20/2000	<0.5	<0.5	<0.5	0.5	0.5	ND	NA
R-6	2/15/2001	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
R-6	6/1/2001	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
R-6	7/5/2001	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
R-6	8/23/2001	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
R-6	11/28/2001	<0.5	<0.5	<0.5	<0.5	ND	ND	NA
R-6	2/21/2002	<0.5	<0.5	<0.5	<1.0	ND	ND	NA
R-6	5/23/2002	<0.5	<0.5	<0.5	<1.0	ND	ND	NA
R-6	8/8/2002	<0.5	0.4	0.9	1	2.3	ND	NA
R-6	11/6/2002	<0.5	<0.5	<0.5	0.9	0.9	ND	NA
R-6	2/27/2003	NA	NA	NA	NA	NA	NA	NA
R-6	5/28/2003	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
R-6	8/20/2003	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
R-6	11/24/2003	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
R-6	2/25/2004	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
R-6	5/19/2004	<1.0	<1.0	<1.0	<3.0	ND	ND	NA
R-6	8/17/2004	NA	NA	NA	NA	ND	ND	NA
R-6	11/17/2004	NA	NA	NA	NA	ND	ND	NA

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Summary of Historical Groundwater Analytical Data
El Paso Corporation Jaquez Site, San Juan County, New Mexico

Sample Location	Date Sampled	Benzene (µg/l)	Toluene (µg /l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	Floating Product (inches)	Nitrates (mg/l)
R-6	2/22/2005	NA	NA	NA	NA	ND	ND	NA
R-6	5/24/2005	<1.0	<1.0	<1.0	<2.0	ND	ND	NA
R-6	8/29/2005	NA	NA	NA	NA	ND	ND	NA
R-6	11/21/2005	<1.0	<1.0	<1.0	<2.0	ND	ND	NA
R-6	6/10/2010	<2.0	<2.0	<2.0	<6.0	ND	ND	NA

Notes:

mg/L = milligrams per liter

ug/L = micrograms per liter

NA= not available (e.g., well was not sampled on that particular date or an analyte was not tested)

ND = not detected

"<" = specific analyte not detected at the reporting limit (RL). Value shown is the RL.

Table 3
 June 2010 Soil Sample Field Screening and Laboratory Analytical Data
 El Paso Corporation Jaquez Site, San Juan County, New Mexico

Sample Location	Sample Depth (ft. BGS)	Date Sampled	Field Screening Data			Laboratory Analytical Data								
			PID (PPMV)	Petro FLAG™ (mg/total kg)	Petro FLAG™ (mg/kg)	Benzene (ug/kg)	Toluene (ug/kg)	Ethyl benzene (ug/kg)	Total Xylenes (ug/kg)	TPH GRO (mg/kg)	TPH (C10-C28) (mg/kg)	TPH (>C28-C40) (mg/kg)		
SB-1	1	6/11/2010	0	-	-	-	-	-	-	-	-	-	-	-
	2	6/11/2010	1.1	-	-	-	-	-	-	-	-	-	-	-
	3	6/11/2010	0.8	-	-	-	-	-	-	-	-	-	-	-
	4	6/11/2010	0	-	-	-	-	-	-	-	-	-	-	-
	5	6/11/2010	0	-	-	-	-	-	-	-	-	-	-	-
	6	6/11/2010	0	-	-	-	-	-	-	-	-	-	-	-
SB-2	1	6/11/2010	0	-	-	-	-	-	-	-	-	-	-	-
	2	6/11/2010	0	-	-	-	-	-	-	-	-	-	-	-
SB-3	1	6/11/2010	0	-	-	-	-	-	-	-	-	-	-	-
	2	6/11/2010	13.2	-	-	-	-	-	-	-	-	-	-	-
	3	6/11/2010	11.9	-	-	-	-	-	-	-	-	-	-	-
	4	6/11/2010	0.1	-	-	-	-	-	-	-	-	-	-	-
SB-4	5	6/11/2010	10.8	123	141	ND (4.0)	ND (4.0)	ND (4.0)	ND (12)	ND (5.7)	ND (3.8)	ND (3.8)	-	-
	6	6/11/2010	0.5	-	-	-	-	-	-	-	-	-	-	-
SB-5	1	6/11/2010	0	-	-	-	-	-	-	-	-	-	-	-
	2	6/11/2010	0	-	-	-	-	-	-	-	-	-	-	-
	3	6/11/2010	0	-	-	-	-	-	-	-	-	-	-	-
SB-6	1	6/11/2010	19.2	-	-	ND (3.9)	ND (3.9)	ND (3.9)	ND (12)	ND (5.5)	8.60	7.08	-	-
	2	6/11/2010	0	-	-	-	-	-	-	-	-	-	-	-
SB-7	1	6/11/2010	106	132	-	-	-	-	-	-	-	-	-	-
	2	6/11/2010	30.6	-	-	-	-	-	-	-	-	-	-	-

June 2010 Soil Sample Field Screening and Laboratory Analytical Data
 El Paso Corporation Jaquez Site, San Juan County, New Mexico

Table 3

Sample Location	Sample Depth (ft. BGS)	Date Sampled	Field Screening Data			Laboratory Analytical Data								
			PID (PPMV)	Petro FLAG™ (mg/total kg)	Petro FLAG™ (mg/kg)	Benzene (ug/kg)	Toluene (ug/kg)	Ethyl benzene (ug/kg)	Total Xylenes (ug/kg)	TPH GRO (mg/kg)	TPH (C10-C28) (mg/kg)	TPH (>C28-C40) (mg/kg)		
SB-8	1	6/11/2010	230	298	-	-	-	-	-	-	-	-	-	-
	1.5	6/11/2010	71.2	-	-	-	-	-	-	-	-	-	-	-
	2	6/11/2010	31.2	-	-	-	-	-	-	-	-	-	-	-
	2.5	6/11/2010	81.5	-	-	-	-	-	-	-	-	-	-	-
	3	6/11/2010	59.2	-	-	-	-	-	-	-	-	-	-	-
	3.5	6/11/2010	45.2	-	-	-	-	-	-	-	-	-	-	-
SB-9	4	6/11/2010	43.2	208	-	-	-	-	-	-	-	-	-	-
	1	6/11/2010	18.4	222	-	-	-	-	-	-	-	-	-	-
	2	6/11/2010	0.8	-	-	-	-	-	-	-	-	-	-	-
	3	6/11/2010	8.5	-	-	-	-	-	-	-	-	-	-	-
	4	6/11/2010	2	160	195	ND (4.7)	ND (4.7)	ND (4.7)	ND (14)	ND (6.9)	ND (4.0)	ND (4.0)	ND (4.0)	
	SB-10	1	6/11/2010	20	207	-	-	-	-	-	-	-	-	-
	2	6/11/2010	6.9	-	-	-	-	-	-	-	-	-	-	
	3	6/11/2010	8.3	-	-	-	-	-	-	-	-	-	-	
SB-11	1	6/11/2010	4.6	-	-	-	-	-	-	-	-	-	-	-
	2	6/11/2010	6	-	-	-	-	-	-	-	-	-	-	-
	2.5	6/11/2010	15.2	137	170	ND (5.0)	ND (9.9)	ND (5.0)	ND (15)	ND (7.1)	9.06	9.05		
SB-12	1	6/11/2010	22.9	456	-	-	-	-	-	-	-	-	-	-
	2	6/11/2010	17.2	-	-	-	-	-	-	-	-	-	-	-
	3	6/11/2010	6.1	-	-	-	-	-	-	-	-	-	-	-
	4	6/11/2010	1.6	7045	-	-	-	-	-	-	-	-	-	-
	4.75	6/11/2010	8.1	-	-	-	-	-	-	-	-	-	-	-

**June 2010 Soil Sample Field Screening and Laboratory Analytical Data
El Paso Corporation Jaquez Site, San Juan County, New Mexico**

Table 3

Sample Location	Sample Depth (ft. BGS)	Date Sampled	Field Screening Data			Laboratory Analytical Data										
			PID (PPMV)	Petro FLAG™ (mg/kg total)	Petro FLAG™ (mg/kg)	Benzene (ug/kg)	Toluene (ug/kg)	Ethyl benzene (ug/kg)	Total Xylenes (ug/kg)	TPH GRO (mg/kg)	TPH (C10-C28) (mg/kg)	TPH (>C28-C40) (mg/kg)				

Notes:

- ft. BGS = feet below ground surface
- PID = photoionization detector screening of bag headspace vapor
- PPMV = parts per million by volume
- mg/total kg = milligrams per total kilograms
- ug/kg = micrograms per kilogram, dry weight basis
- mg/kg = milligrams per kilogram, dry weight basis
- ND = analyte not detected at the reporting limit (RL). Value shown is the RL.
- If no result is listed, sample was not tested
- Sample depth is midpoint of 6-inch sample interval
- PetroFLAG™ results converted to dry weight by using moisture content data from lab results

Table 4
June 2010 Vapor Field Screening and Laboratory Analytical Data
El Paso Corporation Jaquez Site, San Juan County, New Mexico

Sample Location	Date Sampled	Field Screening Data		Laboratory Analytical Data				
		PID (PPMV)		Benzene (PPMV)	Toluene (PPMV)	Ethylbenzene (PPMV)	Total Xylenes (PPMV)	TPH (PPMV)
Passive 1	6/11/2010	0.0		-	-	-	-	-
Passive 2	6/11/2010	0.0		-	-	-	-	-
Passive 3	6/11/2010	0.4		-	-	-	-	-
Passive 4	6/11/2010	8.9		ND (0.50)	ND (0.50)	ND (0.50)	ND (1.5)	ND (5.0)
Passive 5	6/11/2010	0.0		-	-	-	-	-
R-1	6/11/2010	81.2		ND (0.50)	ND (0.50)	ND (0.50)	ND (1.5)	ND (5.0)
Ambient	6/11/2010	0.0		ND (0.50)	ND (0.50)	ND (0.50)	ND (1.5)	ND (5.0)

Notes:

PID = photoionization detector

MTBE = methyl tertiary butyl ether

TPH = total petroleum hydrocarbons (as equivalent pentane)

PPMV = parts per million by volume

ND = analyte not detected at the reporting limit (RL). Value shown is the RL.

Samples analyzed beyond hold time; reported results are considered minimum values

Table 5
August/September 2010 Soil Sample Analytical Data Summary
El Paso Corporation Jaquez Site, San Juan County, New Mexico

Soil Boring	Depth (ft. bgs)	Date	Analytical Parameter														Total TPH mg/kg 100
			Benzene ug/kg NA	Toluene ug/kg NA	Ethylbenzene ug/kg NA	Total Xylenes ug/kg NA	m,p-Xylene ug/kg NA	o-Xylene ug/kg NA	Total BTEX ug/kg 50,000	TPH (C6-C10) mg/kg 100	TPH (C10-C28) mg/kg 100	TPH (>C28-C40) mg/kg 100					
GP-2	(0-5')	8/26/2010	ND (4.1)	ND (4.1)	1.5 J	41.3	41.3	ND (4.1)	47	26.8	ND (3.8)	2.90 J	32				
GP-2	(11-12')	8/26/2010	1.6 J	ND (4.4)	13.5	257	0.82 J	275	8.46	19.1	60						
GP-3	(14-15')	8/26/2010	ND (7.0)	25	340	12,000	1,270	13,669	1,090	36.2	1,282						
GP-3	(15-16')	8/26/2010	ND (290)	ND (290)	107 J	393 J	82.0 J	872	887	56.7	1,082						
GP-4	(8-9')	8/26/2010	ND (4.4)	ND (4.4)	ND (4.4)	ND (8.8)	ND (4.4)	ND	ND (5.8)	2.64 J	7						
GP-4	(13-14')	8/26/2010	132 J	ND (250)	292	3,320	137 J	4,009	1,090	205	2,405						
GP-4	(16-17')	8/26/2010	36.8	ND (4.1)	68.6	498 J	153 J	758	339	299	915						
GP-7	(8-9')	8/26/2010	ND (280)	ND (280)	ND (280)	ND (560)	ND (280)	ND	305	28.7	395						
GP-7	(14-16')	8/26/2010	ND (4.6)	ND (4.6)	3.6 J	16.8	3.6 J	29	143	25.6	254						
GP-7	(15-16')	8/26/2010	2.8 J	ND (4.6)	ND (4.6)	ND (9.2)	ND (4.6)	14	3.25 J	13.4	35						
GP-8	(9-10')	8/26/2010	ND (4.7)	ND (4.7)	ND (4.7)	5.0 J	1.1 J	13	3.88 J	120	320						
GP-8	(12-13')	8/26/2010	ND (310)	ND (310)	ND (310)	1,300	ND (310)	1,765	806	85.8	1,390						
GP-8	(17-18')	8/26/2010	ND (4.1)	ND (4.1)	ND (4.1)	ND (8.3)	ND (4.1)	12	7.74	102	247						
GP-11	(12.5-13')	9/1/2010	ND (7.0)	3.3 J	16.7	124	34.4	182	1,860	90.2	2,312						
GP-12	(7-8')	9/1/2010	ND (700)	ND (700)	662 J	4,070	473 J	5,902	2,510	141	3,314						
GP-12	(12-13')	9/1/2010	3.7 J	1.4 J	11.6	88.7	19.0	125	2,260	88.1	2,727						
GP-13	(8-9')	9/1/2010	823 J	9,940	2,250	19,700	4,610	37,313	575	6.25	596						
GP-15	(4-5')	9/1/2010	9,590	176 J	18,000	143,000	ND (320)	170,766	5,320	78.7	5,807						
GP-15	(9.5-10')	9/1/2010	6.7	ND (4.0)	15.3	119	1.5 J	144	4.77 J	ND (3.8)	9						
GP-19	(5.5-6.5')	9/2/2010	ND (13)	ND (13)	ND (13)	ND (26)	ND (13)	ND	ND (15)	ND (4.2)	21						
GP-23	(6-7')	9/2/2010	4.0 J	ND (4.5)	ND (4.5)	52.0	ND (4.5)	61	ND (5.6)	22.8	53						
GP-25	(7-8')	9/2/2010	ND (6.1)	ND (6.1)	ND (6.1)	ND (12)	ND (6.1)	ND	ND (8.3)	ND (4.0)	ND						

Notes:

1282 = Concentration exceeds the applicable NMOCD standard.

- Sample GP-27 (6'-7') is a duplicate of Sample GP-23 (6'-7').
- "ND" indicates that the analyte was not detected above the reporting limit (shown in parentheses).
- For BTEX and TPH totals, if any components were non-detect, half the detection limit was used. If no components were detected, an "ND" is indicated.
- "J" qualifiers indicate either that an analyte was detected but was below its reporting limit, or that the value is considered as estimated due to other analytical uncertainty such as matrix interference.
- "BGS" = below ground surface.
- "NMOCD" = New Mexico Energy, Minerals and Natural Resources Department, Oil Conservation Division

APPENDIX A

**August-September 2010 Soil Boring
Logs**

Borehole Log



Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-2
 Project No. 1009594.0

Drilling Contractor Vironex, Inc.
 Drilled by G. Grenier
 Drill Rig Geoprobe 6600
 Drilling Method Dual Tube

Logged By D. Heneman (LTE)
 Completion Date August 26, 2010
 Borehole Depth 20'
 Borehole Dia. 2"

Northing 2092403.5
 Easting 2727399.0
 Surface Elev. (ft) 5597.7

Sample Method 5' Dual Tube

Sample Interval Continuous

DTP (bgs) _____
 DTW (bgs) 8.75' August 26, 2010

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
				ML		
-	NR				(0' - 0.8') NR	
1					(0.8' - 1.2') 7.5 YR 3/4 dark brown, sandy soil, minor roots	
0.0						
2						
0.0		4.2/5				
3					(1.2' - 5') 7.5 YR 6/3 light brown sandy silt, 70% silt, 10% fine sand, 20% med grained sand, poorly sorted	
0.0						
4						
0.0						
5						Saturated at 8.75'
NR						
6						
1.0						
7						
0.3		3.75/5			(5' - 10') sandy silt, 70% silt, 10% fine, 20% med sand, minor staining, some gray staining and Fe staining associated with it, wet at 7.9', saturated at 8.75'	
8						

Borehole Log

Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-2
 Project No. 1009594.0



DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
0.8						
9						
1.5			GP-2 (9-10)			
10						Black staining, strong HC odor
NR						
11					(10' - 11.4') 7.5 YR 4/3 brown sandy silt, stained black, strong HC odor, 70% silt, 20% med-coarse sand, 10% fine sand, saturated	
119.0			GP-2 (11-12)	SC/CH		
12						
42.1		3.58/5			(11' - 13.6') sand clay mixture to med plasticity clay, 70% clay, 20% med sand, 10% fine sand, slightly stained at top, becomes less stained towards the bottom in the med plasticity clay, clay is soft, saturated	
13						
2.1						
14						
2.2						
15						
2.4			GP-2 (15-16)	CL	(15' - 16') silty clay, 30% silt, medium plasticity, soft, moderately stained, black/gray, some Fe staining, saturated	
16						
1.6				ML		
17						
1.9		5/5				
18					(16' - 20') sandy silt, 60% silt, 20% fine sand, 20% med-coarse sand, minor staining (gray) from 17' - 18.25'	

Borehole Log

Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-2
 Project No. 1009594.0



DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
0.0						
19						
0.0						
20						
21						
22						
23						
24						
25						
26						
27						
28						

Borehole Log



Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-3
 Project No. 1009594.0

Drilling Contractor Vironex, Inc.
 Drilled by G. Grenier
 Drill Rig Geoprobe 6600
 Drilling Method Dual Tube

Logged By D. Heneman (LTE)
 Completion Date August 26, 2010
 Borehole Depth 20'
 Borehole Dia. 2"

Northing 2092430.1
 Easting 2727426.9
 Surface Elev. (ft) 5598.5

Sample Method 5' Dual Tube

Sample Interval Continuous

DTP (bgs) _____
 DTW (bgs) 10' August 26, 2010

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
0.0				ML	(0' - 0.3') NR	
1					(0.3' - 0.5') top soil, dark yellowish brown, 10 YR 4/6, med sand gr, poorly sorted, 70% fine silt, 10% med sand, 20% fine sand, some minor roots	
2						
3		4.7/5			(0.5' - 5.0') 7.5 YR 5/4 brown sandy silt, med to coarse to fine sand, poorly sorted, 70% fine silt, 10% med sand, 10% fine sand 10% coarse; soli looks clean, no odor or stains	
4						
5						
6	NR				(5' - 6.5') NR	
7					(6.5' - 7.1') 7.5 YR 5/4 brown sandy silt, poorly sorted, 10% med, 10% fine, 10% coarse sand, 70% fine silt	
8		3.5/5				

Borehole Log

Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-3
 Project No. 1009594.0



DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
0.0					(7.1' - 10') 7.5 YR 4/3 brown sandy silt, poorly sorted, 20% med coarse sand, 10% fine sand, 70% silt, minor Fe staining	
9						
10.0						Saturated at 10'
11.0					(10' - 11.7') 7.5 YR 4/3 brown sandy silt to clayey sand, 70% silt, 20% med-coarse sand, 10% fine sand	
12.0				CL		
13.0	1.4	5/5				Heavily stained, strong HC odor 12.4' - 18.6'
14.0					(11.7' - 15') sand clay mixture, 60% low plasticity clay, soft, 20% med-coarse sand, 20% fine sand, minor silt; 12.4' - 15' heavily oil stained, strong HC odor	
15.0	761.0		GP-3 (14-15)	ML		
16.0	684.0		GP-3 (15-16)	CH	(15' - 15.5') sandy silt, saturated, 75% silt, 20% med-fine sand, 5% coarse sand, heavily stained black, strong odor (15.5' - 16') sand-clay mixture, cropy (sic) med plasticity, sort, minor sand - med gr.	
17.0	232.0				(16' - 16.75') sand clay mixture, 60% clay, 20% med sand, 20% fine sand, heavily stained black, strong odor, clay med plasticity, soft	
18.0	21.7	5/5			(16.75' - 18.6') Fat clay, heavily stained black, very minor silt content	

Borehole Log

Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-3
 Project No. 1009594.0



DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
6.7				ML		
19						
2.2					(18.6' - 20') 7.5 YR 5/4 brown sandy silt, minor gray staining, saturated, 60% silt, 20% coarse sand, 10% med sand, 10% fine sand, poorly sorted	
20						
21						
22						
23						
24						
25						
26						
27						
28						

Borehole Log



Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-4
 Project No. 1009594.0

Drilling Contractor Vironex, Inc.
 Drilled by G. Grenier
 Drill Rig Geoprobe 6600
 Drilling Method Dual Tube

Logged By D. Heneman (LTE)
 Completion Date August 26, 2010
 Borehole Depth 20'
 Borehole Dia. 2"

Northing 2092448.0
 Easting 2727448.2
 Surface Elev. (ft) 5598.4

Sample Method 5' Dual Tube

Sample Interval Continuous

DTP (bgs) _____
 DTW (bgs) 15' August 26, 2010

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
0.0				SM ML	(0' - 0.3') 7.5 YR strong brown sandy top soil, roots	
1.0						
2.0						
3.0		5/5			(0.3' - 5') 7.5 YR 5/3 brown sandy silt, 70% silt, 20% med sand, 10% fine, poorly sorted	
4.0						
5.0						
6.0	NR				(5' - 6.7') NR	
7.0	NR					
8.0	2.0	3.3/5				
9.0					(6.7' - 10') 7.5 YR 5/4 brown, sandy silt CUS (sic), 70% silt, 20% med	

Borehole Log

Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-4
 Project No. 1009594.0



DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
2.3					sand, 5% coarse, 5% fine, poorly sorted	
9						
1.9						
10						
NR						
11					(10' - 11.8') NR	
NR						
1.9						
624.0		3.2/5				
13						Heavily stained, strong HC odor 12.9' - 19.7'
859.0					(11.8' - 15') 7.5 YR 4/3 brown sandy silt, poorly sorted, 60% silt, 20% med sand, 10% coarse, 10% fine sand	
14						
662.0						
15						Saturated at 15'
108.0						
16						
1150.0					(15' - 17.2') sandy silt, poorly sorted, 60% silt, 20% med sand, 10% coarse, 10% fine sand	
17						
33.1		5/5		CL	(17.2' - 17.7') silty clay, 30% silt, low plasticity, soft	
18				ML		

Borehole Log

Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-4
 Project No. 1009594.0



DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
5.9						
19					(17.7' - 20') sandy silt, poorly sorted, 60% silt, 20% med sand, 10% coarse, 10% fine sand	
2.6						
20						
21						
22						
23						
24						
25						
26						
27						
28						

Borehole Log



Client El Paso Corporation
Project Jaquez Site

Borehole ID GP-6
Project No. 1009594.0

Drilling Contractor Vironex, Inc.
Drilled by G. Grenier
Drill Rig Geoprobe 6600
Drilling Method Dual Tube

Logged By D. Heneman (LTE)
Completion Date August 26, 2010
Borehole Depth 15'
Borehole Dia. 2"

Northing 2092369.0
Easting 2727412.7
Surface Elev. (ft) 5596.4

Sample Method 5' Dual Tube

Sample Interval Continuous

DTP (bgs) _____
DTW (bgs) 5' August 26, 2010

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
1	NR			SM	(0' - 1.7') NR	
2	NR			ML	(1.7' - 1.8') sandy top soil	
3	0.0	3.3/5				
4	0.0					
5	0.0					Saturated at 5'
6	0.0				(1.8' - 10') 7.5 YR 5/6 strong brown sandy silt, 70% silt, 20% med sand, 10% fin sand, poorly sorted	
7	0.0					
8	0.0	5/5				

Borehole Log

Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-6
 Project No. 1009594.0



DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
9	0.0					
10	0.0					
11	0.0					
12	0.0					
13	0.0	5/5			(10' - 14') 7.5 YR 5/4 brown sandy silt, poorly sorted, 70% silt, 20% med-coarse sand, 10% fine sand	
14	0.0			CL	(14' - 15') silty clay with minor sand component, 20% silt, 10% sand, 70% clay, low plasticity, soft	
15	0.0					No Lab Samples
16						
17						
18						

Borehole Log

Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-7
 Project No. 1009594.0



Drilling	Drilling Contractor <u>Vironex, Inc.</u>	Logged By <u>D. Heneman (LTE)</u>	Northing <u>2092399.6</u>
	Drilled by <u>G. Grenier</u>	Completion Date <u>August 26, 2010</u>	Easting <u>2727427.8</u>
	Drill Rig <u>Geoprobe 6600</u>	Borehole Depth <u>20'</u>	Surface Elev. (ft) <u>5597.7</u>
	Drilling Method <u>Dual Tube</u>	Borehole Dia. <u>2"</u>	

Samples	Sample Method <u>5' Dual Tube</u>	Sample Interval <u>Continuous</u>	DTP (bgs) _____
			DTW (bgs) <u>7.7' August 26, 2010</u>

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
0.0				SM	(0' - 0.5') 7.5 YR 4/6 strong brown sandy top soil, minor roots, damp	
1				ML		
2	0.0				(0.5' - 5') 7.5 YR 6/4 light brown sandy silt, poorly sorted, 60% silt, 20% med-coarse sand, 20% fine sand	
3	0.0	5/5				
4	0.0				(5' - 8.7') 7.5 YR 5/4 brown sandy silt, 50% silt, 30% med-coarse sand, poorly sorted, minor Fe staining, minor gray staining (8.25' - 8.7' more heavily stained)	
5	0.0					
6	1.1				(5' - 8.7') 7.5 YR 5/4 brown sandy silt, 50% silt, 30% med-coarse sand, poorly sorted, minor Fe staining, minor gray staining (8.25' - 8.7' more heavily stained)	
7	1.6	5/5				
8						Saturated at 7.7' minor staining

Borehole Log

Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-7
 Project No. 1009594.0



DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
559.0			GP-7 (8-9)	CH		
9					(8.7' - 10') fat clay, very tight, minor staining, color is a mix of brown/gray, high plasticity	
17.8						
10				ML		
NR					(10' - 11.2') NR	
11						slightly stained gray 11.2' - 16.7'
3.3						
12					(11.2' - 12.75') 7.5 YR 6/4 light brown sandy silt, 80% silt, 10% med sand, 10% fine sand, poorly sorted, slightly stained gray	
1.4		3.8/5				strong HC odor
13				CH		
26.0					(12.75' - 14.75') fat clay, high plasticity, fairly soft, stained gray	
14						
38.9			GP-7 (14-15)	ML		
15					(14.75' - 15') 7.5 YR 6/4 light brown sandy silt, 80% silt, 10% med sand, 10% fine sand, poorly sorted, mix of brown and light gray staining	
3.0			GP-7 (15-16)			
16				CH/CL		
2.8					(15' - 16') poorly sorted sandy silt, 60% silt, 20% coarse-med sand, 20% fine sand, gray staining	
17				CL		
2.8		5/5			(16' - 16.7') fat clay grading downward to silty clay (fat clay - high plasticity and soft; silty clay - med-low plasticity, soft), stained gray	
18					(16.7' - 18.5') silty clay, low to med plasticity, soft, 30% silt component	

Borehole Log

Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-7
 Project No. 1009594.0



DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
1.7				ML		
19						
2.5						
20						
21						
22						
23						
24						
25						
26						
27						
28						

(18.5' - 20') 7.5 YR 6/4 light brown sandy silt, gray staining to 19.4', 60% silt, 30% med sand, 5% coarse, 5% fine sand, poorly sorted, Fe staining below 19.4'

gray staining 18.5' - 19.4'

Borehole Log



Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-8
 Project No. 1009594.0

Drilling Contractor Vironex, Inc.
 Drilled by G. Grenier
 Drill Rig Geoprobe 6600
 Drilling Method Dual Tube

Logged By D. Heneman (LTE)
 Completion Date August 26, 2010
 Borehole Depth 20'
 Borehole Dia. 2"

Northing 2092428.2
 Easting 2727465.2
 Surface Elev. (ft) 5597.8

Sample Method 5' Dual Tube

Sample Interval Continuous

DTP (bgs) _____
 DTW (bgs) 13' August 26, 2010

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
0.0				ML		
1						
0.0						
2						
0.0		5/5			(0' - 5') 7.5 YR 5/4 brown sandy silt, 80% silt, 10% med sand, 10% fine sand, poorly sorted, damp	
3						
0.2						
4						
0.0						
5				CH		
NR						
6					(5' - 7.2') NR	
NR						
7						
2.2		2.8/5				
8					(7.2' - 9.2') fat clay, tight, high plasticity, stained gray, no odor	gray staining could be due to reduction of organic material; presence of some minor roots

Borehole Log

Client El Paso Corporation
Project Jaquez Site

Borehole ID GP-8
Project No. 1009594.0



DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
1.2						
9						
6.7			GP-8 (9-10)	ML	(9.2' - 10') sandy silt, some black staining, 80% silt, 10% coarse-med sand, 10% fine sand.	black staining
10						
NR					(10' - 11') NR	
11						Saturated at 11'
653.0						
12						
11' - 12.4'					(11' - 12.4') sandy silt, 70% silt, 20% coarse, 10% med-fine sand, poorly sorted	heavily stained, strong HC odor
855.0	4/5		GP-8 (12-13)	CL	(12.4' - 15') silt/clay mixture, low plasticity, 50% silt, 50% clay, some gray staining, minor odor	some gray staining, minor odor, PID readings dropped in lower unstained clay
13						
0.3						
14						
0.0						
15						
2.0				ML	(15' - 15.9') sandy silt, 60% silt, 30% coarse-med sand, 10% fine sand, no staining or odor	
16						
15.9' - 17.8'					(15.9' - 17.8') sandy silt, 75% silt, 20% fine sand, 5% med sand, poorly sorted	Stained black, HC odor 15.9' - 17.8'
17						
15.8	5/5		GP-8 (17-18)			
18						

Borehole Log

Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-8
 Project No. 1009594.0



DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
2.8						
19					(17.8' - 20') sandy silt, 60% silt, 30% coarse-med sand, 10% fine sand, patchy light gray staining	19.4'-20' no staining or odor
0.0						
20						
21						
22						
23						
24						
25						
26						
27						
28						

Borehole Log

Client El Paso Corporation
Project Jaquez Site

Borehole ID GP-9
Project No. 1009594.0



Drilling	Drilling Contractor <u>Vironex, Inc.</u>	Logged By <u>D. Heneman (LTE)</u>	Northing <u>2092464.8</u>
	Drilled by <u>G. Grenier</u>	Completion Date <u>August 26, 2010</u>	Easting <u>2727486.0</u>
	Drill Rig <u>Geoprobe 6600</u>	Borehole Depth <u>15'</u>	Surface Elev. (ft) <u>5597.4</u>
	Drilling Method <u>Dual Tube</u>	Borehole Dia. <u>2"</u>	

Samples	Sample Method <u>5' Dual Tube</u>	Sample Interval <u>Continuous</u>	DTP (bgs) _____
			DTW (bgs) <u>9'</u> <u>August 26, 2010</u>

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
1	NR			SM	(0' - 1.2') NR	
0.0				ML	(1.2' - 1.3') sandy top soil, minor roots	
2		3.8/5				
0.0					(1.3' - 4.4') 7.5 YR 5/6 sandy silt, 70% silt, 20% fine sand, 10% med-coarse sand, poorly sorted, dry	
3						
0.0				CL	(4.4' - 5') silty-sandy clay, low plasticity, 10% silt, 10% sand, 80% clay, hard, damp, minor roots	
4						
0.0				ML	(5' - 6.1') NR	
5						
0.0					(6.1' - 7.3') 7.5 YR 5/6 strong brown, poorly sorted sandy silt, 60% silt, 30% med-coarse sand, 10% fine	
6						
0.0					(7.3' - 9') 7.5 YR 5/6 strong brown, poorly sorted sandy silt, 80% silt, 20% med-fine sand	
7						
0.0		3.9/5				
8						

Borehole Log

Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-9
 Project No. 1009594.0



DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
0.0						
9				CL	(9' - 10') silty clay, 50% silt, 50% clay, low plasticity, soft	Saturated at 9'
0.0						
10				CH	(10' - 14.2') 7.5 YR 4/4 brown fat sticky clay, high plasticity, very tight clay, saturated	
0.0						
11						
0.0					(14.2' - 15') 7.5 YR 4/4 sandy silt, 85% silt, 15% med-fine sand, poorly sorted, saturated	No Lab Samples
12		5/5		ML		
0.0						
13						
0.0						
14						
0.0						
15						
0.0						
16						
0.0						
17						
0.0						
18						

Borehole Log



Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-10
 Project No. 1009594.0

Drilling Contractor Vironex, Inc.
 Drilled by G. Grenier
 Drill Rig Geoprobe 7822DT
 Drilling Method Dual Tube

Logged By A. Ager (LTE)
 Completion Date September 01, 2010
 Borehole Depth 15'
 Borehole Dia. 2"

Northing 2092264.5
 Easting 2727395.4
 Surface Elev. (ft) 5595.7

Sample Method 5' Dual Tube

Sample Interval Continuous

DTP (bgs) _____
 DTW (bgs) 2.25' September 01, 2010

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
0	NR			CH	(0' - 0.75') NR	
1	1.0			SW	(0.75' - 1') 2.5 Y 5/3 light olive brown high plasticity clay, damp	
2	1.7	4.25/5				
3	1.2				(1' - 5') light olive brown poorly sorted coarse SAND, 60% coarse, 20% med, 20% fine, dry, roots, Fe staining	Saturated at 2.25 - just N of standing water near garden area; also appears to be near edge of trailer pad - fill(?) assoc w/pad construction
4	0.9					
5	1.8					
6	1.3					
7	1.2					
8	1.7	5/5				

Borehole Log

Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-10
 Project No. 1009594.0



DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
0.9						
9						Saturated at 9'
1.2						
10					(5' - 15') light olive brown coarse SAND, saturated, 60% coarse, 30% fines, 10% med, varying mineralogy, no structure	
0.6						
11						
1.6						
12						
1.8		5/5				
13						
1.3						
14						
1.9						
15						No Lab Samples
16						
17						
18						

Borehole Log



Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-11
 Project No. 1009594.0

Drilling Contractor Vironex, Inc.
 Drilled by G. Grenier
 Drill Rig Geoprobe 7822DT
 Drilling Method Dual Tube

Logged By A. Ager (LTE)
 Completion Date September 01, 2010
 Borehole Depth 15'
 Borehole Dia. 2"

Northing 2092306.3
 Easting 2727449.5
 Surface Elev. (ft) 5595.7

Sample Method 5' Dual Tube Sample Interval Continuous

DTP (bgs) _____
 DTW (bgs) 10' September 01, 2010

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
0						
1	NR			SW	(0' - 1.5') NR	
2	2.1					
3	0.2	3.5/5			(1.5' - 3') 10 YR 6/3 pale brown coarse sand, poorly sorted, subrounded, damp, roots, organic staining, 70% coarse, 20% med, 10% fine, roots	
4	0.0			SW		
5	0.4					
6	0.9				(3' - 7.5') 10 YR 5/5 brown med sand, damp, poorly sorted, 80% med, 10% coarse, 10% fines/silt, saturated 6' - 7.5'	
7	1.4					Perched water table 6'
8	0.8	5/5		SM	(7.5' - 7.75') dry 10 YR 5/5 brown silty sand, dry, 20% silt/fines, 80% med sand	
				CH	(7.75' - 8.25') high plasticity brown clay	

Borehole Log

Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-11
 Project No. 1009594.0



DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
2.8					(8.25' - 9') GLEY 1 2.5 N black high plasticity clay	
9						
38.2						
10						Saturated at 10'
399.0					(9' - 11.5') GLEY 1 5/10Y greenish gray, high plasticity clay, saturated at 10	
11						
180.0				CL	(11.5' - 12.25') greenish gray sandy clay, saturated, 10% fine sand	
12						
1050.0		5/5	GP-11 (12-13)	SW	(12.25' - 13') GLEY 1 3/5 GY v. dark greenish gray coarse sand, poorly sorted, sub-rounded, saturated	
13				CL	(13' - 15') greenish gray sandy clay, saturated, 10% fine sand	
69.2						
14						
9.2						
15						
16						
17						
18						

Borehole Log



Client El Paso Corporation
Project Jaquez Site

Borehole ID GP-12
Project No. 1009594.0

Drilling Contractor Vironex, Inc.
Drilled by G. Grenier
Drill Rig Geoprobe 7822DT
Drilling Method Dual Tube

Logged By A. Ager (LTE)
Completion Date September 01, 2010
Borehole Depth 15'
Borehole Dia. 2"

Northing 2092311.3
Easting 2727463.7
Surface Elev. (ft) 5594.8

Sample Method 5' Dual Tube

Sample Interval Continuous

DTP (bgs) _____
DTW (bgs) 11.5' September 01, 2010

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
0 - 1	NR			SM	(0' - 1') NR	
1 - 2	2.7				(1' - 2.25') 10 YR 3/3 dark brown silty sand, dry, 5% med, 80% fine, 15% silt, roots, black organic staining	
2 - 3	12.1	4/5		SW	(2.25' - 3.75') 2.5 Y 4/1 poorly sorted coarse sand, subrounded, 85% coarse, 5% med, 10% fines	
3 - 4	0.8			SC	(3.75' - 4.25') dark gray clayey sand, dry, med-fine sand component,	
4 - 5	4.1				(4.25' - 5') GLEY 4/10 Y dark greenish gray clayey sand, med-fine sand component, damp	No evidence of perched groundwater
5 - 6	NR				(5' - 6') NR	
6 - 7	4.5				(6' - 7.5') GLEY 2.5 N black clayey sand, damp, med sand content	
7 - 8	1590.0	4/5	GP-12 (7-8)	SW	(7.5' - 8') GLEY 4/10 Y dark greenish gray coarse sand, poorly sorted, 80% coarse, 10% med, 10% fine	HC odor
8 - 15				CL		

Borehole Log

Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-12
 Project No. 1009594.0



DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
620.0						
9					(8' - 10') GLEY 1 4/10 Y dark greenish gray wet sandy clay (10% fines) HC odor, low plasticity	Wet
775.0						
10					(10' - 11') NR	
NR						
45.0					(11- 11.5') G: EY 1 5/5 GY greenish gray sand clay, 10% fines, wet	
114.0				SW	(11.5' - 12') black coarse sand, saturated, poorly sorted	Saturated at 11.5'
12					(12' - 12.5') GLEY 1 4/N v. dark gray coarse sand as above	Strong HC odor; sheen on water
1620.0		4/5	GP-12 (12-13)	CH ML	(12.5' - 12.75') GLEY 1 5/5 GY greenish gray clay, high plasticity, wet	
13					(12.75' - 13.5') greenish gray sandy silt, saturated, poorly sorted, 5% coarse, 10% fine, 5% med	
6.8				SW		
14					(13.5' - 15') dark greenish gray med sand, poorly sorted, saturated, 30% coarse, 70% med	
3.8						
15						
16						
17						
18						

Borehole Log



Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-13
 Project No. 1009594.0

Drilling Contractor Vironex, Inc.
 Drilled by G. Grenier
 Drill Rig Geoprobe 7822DT
 Drilling Method Dual Tube

Logged By A. Ager (LTE)
 Completion Date September 01, 2010
 Borehole Depth 15'
 Borehole Dia. 2"

Northing 2092328.4
 Easting 2727493.1
 Surface Elev. (ft) 5594.7

Sample Method 5' Dual Tube Sample Interval Continuous

DTP (bgs) _____
 DTW (bgs) 10.5' September 01, 2010

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
1	NR			SM	(0' - 1.5') NR	
2	1.0					
3	1.6	3.5/5			(1.5' - 3') 7.5 YR 5/4 brown silty sand, dry, roots, Fe staining, near big tree root	
4	1.1			SW		
5	0.6				(3' - 5') poorly sorted coarse sand, roots, wet, 60% coarse, 20% med, 20% fine, fining upward grades to 80% coarse at bottom	
6	NR			ML	(5' - 7') NR	
7					(7' - 7.25') 7.5 YR 3/4 brown sandy silt, damp, 20% med sand, 10% fines	
8	32.3	3.5/5		CL	(7.25' - 8') GLEY 1 4/10Y dark greenish gray sandy clay, 10% fines, damp	
				CH		

Borehole Log

Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-13
 Project No. 1009594.0



DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
1380.0			GP-13 (8-9)		(8' - 9.25') GLEY 1 5/10Y greenish gray, high plasticity clay, damp	Saturated at 10.5'
9						
65.0				SW	(9.25' - 9.5') greenish gray coarse sand, 80% coarse, 10% med, 10% fines, damp (9.5' - 10') GLEY 1 2.5/5 GY greenish black coarse sand as above, damp	
10					(10' - 10.5') NR	
NR						
14.0					(10.5' - 11') 2.5 Y 5/2 grayish brown saturated coarse sand, poorly sorted, 80% coarse as above, sub-rounded	
11					(11' - 11.5') GLEY 3/N v. dark gray	
2.9					(11.5' - 12') very coarse sand	
12				CH		
0.3	4.5/5				(12' - 13.5') 2.5 Y 5/4 light olive gray high plasticity clay, damp	
13						
0.2				SW		
14					(13.5' - 15') light olive gray poorly sorted coarse sand, fining upwards, saturated	
0.7						
15						
16						
17						
18						

Borehole Log



Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-14
 Project No. 1009594.0

Drilling Contractor Vironex, Inc.
 Drilled by G. Grenier
 Drill Rig Geoprobe 7822DT
 Drilling Method Dual Tube

Logged By A. Ager (LTE)
 Completion Date September 01, 2010
 Borehole Depth 15'
 Borehole Dia. 2"

Northing 2092338.2
 Easting 2727515.9
 Surface Elev. (ft) 5593.3

Sample Method 5' Dual Tube

Sample Interval Continuous

DTP (bgs) _____
 DTW (bgs) 13' September 01, 2010

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
1	NR			SM	(0' - 2') NR	
2						
3	1.4	3/5			(2' - 3.25') 2.5 Y 4/3 olive brown silty sand, dry, 10% fines, 60% med, roots	
4	1.6			CH	(3.25' - 4.25') olive brown high plasticity clay, dry	
5	1.6			SW	(4.25' - 5') olive brown, poorly sorted sand, 80% coarse, 10% med, 10% fines, roots, black discoloration at 4.25' (<0.1' thick)	
6	NR			CL	(5' - 6.25') NR	
7	1.5				(6.25' - 7') 2.5 Y 5/3 light olive brown sandy clay, wet, 20% fines	
8	1.6	3.75/5			(7' - 7.75') same clay, 5% fines	
				SP/SC		Perched groundwater at 7.75'

Borehole Log

Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-14
 Project No. 1009594.0



DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
9	2.3				(7.75' - 9.25') coarsening upward sequence - coarse sand to clayey sand, saturated	
10	2.0			CL	(9.25' - 10') GLEY 1 4/110 Y dark greenish gray low plasticity sandy clay, roots, 20% fines	
11	NR				(10' - 11.5') NR	
12	1.8			CH	(11.5' - 11.75') sandy clay as above	
				CL	(11.75' - 12.25') 2.5 Y 6/2 light brownish gray, high plasticity clay, dry	
13	2.2	3.5/5		CL	(12.25' - 13') sandy clay, wet	
				SW	(12.25' - 13') sandy clay, wet	Saturated at 13'
14	2.0				(13' - 14') light brownish gray coarse sand, poorly sorted 60% coarse, 20% med, 20% fines, saturated	
				CH	(13' - 14') light brownish gray coarse sand, poorly sorted 60% coarse, 20% med, 20% fines, saturated	
15	1.8				(14' - 15') light brownish gray, high plasticity clay, wet	
16						No Lab Samples
17						
18						

Borehole Log



Client El Paso Corporation
Project Jaquez Site

Borehole ID GP-15
Project No. 1009594.0

Drilling Contractor Vironex, Inc.
Drilled by G. Grenier
Drill Rig Geoprobe 7822DT
Drilling Method Dual Tube

Logged By A. Ager (LTE)
Completion Date September 01, 2010
Borehole Depth 13.25'
Borehole Dia. 2"

Northing 2092300.3
Easting 2727491.2
Surface Elev. (ft) 5591.8

Sample Method 5' Dual Tube

Sample Interval Continuous

DTP (bgs) _____
DTW (bgs) 9.3' September 01, 2010

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
1	NR			CL	(0' - 2') NR	
2						
3	1.3	3/5		SC/CL	(2' - 2.5') 7.5 YR 3/3 dark brown clayey sand or sandy clay, 30% fine sand, poorly sorted, damp, roots, black organic staining	Slight HC odor
4						
5	348.0				(2.5' - 3.75') GLEY 1 4/10 clayey sand or sandy clay, wet, 40% med sand, 10% fine sand, 50% clay	
6						
7	1740.0		GP-15 (4-5)	CL	(3.75' - 5') GLEY 1 4/10 dark greenish gray clayey sand or sandy clay, damp, 50% clay, 10% fin, 40% med sand poorly sorted, fining upwards	
8						
9	415.0			CL	(5' - 6.5') GLEY 1 3/5 GY v. dark greenish gray sandy clay, 20% fine, low plasticity, damp, saturated 6.5' - 7.4'	Perched water at 6.5' is likely from ditch (dry clay beneath)
10						
11	78.0			CH	(7.4' - 7.6') GLEY 1 3/5 GY gray sandy clay (<5% sand), DRY	
12				SC		
13	110.0	5/5		SW	(7.6' - 8.3') GLEY 1 4/10 Y d. greenish gray clayey sand, 40% coarse, 20% med, 10% fine, 10% clay, damp	
14						
15	7.3					

Borehole Log

Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-15
 Project No. 1009594.0



DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
4.3					(8.3' - 8.75') GLEY 1 2.5/10 GY greenish black, poorly sorted med sand, damp, sub-rounded	
9	5.0				(8.75' - 9.3') GLEY 1 3/10 Y very dark greenish gray SP poorly sorted sand, coarse, sub-rounded, wet, 10% fines, 10% med, 80% coarse	Saturated at 9.3'
82.0						
10			GP-15 (9.5-10)		(9.3' - 11') GLEY 1 3/1 Y coarsening upward, v. coarse at 11', saturated at 9.3	
17.0						
11				CH		
3.8		3.25/3.25				
12					(11' - 13.25') GLEY 1 4/10 y d. greenish gray, high plasticity clay, saturate	
1.3						
13						
0.8						TD = 13.25'
14						
15						
16						
17						
18						

Borehole Log



Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-16
 Project No. 1009594.0

Drilling Contractor Vironex, Inc.
 Drilled by G. Grenier
 Drill Rig Geoprobe 7822DT
 Drilling Method Dual Tube

Logged By A. Ager (LTE)
 Completion Date September 01, 2010
 Borehole Depth 15'
 Borehole Dia. 2"

Northing 2092315.8
 Easting 2727505.1
 Surface Elev. (ft) 5591.7

Sample Method 5' Dual Tube Sample Interval Continuous

DTP (bgs) _____
 DTW (bgs) 5.25' September 01, 2010

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
1	NR			ML	(0' - 1.5') NR	
2	1.7				(1.5' - 2.5') 7.5 YR 4/4 brown sandy silt, poorly sorted, damp, 80% silt	
3	1.6	3.5/5		CL	(2.5' - 3.25') GLEY 1 4/10 Y dark greenish gray sandy clay, 20% fines, damp, black organic staining	
4	2.1			SW	(3.25' - 4') coarse sand, poorly sorted, 80% coarse, 10% med, 10% fines, Fe staining in bands	
5	3.1				(4' - 4.5') black coarse sand as above, damp	Alternating coarse to fine sand units 4.5' - 9.5'
6	4.0				(4.5' - 6.5') black med sand, poorly sorted, occ silt, saturated at 5.25'	Saturated at 5.25'
7	3.8				(6.5' - 7.25') v. coarse sand, black, saturated	
8	2.8	5/5			(7.25' - 8') gray fine sand, 80% fines, 10% coarse, 10% med, saturated	

Borehole Log

Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-16
 Project No. 1009594.0



DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
2.0					(8' - 9.5') GLEY 1 3/10 Y very dark greenish gray coarse sand	
9						
2.1				CL	(9.5' - 10') greenish gray low plasticity sandy clay, 20% fine sand content, damp	
10				CH		
11	NR				(10' - 12') NR (water filled)	
12						
2.7		3/5			(12' - 12.75') 2/5 Y 6/4 light yellowish brown, high plasticity, clay, no fines, damp	
13				SW		
1.6					(12.75' - 14') light yellowish brown med sand, poorly sorted, wet, 40% fines grading up to v. coarse sand at 13.5'	
14				CH		
1.7					(14' - 15') light yellowish brown high plasticity clay, damp	
15						No Lab Samples
16						
17						
18						

Borehole Log



Client El Paso Corporation
Project Jaquez Site

Borehole ID GP-18
Project No. 1009594.0

Drilling Contractor Vironex, Inc.
Drilled by G. Grenier
Drill Rig Geoprobe 7822DT
Drilling Method Dual Tube

Logged By A. Ager (LTE)
Completion Date September 01, 2010
Borehole Depth 15'
Borehole Dia. 2"

Northing 2092262.4
Easting 2727441.9
Surface Elev. (ft) 5591.9

Sample Method 5' Dual Tube

Sample Interval Continuous

DTP (bgs) _____
DTW (bgs) 6.75' September 01, 2010

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
1	NR			SM	(0' - 2') NR	
2	2.0	3/5			(2' - 3') 2.5 Y 5/3 light olive brown silty sand, dry, roots, 30% coarse sand, 10% med, 10% fines	
3	1.3				(3' - 3.5') light olive brown, silty sand, dry, roots, no coarse component, 60% fine, 10% med, large root at 3.5'	
4	2.2			SW	(3.5' - 4.25') 2.5 Y 4/2 dark grayish brown, very coarse, poorly sorted, subangular, 80% coarse, 10% med, 10% fine, wet	
5					(4.25' - 5') 2.5 Y 6/4 light yellowish brown coarse sand, poorly sorted, 60% coarse, 20% fines, 20% med, roots, wet	
6	NR				(5' - 6') NR	
7	2.0				(6' - 6.5') very coarse sand, poorly sorted, subangular	Saturated at 6.75
8	2.0	4/5				

Borehole Log

Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-18
 Project No. 1009594.0



DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
1.5						
9						
2.5						
10						
2.0						
11					(6.5' - 15') 2.5 Y 5/3 light olive brown, coarse sand, poorly sorted, 60% coarse, 20% fines, 20% med	
2.5						
12						
1.4	5/5					
13						
1.8						
14						
1.4						
15						No Lab Samples
16						
17						
18						

Borehole Log



Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-19
 Project No. 1009594.0

Drilling Contractor Vironex, Inc.
 Drilled by G. Grenier
 Drill Rig Geoprobe 7822DT
 Drilling Method Dual Tube

Logged By A. Ager (LTE)
 Completion Date September 02, 2010
 Borehole Depth 10'
 Borehole Dia. 2"

Northing 2092289.1
 Easting 2727492.2
 Surface Elev. (ft) 5586.6

Sample Method 5' Dual Tube

Sample Interval Continuous

DTP (bgs) _____
 DTW (bgs) 5' September 02, 2010

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
1	NR			ML	(0' - 2') NR	
2						
3	0.0	3/5'		CL	(2' - 2.5') 7.5 YR 4/4 brown sandy silt, organic (black) staining, 30% fines, damp (2.5' - 3.25') brown sandy clay, wet	
4	2.2					
5	0.2			SW	(3.25' - 4.5') 7.5 YR 3/2 dark brown, low plasticity clay, roots, organic staining (black), wet (4.5' - 5') 7.5 YR 5/2 brown, p. sorted coarse sand, roots, wet, subangular, 60% coarse, 20% med, 10% fines (minor clay content)	Saturated at 5'
6	0.0					
7	0.0		GP-19 (5.5-6.5)		(5' - 7.75') 2.5 Y 6/2 light brownish gray coarse sand, saturated "soupy", p. sorted, 60% coarse, 20% med, 10% fines, subangular	
8	0.0	5/5'		CL		

Borehole Log

Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-19
 Project No. 1009594.0



DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
0.0						
9						
0.0						
10				CH	(7.75' - 9.75') light brownish gray sandy clay, 20% fines, 5% coarse, saturated, various interbedded w/fat clay layers (<1" thick)	
10					(9.75' - 10') light brownish gray high plasticity clay, wet	
11						
12						
13						
14						
15						
16						
17						
18						

Borehole Log

Client El Paso Corporation
Project Jaquez Site

Borehole ID GP-20
Project No. 1009594.0



Drilling Contractor Vironex, Inc.
Drilled by G. Grenier
Drill Rig Geoprobe 7822DT
Drilling Method Dual Tube

Logged By A. Ager (LTE)
Completion Date September 02, 2010
Borehole Depth 15'
Borehole Dia. 2"

Northing 2092299.2
Easting 2727518.7
Surface Elev. (ft) 5585.8

Sample Method 5' Dual Tube Sample Interval Continuous

DTP (bgs) _____
DTW (bgs) 7' September 02, 2010

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
0 - 1	NR			SM	(0' - 1.5') NR	
1 - 2	0.4				(1.5' - 2.75') 2.5 Y 3/2 v. dark grayish brown silty sand, damp, 60% fines, 10% coarse, roots, grass, black organic staining	
2 - 3	0.0	3.5/5'		SW	(2.75' - 3.5') 2.5 Y 5/3 light olive brown, subangular, sample 80% coarse, 10% med, 10% fines	Rod stuck in casing; down ~1 hr
3 - 4	0.8			CL	(3.5' - 5') light olive brown, wet sandy clay (10% fines), low plasticity	
4 - 5	1.5					
5 - 6	1.0			SW	(5' - 7.25') 2.5 Y 5/3 light olive brown, v. coarse sand, poorly sorted, 90% coarse, 5% med, 5% fines, wet, subangular, saturated at 7'	
6 - 7	1.6					Saturated at 7'
7 - 8	2.5	5/5'		ML	(7.25' - 7'6") 2.5 Y 6/4 light yellowish brown, sandy silt, wet	
8 - 8.75				CH	(7.6' - 8.75') 2.5 Y 6/4 light yellowish brown, high plasticity clay	

Borehole Log



Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-20
 Project No. 1009594.0

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
1.3						
9				SW	(8.75' - 10') poorly sorted sand, 60% coarse, 20% med, 20% fines, saturated, subangular, minor clay content, light yellowish brown	
1.7						
10				CH	(10' - 11.25') 2/5 Y 6/4 light yellowish brown, high plasticity clay, damp	
2.1						
11				SM	(11.25' - 15') 2.5' 2.5 Y 4/4 olive brown, fine silty sand, saturated, 20% fine content (soupy)	
0.1						
12		5/5'				
1.6						
13						
0.4						
14						
1.4						
15						No Lab Samples
16						
17						
18						

Borehole Log

Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-23
 Project No. 1009594.0



Drilling Contractor Vironex, Inc.
 Drilled by G. Grenier
 Drill Rig Geoprobe 7822DT
 Drilling Method Dual Tube

Logged By A. Ager (LTE)
 Completion Date September 02, 2010
 Borehole Depth 15'
 Borehole Dia. 2"

Northing 2092222.7
 Easting 2727492.4
 Surface Elev. (ft) 5587.2

Sample Method 5' Dual Tube Sample Interval Continuous

DTP (bgs) _____
 DTW (bgs) 8.5' September 02, 2010

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
0	NR			SM	(0' - 0.75') NR	
1	0.0			ML	(0.75' - 1.2') 7.5 YR 4/4 brown silty sand, 60% sand, mainly coarse component, roots, damp	
2	0.0				(1.2' - 2.0') brown, sandy silt, 20% sand, no coarse component, all fine, damp	
3	0.2	4.25/5'			(2' - 3') dry, more roots, white staining, near roots	
4	0.0			CL	(3' - 4') damp again	
5	0.0			CL	(4' - 5') brown sandy clay, med to fine content (30%), damp	
6	NR			SW	(5' - 6') NR	Likely fill material
7	215.0		GP-23 (6-7); GP-23 (6-7) Blind Duplicate		(6' - 6.125') 2.5 Y 5/2 grayish brown, poorly sorted med sand, 80% med, 20% fines, subangular, damp	6.7' to 7.5' is saturated
8	48.6	4/5'			(6.25' - 7.5') GLEY 1 3/N v. dark gray, fining upward sand, primarily coarse content, damp, 6.75' - 7.5' saturated	
8					(7.5' - 8.5') GLEY 1 4/N dark gray, coarse sand as above, damp	

Borehole Log

Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-23
 Project No. 1009594.0



DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
0.0						Saturated at 8.5'
9						
0.0						
10						
4.0					(8.5' - 11.5') saturated, coarse sand, dark gray, 80% coarse, 10% med, 10% fines, 8.5' saturated	
11						
0.0				SM		
12						
0.0		5/5'				
13						
0.0					(11.5' - 15') alternating dark gray to black layers of coarse sand to silty sand, saturated	
14						
0.0						
15						
16						
17						
18						

Borehole Log



Client El Paso Corporation
Project Jaquez Site

Borehole ID GP-24
Project No. 1009594.0

Drilling Contractor Vironex, Inc.
Drilled by G. Grenier
Drill Rig Geoprobe 7822DT
Drilling Method Dual Tube

Logged By A. Ager (LTE)
Completion Date September 02, 2010
Borehole Depth 15'
Borehole Dia. 2"

Northing 2092240.2
Easting 2727509.8
Surface Elev. (ft) 5585.3

Sample Method 5' Dual Tube

Sample Interval Continuous

DTP (bgs) _____
DTW (bgs) 6.75' September 02, 2010

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
1	NR			SM		
2		2.25/5'			(0' - 2.75') NR	
3	0.0					
4	0.0			CL	(2.75' - 4') 7.5 YR 4/3 brown silty sand, occasional (<5%) coarse sand, roots, damp, 60% fines	
5	0.3				(4' - 5') brown, high plasticity sandy clay, damp, 10% fines	
6	NR			SW	(5' - 5.5') NR	Likely fill material
7	1.1				(5.5' - 6') 2.5 Y 6/3 light yellowish brown, 60% coarse, 20% med, 20% fines, black organic lens at 5.75' (2" wide) subangular, wet	
8	0.6				(6' - 6.75') coarse sand as above except color = GLEY 1 5/5 GY greenish gray, wet	
9	0.1	4.5/5'			(6.75' - 8.25') 2/4 Y 5/2 grayish brown, saturated, poorly sorted coarse sand, 80% coarse, 10% med, 10% fines, subangular	

Borehole Log

Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-24
 Project No. 1009594.0



DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
9	0.0				(8.25' - 8.75') color change to GLEY 1 3/N very dark grey	
10	1.2				(8.75' - 9.5') GLEY 1 5/10 Y greenish gray, poorly sorted, med sand, no coarse content, 80% med, 10% fines, 10% silt, saturated	
11	1.1			SP/SM	(9.5' - 10') GLEY 1 3/N v. dark gray med sand, saturated	
12	1.1				(10' - 13.75') GLEY 1 3/N v. dark gray alternating (thinly banded) coarse sands and silty sands, saturated	
13	0.3	5/5'				
14	0.0			SW	(13.5' - 14') GLEY 1 2.5/N black coarse sand, poorly sorted, 60% coarse, 20% med, 20% fine, v. coarse at base, saturated	
15	0.0				(14' - 15') 2.5 Y 5/2 grayish brown coarse sand, 80% coarse, 20% med, 20% fine, saturated	
16						No Lab Samples
17						
18						

Borehole Log

Client El Paso Corporation
Project Jaquez Site

Borehole ID GP-25
Project No. 1009594.0



Drilling Contractor Vironex, Inc.
Drilled by G. Grenier
Drill Rig Geoprobe 7822DT
Drilling Method Dual Tube

Logged By A. Ager (LTE)
Completion Date September 02, 2010
Borehole Depth 10'
Borehole Dia. 2"

Northing 2092255.7
Easting 2727537.1
Surface Elev. (ft) 5584.6

Sample Method 5' Dual Tube Sample Interval Continuous

DTP (bgs) _____
DTW (bgs) 6.25' September 02, 2010

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
1	NR			ML	(0' - 2') NR	
2					(2' - 2.25') 2.5 Y 5/3 light olive brown sandy silt, saturated	
3	1.0	3/5'			(2.25' - 3.5') light olive brown sandy silt, roots, damp, med sand component (30% sand)	
4	0.4				(3.5' - 4.5') 2.5 Y 3/1 v. dark gray sandy silt, damp	
5	1.1			SW	(4.5' - 5') 7.5 Y 5/2 grayish brown coarse sand, poorly sorted, 80% coarse, 10% med, 10% fine, damp	
6	NR				(5' - 5.5') NR	
7	0.5			SW/SM		Saturated at 6.25'
8	0.6					
8	20.5	4.5/5'	GP-25 (7-8) (MS-MSD samples also collected here)		(5.5' - 10') alternating poorly sorted coarse sands and thin (2") bands of silty sand, grayish brown, saturated at 6.25'	Jed called to stop @ 7' but only 3 more feet to push so driller provided full core

Borehole Log

Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-25
 Project No. 1009594.0



DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
0.5				(Patterned)		
9						
0.4				(Patterned)		
10						
11						
12						
13						
14						
15						
16						
17						
18						

Borehole Log

Client El Paso Corporation
 Project Jaquez Site

Borehole ID SB-13
 Project No. 1009594.0



Drilling Contractor LT Environmental, Inc. Logged By A. Ager (LTE)
 Drilled by A. Ager Completion Date September 01, 2010
 Drill Rig - Borehole Depth 8'
 Drilling Method Hand Auger Borehole Dia. 2"

Northing 2092227.6
 Easting 2727518.9
 Surface Elev. (ft) 5585.3

Sample Method Grab Sample Interval Continuous

DTP (bgs) _____
 DTW (bgs) 5.83' September 01, 2010

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
0.0				ML		
1					(0' - 2') Brown 7.5 YR 4/3 fine sandy silt, poorly sorted, 10% fine sand, 90% silt, damp, roots	
2						
3				SW		
4		8/8'			(3' - 4') brown 7.5 YR 4/4 fine-med sand, moderately sorted, 40% fine sand, 60% med sand, damp, possible organic/reduction zones	
5						
6						
7						
8						
						Saturated at 5.83'
					(4' - 5') brown 7.5 YR 4/4 same as above, possible organic concentration	
					(2' - 3') strong brown 7.5 YR 5/6 very fine sandy silt, well sorted/mod, 15% fine sand, 85% silt, damp	
					(5' - 8') brown 7.5 YR 5/3 fine sands, mod sorted, saturated, possible organics, 80% fine, 20% med sand-silt; saturated at 5.83'	

APPENDIX B

Field Sampling Forms and Notes



Project Name: Jaquez
Project Manager: Julie Linn, RG
Client: MWH
Site Name: Jaquez

Date: 6/10/2010

Well	Time	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Volume of Product Removed	Comments
R4	8:57 AM	-	11.36	-	-	Sample BTEX
R6	9:31 AM	-	9.43	-	-	Sample BTEX
R1	9:55 AM	-	12.22	-	-	Sample BTEX
R2	10:39 AM	-	10.94	-	-	Sample BTEX
R3	11:03 AM	-	11.83	-	-	Sample BTEX
R5	11:37 AM	-	14.74	-	-	Sample BTEX
M7	12:16 PM	-	2.9	-	-	Sample BTEX
M1	12:41 PM	-	2.98	-	-	Sample BTEX
M3	1:01 PM	-	2.63	-	-	Sample BTEX
M4	1:49 PM	-	1.5	-	-	Sample BTEX
M5	1:50 PM	-	2.77	-	-	Sample BTEX
M2	1:53 PM	-	2.99	-	-	Sample BTEX
M6	4:18 PM	-	6.04	-	-	Sample BTEX

Comments

Depth to water measured from top of PVC casing

R1: Fuel Odor

Signature:

Date: 6/17/2010



Project Name: Jaquez Location: Jaquez Well No: M2
 Client: MWH Date: 6/10/2010 Time: 15:32
 Project Manager: Julie Linn, RG Sampler's Name: Julie Linn, RG

Measuring Point: TOC Depth to Water: 2.99 ft Depth to Product: 0 ft
 Well Diameter: 4" Total Depth: 14.88 ft Product Thickness: 0 ft
 Water Column Height: 11.89 ft

Sampling Method: Submersible Pump Centrifugal Pump Peristaltic Pump Other _____
 Bottom Valve Bailer Double Check Valve Bailer

Criteria: 3 to 5 Casing Volumes of Water Removal Stabilization of Indicator Parameters Other _____

Water Volume in Well			
Gal/ft x ft of water	Gallons	Ounces	Volume to be removed
11.89x 0.65	7.72x 3		23.16 gal

Time (military)	pH (su)	SC (us)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. gal	Comments/Flow Rate
15:32	7.10	264	61.0				1.25	clear
	6.80	275	54.3				2.5	slight orange flecks/clear
	6.74	285	52.0				3.75	slight orange flecks/clear
	6.66	288	51.3				5	slight orange flecks/clear
	6.64	299	51.1				10	slight orange flecks/clear
	6.64	315	50.7				15	slight orange flecks/clear
	6.65	321	50.7				20	slight orange flecks/clear
15:48	6.68	331	50.4				23	slight orange flecks/clear
Final:								
15:48	6.68	331	50.4				23	slight orange flecks/clear

COMMENTS:

Instrumentation: pH Meter DO Monitor Conductivity Meter Temperature Meter Other _____

Water Disposal: Rio Vista

Sample ID: M2

Sample Time: 15:48

Analysis Requested: BTEX VOCs Alkalinity TDS Cations Anions Nitrate Nitrite Metals
 Other _____

Trip Blank: Yes

Duplicate Sample: No



Project Name: Jaquez Location: Jaquez Well No: M3
 Client: MWH Date: 6/10/2010 Time: 13:01
 Project Manager: Julie Linn, RG Sampler's Name: Julie Linn, RG

Measuring Point: TOC Depth to Water: 2.63 ft
 Well Diameter: 4" Total Depth: 15.06 ft
 Water Column Height: 12.43 ft
 Depth to Product: _____ ft
 Product Thickness: _____ ft

Sampling Method: Submersible Pump Centrifugal Pump Peristaltic Pump Other _____
 Bottom Valve Bailer Double Check Valve Bailer

Criteria: 3 to 5 Casing Volumes of Water Removal Stabilization of Indicator Parameters Other _____

Water Volume in Well			
Gal/ft x ft of water	Gallons	Ounces	Volume to be removed
12.43 x 0.65	8.07x3		24.21 gal

Time (military)	pH (su)	SC (us)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. gal	Comments/Flow Rate
13:07	7.28	222	70.2				1.25	clear
	7.14	237	64.6				2.5	very slightly cloudy
	6.89	277	59.5				3.75	very slightly cloudy
	6.83	314	57.4				5	very slightly cloudy
13:29	6.74	350	56.5				10	very slightly cloudy
	6.74	352	56.7				15	very slightly cloudy
	6.73	346	56.7				20	very slightly cloudy
	6.72	352	56.8				24	very slightly cloudy
Final:								
13:29	6.72	352	56.8				24	very slightly cloudy

COMMENTS:

Instrumentation: pH Meter DO Monitor Conductivity Meter Temperature Meter Other _____

Water Disposal: Rio Vista

Sample ID: M4 Sample Time: 13:29

Analysis Requested: BTEX VOCs Alkalinity TDS Cations Anions Nitrate Nitrite Metals
 Other _____

Trip Blank: Yes

Duplicate Sample: No



Project Name: Jaquez Location: Jaquez Well No: M4
 Client: MWH Date: 6/10/2010 Time: 14:41
 Project Manager: Julie Linn, RG Sampler's Name: Julie Linn, RG

Measuring Point: TOC Depth to Water: 1.5 ft Depth to Product: 0 ft
 Well Diameter: 4" Total Depth: 15.37 ft Product Thickness: 0 ft
 Water Column Height: 13.87 ft

Sampling Method: Submersible Pump Centrifugal Pump Peristaltic Pump Other _____
 Bottom Valve Bailer Double Check Valve Bailer

Criteria: 3 to 5 Casing Volumes of Water Removal Stabilization of Indicator Parameters Other _____

Water Volume in Well			
Gal/ft x ft of water	Gallons	Ounces	Volume to be removed
13.87 x 0.65	9.02x 3		27.06 gal

Time (military)	pH (su)	SC (us)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. gal	Comments/Flow Rate
14:41	7.56	437	85.8				1.25	clear
	7.57	439	76.8				2.5	clear
	7.48	449	68.5				3.75	clear
	7.25	500	64.6				5	clear
	7.34	481	56.5				10	2 gal/dark grey
14:53	7.43	462	54.9				12.5	bailing dry
Final:								
14:53	7.43	462	54.9				12.5	bailing dry

COMMENTS:

Instrumentation: pH Meter DO Monitor Conductivity Meter Temperature Meter Other _____

Water Disposal: Rio Vista

Sample ID: M5 Sample Time: 14:53

Analysis Requested: BTEX VOCs Alkalinity TDS Cations Anions Nitrate Nitrite Metals
 Other _____

Trip Blank: Yes Duplicate Sample: No



Project Name: <u>Jaquez</u>	Location: <u>Jaquez</u>	Well No: <u>M5</u>
Client: <u>MWH</u>	Date: <u>6/10/2010</u>	Time: <u>15:02</u>
Project Manager: <u>Julie Linn, RG</u>	Sampler's Name: <u>Julie Linn, RG</u>	

Measuring Point: <u>TOC</u>	Depth to Water: <u>2.77</u> ft	Depth to Product: <u>0</u> ft
Well Diameter: <u>4"</u>	Total Depth: <u>15.04</u> ft	Product Thickness: <u>0</u> ft
	Water Column Height: <u>12.27</u> ft	

Sampling Method: Submersible Pump Centrifugal Pump Peristaltic Pump Other _____
 Bottom Valve Bailer Double Check Valve Bailer

Criteria: 3 to 5 Casing Volumes of Water Removal Stabilization of Indicator Parameters Other _____

Water Volume in Well			
Gal/ft x ft of water	Gallons	Ounces	Volume to be removed gal
12.27 x 0.65	7.98x 3		23.94

Time (military)	pH (su)	SC (us)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. gal	Comments/Flow Rate
15:02	7.51	241	69.8				1.25	clear
	6.90	300	61.5				2.5	slightly gray
	6.82	325	56.8				3.75	slightly gray
	6.77	312	54.5				5	slightly gray
	6.73	297	52.9				10	more clear
	6.68	361	52.5				15	more clear
	6.72	379	51.8				20	more dark grey
15:20	6.76	386	52.7				24	more clear
Final:								
15:20	6.76	386	52.7				24	more clear

COMMENTS:

Instrumentation: pH Meter DO Monitor Conductivity Meter Temperature Meter Other _____

Water Disposal: Rio Vista

Sample ID: M5

Sample Time: 15:20

Analysis Requested: BTEX VOCs Alkalinity TDS Cations Anions Nitrate Nitrite Metals
 Other _____

Trip Blank: Yes

Duplicate Sample: No



Project Name: Jaquez Location: Jaquez Well No: M-7
 Client: MWH Date: 6/10/2010 Time: 12:13
 Project Manager: Julie Linn, RG Sampler's Name: Julie Linn, RG

Measuring Point: TOC Depth to Water: 2.9 ft Depth to Product: _____ ft
 Well Diameter: 2" Total Depth: 16.17 ft Product Thickness: _____ ft
 Water Column Height: 13.27 ft

Sampling Method: Submersible Pump Centrifugal Pump Peristaltic Pump Other _____
 Bottom Valve Bailer Double Check Valve Bailer

Criteria: 3 to 5 Casing Volumes of Water Removal Stabilization of Indicator Parameters Other _____

Water Volume in Well			
Gal/ft x ft of water	Gallons	Ounces	Volume to be removed
13.27 x 0.16	2.12x 3		6.4 gal

Time (military)	pH (su)	SC (us)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. gal	Comments/Flow Rate
12:16	7.12	314	66.0				0.26	slightly orange & cloudy
	7.09	320	62.6				0.53	slightly orange & cloudy
	7.06	322	58.1				0.79	slightly orange & cloudy
	7.02	326	55.8				1.05	gray & cloudy
	7.08	321	53.2				2	gray & cloudy
12:16	7.09	323	52.7				2.5	NA
	7.01	318	52.5				3	NA
	7.03	320	52.0				4	NA
	7.01	317	52.5				5	NA
	7.04	317	52.2				6	NA
	7.02	317	51.4				6.5	NA
Final:								
12:16	7.02	317	51.4				6.5	NA

COMMENTS:

Instrumentation: pH Meter DO Monitor Conductivity Meter Temperature Meter Other _____

Water Disposal: Rio Vista

Sample ID: M7 Sample Time: 12:16

Analysis Requested: BTEX VOCs Alkalinity TDS Cations Anions Nitrate Nitrite Metals
 Other _____

Trip Blank: Yes

Duplicate Sample: No



Project Name: Jaquez Location: Jaquez Well No: R-1
 Client: MWH Date: 6/10/2010 Time: 9:52
 Project Manager: Julie Linn, RG Sampler's Name: Julie Linn, RG

Measuring Point: TOC Depth to Water: 12.22 ft Depth to Product: 0 ft
 Well Diameter: 4" Total Depth: 25.1 ft Product Thickness: 0 ft
 Water Column Height: 12.88 ft

Sampling Method: Submersible Pump Centrifugal Pump Peristaltic Pump Other _____
 Bottom-Valve Bailer Double Check Valve Bailer
 Criteria: 3 to 5 Casing Volumes of Water Removal Stabilization of Indicator Parameters Other _____

Water Volume in Well			
Gal/ft x ft of water	Gallons	Ounces	Volume to be removed
12.88 x .65	8.37x 3		25.11 gal

Time (military)	pH (su)	SC (us)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. gal	Comments/Flow Rate
10:00	6.78	898	56.7				1	fuel smell
	6.90	1180	54.0				2.25	fuel smell
	6.88	1118	52.7				3.5	fuel smell
	6.81	1033	52.2				4.75	fuel smell, gray
	6.83	969	52.2				7.75	fuel smell, gray
	6.78	789	52.2				9	fuel smell, gray
	6.81	768	52.2				12.25	fuel smell, gray
	6.78	579	52.3				14	fuel smell, gray
	6.75	494	52.2				15	fuel smell, gray
	6.77	444	53.1				20	less fuel smell, clear
	6.78	441	52.3				23	less fuel smell, clear
10:25	6.31	433	54.5				25	less fuel smell, clear
Final:								
10:25	6.31	433	54.5				27	less fuel smell, clear

COMMENTS: Fuel smell when open well casing. 6/11/10 PID headspace in well: 81.2 ppm.

Instrumentation: pH Meter DO Monitor Conductivity Meter Temperature Meter Other _____

Water Disposal: Rio Vista

Sample ID: R1 Sample Time: 10:26

Analysis Requested: BTEX VOCs Alkalinity TDS Cations Anions Nitrate Nitrite Metals
 Other _____

Trip Blank: Yes Duplicate Sample: No



Project Name: Jaquez Location: Jaquez Well No: R-2
 Client: MWH Date: 6/10/2010 Time: 10:35
 Project Manager: Julie Linn, RG Sampler's Name: Julie Linn, RG

Measuring Point: TOC Depth to Water: 10.94 ft Depth to Product: 0 ft
 Well Diameter: 4" Total Depth: 22.11 ft Product Thickness: 0 ft
 Water Column Height: 11.17 ft

Sampling Method: Submersible Pump Centrifugal Pump Peristaltic Pump Other _____
 Bottom Valve Bailer Double Check Valve Bailer

Criteria: 3 to 5 Casing Volumes of Water Removal Stabilization of Indicator Parameters Other _____

Water Volume in Well			
Gal/ft x ft of water	Gallons	Ounces	Volume to be removed
11.17 x .65	7.26x3		21.78 gal

Time (military)	pH (su)	SC (us)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. gal	Comments/Flow Rate
10:39	6.92	1377	56.3				1.25	clear
	6.93	1435	52.7				2.5	slightly cloudy
	6.95	1500	51.3				3.75	slightly cloudy
	6.95	1523	51.3				5	fuel odor
	6.98	1433	54.3				10	fuel odor
	7.09	1047	54.5				13	starting to bail dry
10:58	7.22	938	53.4				13.5	starting to bail dry
Final:								
10:58	7.22	938	53.4				13.5	starting to bail dry

COMMENTS:

Instrumentation: pH Meter DO Monitor Conductivity Meter Temperature Meter Other _____

Water Disposal: Rio Vista

Sample ID: R2

Sample Time: 10:58

Analysis Requested: BTEX VOCs Alkalinity TDS Cations Anions Nitrate Nitrite Metals
 Other _____

Trip Blank: Yes

Duplicate Sample: No



Project Name: Jaquez Location: Jaquez Well No: R-3
 Client: MWH Date: 6/10/2010 Time: 11:02
 Project Manager: Julie Linn, RG Sampler's Name: Julie Linn, RG

Measuring Point: TOC Depth to Water: 11.83 ft Depth to Product: 0 ft
 Well Diameter: 4" Total Depth: 22.18 ft Product Thickness: 0 ft
 Water Column Height: 10.35 ft

Sampling Method: Submersible Pump Centrifugal Pump Peristaltic Pump Other _____
 Bottom Valve Bailer Double Check Valve Bailer

Criteria: 3 to 5 Casing Volumes of Water Removal Stabilization of Indicator Parameters Other _____

Water Volume in Well			
Gal/ft x ft of water	Gallons	Ounces	Volume to be removed
10.35 x .65	6.73x 3		20.19 gal

Time (military)	pH (su)	SC (us)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. gal	Comments/Flow Rate
11:07	6.86	527	57.9				1.25	clear
	9.94	565	54.0				2.5	clear
	6.95	598	52.5				3.75	clear
	6.97	614	51.8				5	clear
	6.95	551	53.1				10	clear
	7.01	411	52.2				15	clear
	7.03	331	53.2				20	clear
11:27	7.11	333	51.7				23	clear
Final:								
11:27	7.11	333	51.7				23	clear

COMMENTS:

Instrumentation: pH Meter DO Monitor Conductivity Meter Temperature Meter Other _____

Water Disposal: Rio Vista

Sample ID: R3 Sample Time: 11:27

Analysis Requested: BTEX VOCs Alkalinity TDS Cations Anions Nitrate Nitrite Metals
 Other _____

Trip Blank: Yes

Duplicate Sample: No



Project Name: Jaquez Location: Jaquez Well No: R-5
 Client: MWH Date: 6/10/2010 Time: 11:35
 Project Manager: Julie Linn, RG Sampler's Name: Julie Linn, RG

Measuring Point: TOC Depth to Water: 14.74 ft Depth to Product: 0 ft
 Well Diameter: 4" Total Depth: 24.5 ft Product Thickness: 0 ft
 Water Column Height: 9.76 ft

Sampling Method: Submersible Pump Centrifugal Pump Peristaltic Pump Other _____
 Bottom Valve Bailer Double Check Valve Bailer

Criteria: 3 to 5 Casing Volumes of Water Removal Stabilization of Indicator Parameters Other _____

Water Volume in Well			
Gal/ft x ft of water	Gallons	Ounces	Volume to be removed
9.76 x .65	6.34x 3		19.02 gal

Time (military)	pH (su)	SC (us)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. gal	Comments/Flow Rate
11:37	7.60	434	61.9				1.25	clear
	7.58	449	58.6				2.5	slightly cloudy
	7.28	450	57.7				3.75	slightly cloudy
	7.42	451	58.8				5	slightly cloudy
	7.56	500	57.9				10	slightly cloudy
11:56	7.63	573	59.9				13.5	bailing dry
Final:								
11:56	7.63	573	59.9				13.5	bailing dry

COMMENTS:

Instrumentation: pH Meter DO Monitor Conductivity Meter Temperature Meter Other _____

Water Disposal: Rio Vista

Sample ID: R5 Sample Time: 11:56

Analysis Requested: BTEX VOCs Alkalinity TDS Cations Anions Nitrate Nitrite Metals
 Other _____

Trip Blank: Yes Duplicate Sample: No



Project Name: Jaquez Location: Jaquez Well No: R-6
 Client: MWH Date: 6/10/2010 Time: 9:31
 Project Manager: Julie Linn, RG Sampler's Name: Julie Linn, RG

Measuring Point: TOC Depth to Water: 9.43 ft Depth to Product: 0 ft
 Well Diameter: 4" Total Depth: 13.57 ft Product Thickness: 0 ft
 Water Column Height: 4.14 ft

Sampling Method: Submersible Pump Centrifugal Pump Peristaltic Pump Other _____
 Bottom Valve Bailer Double Check Valve Bailer

Criteria: 3 to 5 Casing Volumes of Water Removal Stabilization of Indicator Parameters Other _____

Water Volume in Well			
Gal/ft x ft of water	Gallons	Ounces	Volume to be removed
4.14 x .65	2.69x 3		8.07 gal

Time (military)	pH (su)	SC (us)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. gal	Comments/Flow Rate
9:37	6.87	262	60.6				0.528	dirty
	6.81	288	60.1				1.056	dirty
	6.80	301	58.6				1.585	dirty
	6.76	298	57.9				2.113	dirty
	6.74	298	58.3				2	dirty
9:45	6.77	275	58.5				4	bailing dry
Final:								
9:45	6.77	275	58.5				4	bailing dry.

COMMENTS:

Instrumentation: pH Meter DO Monitor Conductivity Meter Temperature Meter Other _____

Water Disposal: Rio Vista

Sample ID: R6 Sample Time: 9:45

Analysis Requested: BTEX VOCs Alkalinity TDS Cations Anions Nitrate Nitrite Metals
 Other _____

Trip Blank: Yes

Duplicate Sample: No

44

6/10/10

4" well = 0.65

0736

In office ISO 150

0818

arrive @ Jaquez

0830

Set up on R4 (4" well diameter)

TD 22.23' B ToC PVC

0857

DTW 11.36

	pH	Temp (°F)	Cond (µs)	Vol. pinged (gal)	Comments
0900	6.84	57.4	317 µs	1.25	clear
	6.84	55.2	355	2.50 gal	slightly tan
	6.96	53.6	342	3.75	
	7.03	53.1	402	5.0 gal	grayish
	7.18	53.6	399 µs	10.0 gal	gray-blue
	7.27	54.9	517	12.25 gal	
	7.31	53.4	540	13.5 gal	clear
	7.26	55.9	541	15 gal	clear
	7.29	53.8	545	15.25 gal	clear

0922

7.29

53.8

544

18 gallons

0923

collect sample from R4

0931

on site R6 (4" well diameter)

Bottom of well

13.57

B ToC

Note - roots

DTW

9.43'

B ToC

PVC

1/11 well

	pH	Temp (°F)	Cond (µs)	Vol pumped	Comments
0937	6.87	60.6	262	2 liters	dirty
	6.81	60.1	288	4 liters	↓
	6.80	58.6	301	6 liters	
	6.76	57.9	298	8 liters	
	6.74	58.3	298	2 gallons	
R 0945	6.77	58.5	275	4 gallons	Bailing Dry

0945 Sample R6

0952 on site R1 (4" well diameter)

TD well 25.10' BTOX PVC

0955 DTW 12.22' BTOX PVC

	pH	Temp (°F)	Cond (µs)	Vol pumped	Comments
1000	6.78	56.7	898	1 gallon	Fuel smell
	6.90	54.0	1180	2.25 gal	"
	6.88	52.7	1118	3.50 gal	"
	6.81	52.2	1033	4.75 gal	" grey
	6.83	52.2	969	7.25 gal	" grey
	6.78	52.2	789	9.00 gal	" grey
	6.81	52.2	768	12.25 gal	" "
	6.78	52.3	579	14.00 gal	" "
	6.75	52.2	494	15.00 gal	" "
	6.77	53.1	444	20.00 gal	less fuel smell
	6.78	52.3	441	23.00 gal	" clearer
	6.31	54.5	433	25.00 gal	"
				27.00 gal	

1026 Collect Sample R1

46

1035 on site R2 (4" well diameter)

11

1039 Bottom of well 22.11' BTOX PVC
DTW 10.94' BTOX PVC

11

pH	cond (mc)	Temp (°F)	Volume	Comments
6.92	1377	56.3	1.25 gal	clear
6.93	1435	52.7	2.50 gal	slightly turb
6.95	1500	51.3	3.75 gal	slight
6.95	1523	51.3	5.00 gal	fuel odor
6.98	1433	54.3	10.00 gal	
7.09	1047	54.5	13.00 gal	starting to
7.22	938	53.4	13.5 gal	Bail Dry

1058 Sample R2

1102 on site R3 (4" well diameter)

12

1103 Bottom of well 22.18' BTOX PVC
DTW 11.83' BTOX PVC

12

pH	cond (mc)	Temp (°F)	Volume (gal)	Comments
1107 6.86	527	57.9	1.25	clear
6.94	565	54.0	2.50	clear
6.95	598	52.5	3.75	clear
6.97	614	51.8	5.0	
6.95	551	53.1	10.0	
7.01	411	52.2	15.00	
7.05	331	53.2	20.0	
7.11	333	51.7	23.0	

1125 Sample R3

1135 on site R5 (4" well diameter)

Bottom of well 24.50' BTOC PVC

1137 DTW 14.74" BTOC PVC

<u>pH</u>	<u>Temp (°F)</u>	<u>Cond (µs)</u>	<u>Volume</u>	<u>Comments</u>
7.00	61.9	434	1.25 gal	Clear
7.58	58.6	449	2.5 gal	slightly cloudy
7.28	57.7	450	3.75 gal	↓
7.42	58.8	451	5.00 gal	
7.56	57.9	500	10 gal	
7.63	59.9	573	13.5 gal	Bailing dry

1156 Sample R5

1213 on site M7 (note 2" well diameter)

Bottom of well 16.17' BTOC PVC

1216 DTW 2.90' BTOC PVC

<u>pH</u>	<u>Temp (°F)</u>	<u>Cond (µs)</u>	<u>Volume (gal)</u>	<u>Comments</u>
7.12	66.0	314	1 liter	slightly orange & cloudy
7.09	62.6	320	2 liter	cloudy
7.06	58.1	322	3 liter	grey & cloudy
7.02	55.8	326	4 liter	
7.08	53.2	321	2 gallon	
7.09	52.7	323	2.5 gallon	
7.01	52.5	318	3.0 gallon	
7.03	52.0	320	4.0 gallon	
7.01	52.5	317	5.0 gallon	
7.04	52.3	317	6.0 gallon	
7.02	51.4	317	6.5 gallon	

1238 Sample M1

1240 on site M1 (4" well)

TD 15.37' BTOC PVC

1241 DTW 2.98' BTOC PVC

	pH	Temp (°F)	Cond (µs)	Volume (gal)	Comments
1245	7.00	70.5	224	1.25	clear
	6.87	66.7	225	2.5	orangeish
	6.83	63.0	226	3.75	greyish particles
	6.80	58.6	227	5 gallons	
	7.05	56.3	221	9 gallons	Bailing Dry

1256 Sample M1

1301 on site M3 (4" well)

TD 15.06' BTOC PVC

DTW 2.63' BTOC PVC

	pH	Temp (°F)	Cond (µs)	Volume (gal)	Comments
1307	7.28	70.2	222	1.25	clear
	7.14	64.6	237	2.50	very slightly cloudy
	6.89	59.5	277	3.75	
	6.83	57.4	314	5.0 gallons	
	6.74	56.5	350	10.0 gallons	
	6.74	56.7	352	15.0 gallons	
	6.73	56.7	346	20.0 gallons	
	6.72	56.8	352	24.0 gallons	

1329 Sample M3

1321 Call Ashley - out of water storage - tank full
Troy calls can dump purge H₂O at 1430

1349 M4 TD 15.37 DTW 1.50' BTOC PVC
1350 M5: TD 15.04 DTW 2.77' BTOC PVC
1353 M2: TD 14.88 DTW 2.99' BTOC PVC

1441 ON SITE M4 (4" well Diameter)

pH	Temp	Cond	Volume (gal)	Comments
7.56	85.8	437	1.25	clear
7.57	76.8	439	2.5	↓ 2 gal dark grey bailing dry
7.48	68.5	449	3.75	
7.25	64.6	500	5.0 gal	
7.34	56.5	481	10.0 gal	
7.43	54.9	462	12.5 gal	

1453 sample M4

1502 at M5 (4" well Diameter)

pH	Temp	Conductivity (µs)	Volume (gal)	Comments
7.51	69.8	241	1.25	clear
6.90	61.5	300	2.50	↓ Slightly Gray
6.82	56.8	325	3.75	
6.77	54.5	312	5.0 gal	↓ more clear
6.73	52.9	297	10.0 gal	
6.68	52.5	301	15.0 gal	↓ dark more grey more clear
6.72	51.8	379	20.0 gal	
6.76	52.7	386	24.0 gal	

1520 sample M5

50

1532 at M2 (4" well diameter)

pH	Temp (°F)	Cond (µs)	Volume (gal)	Comments
7.10	61.0	264	1.25	clear
6.80	54.3	275	2.50	slight orange
6.74	52.0	285	3.75	flcks/misty
6.66	51.3	288	5.0 gallons	clear
6.64	51.1	299	10.0 gallons	
6.64	50.7	315	15.0 gallons	
6.65	50.7	321	20.0 gallons	
6.68	50.4	331	23.0 gallons	

1548 sample M2

Cut off passive vent pipe stick ups to ~3' above ground

1618 at M6 (4" well diameter)

1621 DTW 6.04' BTOC PVC
TD 8.60' BTOC PVC

pH	Temp (°F)	Cond (µs)	Volume (gallons)	Comments
6.95	62.2	1673	2 liters	slightly grey
6.97	59.9	1844	3 liters	slight dk
7.03	59.0	1942	4 liters	fuel odor

7 feet

1632 sample M6

1646 Iv Jaguar

1725 arrive @ office 150234

6/11/10

51

0745 lv office 150234
0828 arrive @ Jaquez site 150257

Ambient air survey - No thing detected meter read 0.0 ppm throughout site North of canal

0924	Set up on SB-1	36°45'01.478N
0927	Sample @ 1'	PID 0.0
0931	" " 2'	PID 1.1
0937	" " 3'	PID 0.8
0942	" " 4'	PID 0
0952	" " 5'	" "
0957	" " 6'	" " saturated

Set up on SB-3 for soil sampling
36°45'00.694N 107°49'06.499W

	Site	Depth	PID
1017	SB-3	1'	0.0
1019	SB-3	2'	13.2
1023	SB-3	3'	11.9
1027	SB-3	4'	0.1
1028	SB-3	5'	10.8
1033	SB-3	6'	0.5 saturated

SB-3A 1' closer to canal 0.6 ppm

1027 R-1 PID 81.2 ppm monitor well head space

52

6/11/10

Jaquez Soil Sampling Cont.

1056

Set up on SB-2 soil sample

1058

sample SB-2 @ 1' PID 0 ppm

1059

" " " @ 2' PID 0.0 ppm saturated

SB-2 location $36^{\circ}45'00.860''N$ $107^{\circ}49'06.120''W$

1105

Set up on SB-4 Soil Sample

1107

sample SB-4 @ 1' PID 0.0

1113

" " " @ 2' " 0.0

1115

" " " @ 3' PID 0.0 saturated

1200

Set up on SB-5 Soil Sample

 $36^{\circ}44'59.607''N$ $107^{\circ}49'06.974''W$

1202

Sample^{SO5} @ 1' PID 0.0

1206

Sample SB-5 @ 2' PID 0.0 saturated

1208

Set up on SB-6 Soil Sample

 $36^{\circ}44'59.452''N$ $107^{\circ}49'06.842''W$

1211

Sample SB-6 @ 1' PID 19.2 ppm

1215

" " " @ 2' PID 0.0 ppm

1225

Set up on SB-7 Soil Sample

1228

Sample SB-7 @ 1' PID 106 ppm

1230

Sample SB-7 @ 18" PID 30.6 ppm saturated

location $36^{\circ}44'59.847''N$ $107^{\circ}49'06.522''W$

6/11/10 Jaguez Soil Sampling

53

1234 Set up on SB-8 soil sample

36° 45' 00.161" N

107° 49' 06.089" W

Depth

PID

1237

12"

230

PPM

1239

18"

71.2

"

1241

2'

31.2

"

1243

30"

81.5

"

1245

3'

59.2

PPM

1248

40"-44"

45.2

"

1250

48-51"

43.2

ppm

saturated

1300 Set up on SB-9 soil sample

location 36° 45' 00.572 N

107° 49' 05.672 W

Depth

PID (ppm)

1303

1"

18.4

1307

2'

0.8

1308

3'

8.5

1312

4'

2.0

saturated

1331 Set up on SB-10 soil sample

location 36° 45' 00.291" N

107° 49' 05.609" W

Depth

PID ppm

1334

1'

20.0

1337

2'

6.9

1341

3'

8.3

saturated

54

6/11/10 Jaquez Soil Sampling Cont.

1350 Set up on SB-11 soil sample

location $36^{\circ} 44' 59.946''$ N $107^{\circ} 49' 05.999''$ W

	Depth	PID ppm
1355	1'	4.6
1402	2'	6.0
1405	32"	15.2

1418 Set up on SB-12 soil sample

location $36^{\circ} 44' 59.380''$ N $107^{\circ} 49' 05.029''$ W

	Depth	PID (ppm)
1421	1'	22.9
1426	2'	17.2
1431	3'	6.1
1436	4'	1.6
1440	56"-57"	8.1

Fill in all soil sampling holes w/ Bentonite and DI water

1625 take ambient air sample

1632 take air sample @ passive well #4 after purging air for 3 minutes @ 6 liters per minute

1652 take air sample @ well R-1 after purging for 3 minutes @ 6 liters/min.

6/11/10 Jaguez continued

55

Petro Flag results

Sample ID	Weight(g)	Reading (ppm)
SB-3-5	10.1	123
SB-7-1	10.1	132
SB-8-1	10.1	298
SB-8-4	10.1	208
SB-9-1	10.0	222
SB-9-4	10.0	160
SB-10-1	10.0	207
SB-11-32	10.1	137
SB-12-1	10.1	456
SB-12-4	10.1	7045

* RF² 2 for all samples

Soils samples sent to lab:

SB-3-5 Sample for 8015, TVPH,
SB-6-1 TEPH(8015), BTEX 8021
SB-9-4
SB-11-32

* all of the remaining soil from the above 4 samples was left in outside refrigerator @ John Jaguez residence per John Jaguez

1829 IV Jaguez site

1906 arrive @ office 150286



COMPLIANCE / ENGINEERING / REMEDIATION

LT Environmental, Inc.

2243 Main Avenue, Suite 3
Durango, Colorado 81301
T 970.385.1096 / F 970.385.1873

July 9, 2010

Mr. Jed Smith, PE
Senior Chemical Engineer
MWH
1801 California Street, Suite 2900
Denver, Colorado 80202

Subject: Supplemental Information for Jaquez Site

Mr. Smith:

Per your request, this letter is to provide to you the supplemental information relating to the site investigation activities conducted on June 10 and 11, 2010 at the Jaquez Site in Blanco, New Mexico.

In an e-mail dated July 9, 2010, you requested the following information that was not included in the field notebook. The responses to your questions are in italics.

1. I didn't see the notes about the screening of the passive vent wells. I wrote down 0,0,0.4,8.9,0 (running from east to west) while you were out there, but I need those results documented in the notes.

Response: The passive vent wells were screened using the Photoionization Detector (PID) with a 10.5eV lamp. Working from east to west, the PID values read at the top of each passive vent well within 10 seconds of removal of the well cap were 0 ppm, 0 ppm, 0.4 ppm, 8.9 ppm, and 0 ppm.

2. I didn't see any notes regarding the ambient air screening in the south end. I see the ambient air sample collected at 1625; and there was one note on Pg. 51 regarding the north end having no ambient air PID detections.

Response: The ambient air screening was conducted on the south side of the canal prior to beginning soil sampling on the south side of the canal. This ambient air screening was conducted by holding the PID at waist height and walking around the site slowly, observing any readings on the PID. The entire south side of the canal was walked, including near the groundwater monitor wells and passive vent wells. No readings above 0.0 ppm were observed on the PID.

3. I didn't see documentation regarding the locations or routes used for ambient air screening. I think we discussed walking around to all the wells, as an example route. I just need to document where we screened ambient air. If you screened along a route that connected all the monitor wells, then a statement to that effect would probably be fine.

Response: This ambient air screening on both the north and south sides of the canal was conducted by holding the PID at waist height and walking around the area slowly, observing any



readings on the PID. The entire north and south sides of the canal were walked, including near the groundwater monitor wells, passive vent wells, pipelines, and other well stick-ups. No readings above 0.0 ppm were observed on the PID on either the north or south side of the canal.

Additionally, in a phone call today, you requested the location of the ambient air. This sample was collected on the south side of the canal, approximately half way between the western-most passive vent well and the canal, slightly to the west of a line between these two locations. Lastly, the PetroFlag sampling kit was calibrated the day of the sampling (at approximately 10 a.m.), per the manufacturer's specifications.

If you have any additional questions or comments regarding this project, do not hesitate to contact me at (970) 385-1096 or via email at jlinn@ltenv.com.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Julie', is placed over a rectangular area of the document that has been obscured by a heavy, grainy black redaction.

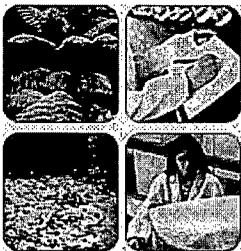
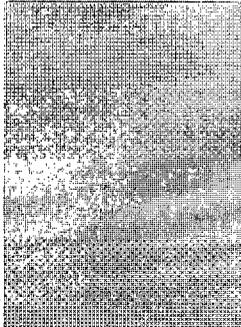
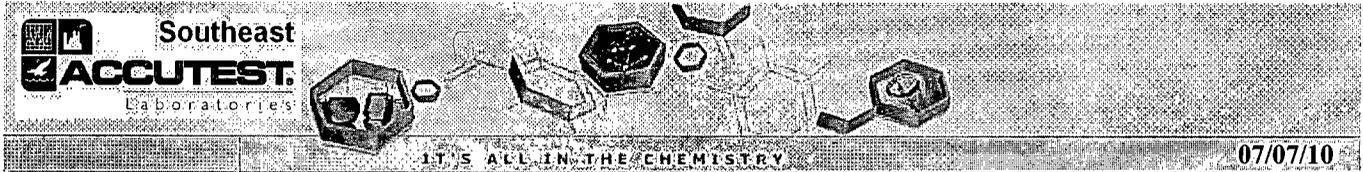
Julie Linn, RG
Project Geologist

Copy: Ashley Ager

Sample ID	Sample Location	Sample Depth (feet below ground surface)	Date Sampled	Time Sampled	PID (ppm)	Sample Location Lat/long	Notes	PetroFlag Results (parts per million) (If no result is listed, sample was not analyzed)	Sample Sent to Analytical Lab
SB1-1	SB-1	1	6/11/2010	9:27 AM	0	36° 45' 01.478"N; 107° 49' 05.851"W			
SB1-2		2	6/11/2010	9:31 AM	1.1				
SB1-3		3	6/11/2010	9:37 AM	0.8				
SB1-4		4	6/11/2010	9:42 AM	0				
SB1-5		5	6/11/2010	9:52 AM	0				
SB1-6		6	6/11/2010	9:57 AM	0		Saturated		
SB2-1	SB-2	1	6/11/2010	10:58 AM	0	36° 45' 00.860"N; 107° 49' 06.120"W			
SB2-2		2	6/11/2010	10:59 AM	0		Saturated		
SB3-1	SB-3	1	6/11/2010	10:17 AM	0	36° 45' 00.694"N; 107° 49' 06.499"W			
SB3-2		2	6/11/2010	10:19 AM	13.2				
SB3-3		3	6/11/2010	10:23 AM	11.9				
SB3-4		4	6/11/2010	10:27 AM	0.1				
SB3-5		5	6/11/2010	10:28 AM	10.8			123	Yes
SB3-6		6	6/11/2010	10:33 AM	0.5		Saturated		
SB4-1	SB-4	1	6/11/2010	11:07 AM	0	36° 45' 00.046"N; 107° 49' 07.326"W			
SB4-2		2	6/11/2010	11:13 AM	0				
SB4-3		3	6/11/2010	11:15 AM	0		Saturated		
SB5-1	SB-5	1	6/11/2010	12:02 PM	0	36° 44' 59.046"N; 107° 49' 06.974"W			
SB5-2		2	6/11/2010	12:06 PM	0		Saturated		
SB6-1	SB-6	1	6/11/2010	12:11 PM	19.2	36° 44' 59.452"N; 107° 49' 06.842"W			Yes
SB6-2		2	6/11/2010	12:15 PM	0		Saturated		
SB7-1	SB-7	1	6/11/2010	12:28 PM	106	36° 44' 59.847"N; 107° 49' 06.522"W		132	
SB7-2		2	6/11/2010	12:30 PM	30.6		Saturated		
SB8-1	SB-8	1	6/11/2010	12:37 PM	230	36° 44' 00.161"N; 107° 49' 06.089"W		298	
SB8-2		1.5	6/11/2010	12:39 PM	71.2				
SB8-3		2	6/11/2010	12:41 PM	31.2				
SB8-2.5		2.5	6/11/2010	12:43 PM	81.5				
SB8-3		3	6/11/2010	12:45 PM	59.2				
SB8-3.5		3.5	6/11/2010	12:48 PM	45.2				
SB8-4		4	6/11/2010	12:50 PM	43.2		Saturated	208	
SB9-1	SB-9	1	6/11/2010	1:03 PM	18.4	36° 45' 00.572"N; 107° 49' 05.672"W		222	
SB9-2		2	6/11/2010	1:07 PM	0.8				
SB9-3		3	6/11/2010	1:08 PM	8.5				
SB9-4		4	6/11/2010	1:12 PM	2		Saturated	160	Yes
SB10-1	SB-10	1	6/11/2010	1:34 PM	20	36° 45' 00.291"N; 107° 49' 05.609"W		207	
SB10-2		2	6/11/2010	1:37 PM	6.9				
SB10-3		3	6/11/2010	1:41 PM	8.3		Saturated		
SB11-1	SB-11	1	6/11/2010	1:55 PM	4.6	36° 44' 59.946"N; 107° 49' 05.999"W			
SB11-2		2	6/11/2010	2:02 PM	6				
SB11-3		2.5	6/11/2010	2:05 PM	15.2		Saturated	137	Yes
SB12-1	SB-12	1	6/11/2010	1:08 PM	22.9	36° 44' 59.380"N; 107° 49' 05.029"W		456	
SB12-2		2	6/11/2010	1:08 PM	17.2				
SB12-3		3	6/11/2010	1:08 PM	6.1				
SB12-4		4	6/11/2010	1:08 PM	1.6			7045	
SB12-4.75		4.75	6/11/2010	1:08 PM	8.1		Saturated		

APPENDIX C

Laboratory Analytical Reports



Technical Report for

EL PASO CORPORATION

MWHCOD: San Juan River Basin Program

Jaquez Site

Accutest Job Number: F74410

Sampling Date: 06/11/10

Report to:

MWH

jed.smith@mwhglobal.com

ATTN: Jed Smith

Total number of pages in report: 14



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi
Harry Behzadi, Ph.D.
Laboratory Director

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK
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Test results relate only to samples analyzed.



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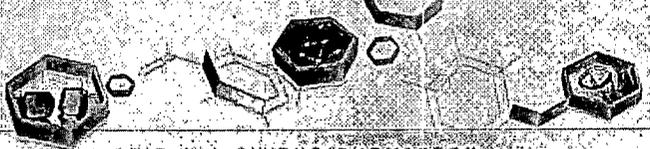
Sample Summary

EL PASO CORPORATION

Job No: F74410

MWHCOD: San Juan River Basin Program
Project No: Jaquez Site

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
F74410-1	06/11/10	16:32 JL	06/15/10	AIR	Air	PASSIVE 4
F74410-2	06/11/10	16:52 JL	06/15/10	AIR	Air	RI
F74410-3	06/11/10	16:25 JL	06/15/10	AIR	Air	AMBIENT



IT'S ALL IN THE CHEMISTRY

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: PASSIVE 4	Date Sampled: 06/11/10
Lab Sample ID: F74410-1	Date Received: 06/15/10
Matrix: AIR - Air	Percent Solids: n/a
Method: EPA TO-3	
Project: MWHCOD: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	HH035760.D	1	06/15/10	NJ	n/a	n/a	GHH1674
Run #2							

Run #	Initial Volume
Run #1	0.50 ml
Run #2	

Purgeable Aromatics

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
71-43-2	78.11	Benzene	ND	0.50	0.11	ppmv		ND	1.6	mg/m3
108-88-3	92.14	Toluene	ND	0.50	0.10	ppmv		ND	1.9	mg/m3
100-41-4	106.2	Ethylbenzene	ND	0.50	0.10	ppmv		ND	2.2	mg/m3
1330-20-7	106.2	Xylenes (total)	ND	1.5	0.30	ppmv		ND	6.5	mg/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.50	0.15	ppmv		ND	1.8	mg/m3
	72	TPH as Equiv Pentane	ND	5.0	1.0	ppmv		ND	15	mg/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	95%		58-132%
460-00-4	4-Bromofluorobenzene	83%		58-132%

(a) Sample analyzed beyond hold time; reported results are considered minimum values.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

MDL - Method Detection Limit
 J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: R1 Lab Sample ID: F74410-2 Matrix: AIR - Air Method: EPA TO-3 Project: MWHCOD: San Juan River Basin Program	Date Sampled: 06/11/10 Date Received: 06/15/10 Percent Solids: n/a
---	--

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	HH035761.D	1	06/15/10	NJ	n/a	n/a	GHH1674
Run #2							

Run #	Initial Volume
Run #1	0.50 ml
Run #2	

Purgeable Aromatics

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
71-43-2	78.11	Benzene	ND	0.50	0.11	ppmv		ND	1.6	mg/m3
108-88-3	92.14	Toluene	ND	0.50	0.10	ppmv		ND	1.9	mg/m3
100-41-4	106.2	Ethylbenzene	ND	0.50	0.10	ppmv		ND	2.2	mg/m3
1330-20-7	106.2	Xylenes (total)	ND	1.5	0.30	ppmv		ND	6.5	mg/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.50	0.15	ppmv		ND	1.8	mg/m3
	72	TPH as Equiv Pentane	ND	5.0	1.0	ppmv		ND	15	mg/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	95%		58-132%
460-00-4	4-Bromofluorobenzene	76%		58-132%

(a) Sample analyzed beyond hold time; reported results are considered minimum values.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: AMBIENT	Date Sampled: 06/11/10
Lab Sample ID: F74410-3	Date Received: 06/15/10
Matrix: AIR - Air	Percent Solids: n/a
Method: EPA TO-3	
Project: MWHCOD: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	HH035763.D	1	06/15/10	NJ	n/a	n/a	GHH1674
Run #2							

Run #	Initial Volume
Run #1	0.50 ml
Run #2	

Purgeable Aromatics

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
71-43-2	78.11	Benzene	ND	0.50	0.11	ppmv		ND	1.6	mg/m3
108-88-3	92.14	Toluene	ND	0.50	0.10	ppmv		ND	1.9	mg/m3
100-41-4	106.2	Ethylbenzene	ND	0.50	0.10	ppmv		ND	2.2	mg/m3
1330-20-7	106.2	Xylenes (total)	ND	1.5	0.30	ppmv		ND	6.5	mg/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.50	0.15	ppmv		ND	1.8	mg/m3
	72	TPH as Equiv Pentane	ND	5.0	1.0	ppmv		ND	15	mg/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%		58-132%
460-00-4	4-Bromofluorobenzene	78%		58-132%

(a) Sample analyzed beyond hold time; reported results are considered minimum values.

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: F74410 CLIENT: MWH PROJECT: ?
 DATE/TIME RECEIVED: 6/15/10 9:50 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER
 AIRBILL NUMBERS: 8686 4131 7101

COOLER INFORMATION

- CUSTODY SEAL NOT PRESENT OR NOT INTACT
- CHAIN OF CUSTODY NOT RECEIVED (COC)
- ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- TEMPERATURE CRITERIA NOT MET
- WET ICE PRESENT

TRIP BLANK INFORMATION

- TRIP BLANK PROVIDED
- TRIP BLANK NOT PROVIDED
- TRIP BLANK NOT ON COC
- TRIP BLANK INTACT
- TRIP BLANK NOT INTACT
- RECEIVED WATER TRIP BLANK
- RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 0
 NUMBER OF 5035 FIELD KITS ? 0
 NUMBER OR LAB FILTERED METALS ? 0

TEMPERATURE INFORMATION

- IR THERM ID NA CORR. FACTOR: NA
- OBSERVED TEMPS: _____
- CORRECTED TEMPS: _____

SAMPLE INFORMATION

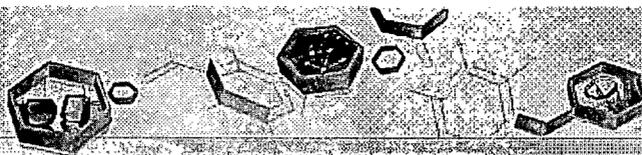
- SAMPLE LABELS PRESENT ON ALL BOTTLES
- INCORRECT NUMBER OF CONTAINERS USED
- SAMPLE RECEIVED IMPROPERLY PRESERVED
- INSUFFICIENT VOLUME FOR ANALYSIS
- DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- ID'S ON COC DO NOT MATCH LABEL
- VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- SAMPLE CONTAINER(S) RECEIVED BROKEN
- % SOLIDS JAR NOT RECEIVED
- 5035 FIELD KIT FROZEN WITHIN 48 HOUR'S
- RESIDUAL CHLORINE PRESENT

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

SUMMARY OF COMMENTS: _____

TECHNICIAN SIGNATURE/DATE *Old* *6/15/10* REVIEWER SIGNATURE/DATE *LC* *06-15-10*
 NF 10/09 RECEIPT CONFIRMATION 100609 (2).xls

31
3



GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: F74410
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCOD: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GHH1674-MB	HH035759.D1		06/15/10	NJ	n/a	n/a	GHH1674

The QC reported here applies to the following samples:

Method: EPA TO-3

F74410-1, F74410-2, F74410-3

CAS No.	Compound	Result	RL	Units	Q	Result	RL	Units
1634-04-4	Methyl Tert Butyl Ether	ND	0.50	ppmv		ND	1.8	mg/m3
71-43-2	Benzene	ND	0.50	ppmv		ND	1.6	mg/m3
108-88-3	Toluene	ND	0.50	ppmv		ND	1.9	mg/m3
100-41-4	Ethylbenzene	ND	0.50	ppmv		ND	2.2	mg/m3
1330-20-7	Xylenes (total)	ND	1.5	ppmv		ND	6.5	mg/m3
	TPH as Equiv Pentane	ND	5.0	ppmv		ND	15	mg/m3

CAS No.	Surrogate Recoveries	Result	Limits
460-00-4	4-Bromofluorobenzene	97%	58-132%
460-00-4	4-Bromofluorobenzene	72%	58-132%

4.1.1
4

Blank Spike Summary

Job Number: F74410
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCOD: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GHH1674-BS	HH035758.D1		06/15/10	NJ	n/a	n/a	GHH1674

4.2.1
4

The QC reported here applies to the following samples:

Method: EPA TO-3

F74410-1, F74410-2, F74410-3

CAS No.	Compound	Spike ppmv	BSP ppmv	BSP %	Limits
1634-04-4	Methyl Tert Butyl Ether	10	9.7	97	65-106
71-43-2	Benzene	10	9.9	99	66-114
108-88-3	Toluene	10	9.7	97	60-123
100-41-4	Ethylbenzene	10	9.6	96	62-109
1330-20-7	Xylenes (total)	30	28.5	95	62-111
	TPH as Equiv Pentane	135	126	93	62-111

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	97%	58-132%
460-00-4	4-Bromofluorobenzene	85%	58-132%

Duplicate Summary

Job Number: F74410
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCOD: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F74410-2DUP	HH035762.D1		06/15/10	NJ	n/a	n/a	GHH1674
F74410-2 ^a	HH035761.D1		06/15/10	NJ	n/a	n/a	GHH1674

The QC reported here applies to the following samples:

Method: EPA TO-3

F74410-1, F74410-2, F74410-3

CAS No.	Compound	F74410-2		Q	RPD	Limits
		ppmv	DUP ppmv			
1634-04-4	Methyl Tert Butyl Ether	ND	ND		nc	13
71-43-2	Benzene	ND	ND		nc	10
108-88-3	Toluene	ND	ND		nc	12
100-41-4	Ethylbenzene	ND	ND		nc	13
1330-20-7	Xylenes (total)	ND	ND		nc	13
	TPH as Equiv Pentane	ND	ND		nc	17

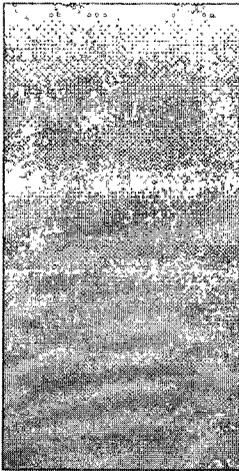
CAS No.	Surrogate Recoveries	DUP	F74410-2	Limits
460-00-4	4-Bromofluorobenzene	95%	95%	58-132%
460-00-4	4-Bromofluorobenzene	72%	76%	58-132%

(a) Sample analyzed beyond hold time; reported results are considered minimum values.

4.3.1
4



11/02/10



Technical Report for

EL PASO CORPORATION

MWHCODE: San Juan River Basin Program

Jaquez Sites

Accutest Job Number: T54504

Sampling Date: 06/10/10

Report to:

MWH

jed.smith@mwhglobal.com

ATTN: Jed Smith

Total number of pages in report: 30



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Paul K Canevaro

Paul Canevaro
Laboratory Director

Client Service contact: Georgia Jones 713-271-4700

Certifications: TX (T104704220-10-3) AR (88-0756) FL (E87628) KS (E-10366) LA (85695/04004)
OK (9103)

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Test results relate only to samples analyzed.

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Sample Summary

EL PASO CORPORATION

Job No: T54504

MWHCODE: San Juan River Basin Program
 Project No: Jaquez Sites

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T54504-1	06/10/10	09:23 JL	06/15/10	AQ	Ground Water	R4
T54504-2	06/10/10	09:45 JL	06/15/10	AQ	Ground Water	R6
T54504-3	06/10/10	10:26 JL	06/15/10	AQ	Ground Water	R1
T54504-4	06/10/10	10:58 JL	06/15/10	AQ	Ground Water	R2
T54504-5	06/10/10	11:27 JL	06/15/10	AQ	Ground Water	R3
T54504-6	06/10/10	11:56 JL	06/15/10	AQ	Ground Water	R5
T54504-7	06/10/10	12:38 JL	06/15/10	AQ	Ground Water	M7
T54504-8	06/10/10	12:56 JL	06/15/10	AQ	Ground Water	M1
T54504-9	06/10/10	13:29 JL	06/15/10	AQ	Ground Water	M3
T54504-10	06/10/10	14:53 JL	06/15/10	AQ	Ground Water	M4
T54504-11	06/10/10	15:20 JL	06/15/10	AQ	Ground Water	M5
T54504-12	06/10/10	15:48 JL	06/15/10	AQ	Ground Water	M2
T54504-13	06/10/10	16:32 JL	06/15/10	AQ	Ground Water	M6

Sample Summary (continued)

EL PASO CORPORATION

Job No: T54504

MWHCODE: San Juan River Basin Program
Project No: Jaquez Sites

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
T54504-14	06/10/10	17:00 JL	06/15/10	AQ Trip Blank Water	TRIP-BLANK



SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: EL PASO CORPORATION

Job No T54504

Site: MWHCODE: San Juan River Basin Program

Report Date 7/7/2010 1:40:37 PM

13 Sample(s) and 1 Trip Blank(s) were collected on 06/10/2010 and were received at Accutest on 06/15/2010 properly preserved, at 4.1 Deg. C and intact. These Samples received an Accutest job number of T54504. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ	Batch ID: VC451
------------------	------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T54504-1MS, T54504-1MSD were used as the QC samples indicated.

Matrix AQ	Batch ID: VF3896
------------------	-------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T54504-12MS, T54504-12MSD were used as the QC samples indicated.

Accutest Laboratories Gulf Coast (ALGC) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALGC and as stated on the COC. ALGC certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified, in the ALGC Quality Manual except as noted above. This report is to be used in its entirety. ALGC is not responsible for any assumptions of data quality if partial data packages are used



Gulf Coast

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3

Sample Results

Report of Analysis



Report of Analysis

3.1
3

Client Sample ID: R4	Date Sampled: 06/10/10
Lab Sample ID: T54504-1	Date Received: 06/15/10
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0010070.D	1	06/18/10	RR	n/a	n/a	VC451
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1330-20-7	Xylene (total)	ND	6.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	m,p-Xylene	ND	4.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		79-122%
17060-07-0	1,2-Dichloroethane-D4	108%		75-121%
2037-26-5	Toluene-D8	105%		87-119%
460-00-4	4-Bromofluorobenzene	88%		80-133%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: R6 Lab Sample ID: T54504-2 Matrix: AQ - Ground Water Method: SW846 8260B Project: MWHCODE: San Juan River Basin Program	Date Sampled: 06/10/10 Date Received: 06/15/10 Percent Solids: n/a
---	--

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0010082.D	1	06/18/10	RR	n/a	n/a	VC451
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1330-20-7	Xylene (total)	ND	6.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	m,p-Xylene	ND	4.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		79-122%
17060-07-0	1,2-Dichloroethane-D4	107%		75-121%
2037-26-5	Toluene-D8	103%		87-119%
460-00-4	4-Bromofluorobenzene	88%		80-133%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.3


Client Sample ID: R1	Date Sampled: 06/10/10
Lab Sample ID: T54504-3	Date Received: 06/15/10
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0010083.D	1	06/18/10	RR	n/a	n/a	VC451
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1330-20-7	Xylene (total)	ND	6.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	m,p-Xylene	ND	4.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		79-122%
17060-07-0	1,2-Dichloroethane-D4	109%		75-121%
2037-26-5	Toluene-D8	103%		87-119%
460-00-4	4-Bromofluorobenzene	87%		80-133%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: R2	Date Sampled: 06/10/10
Lab Sample ID: T54504-4	Date Received: 06/15/10
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0010084.D	1	06/18/10	RR	n/a	n/a	VC451
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1330-20-7	Xylene (total)	ND	6.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	m,p-Xylene	ND	4.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		79-122%
17060-07-0	1,2-Dichloroethane-D4	110%		75-121%
2037-26-5	Toluene-D8	102%		87-119%
460-00-4	4-Bromofluorobenzene	89%		80-133%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.5
3

Client Sample ID: R3		
Lab Sample ID: T54504-5	Date Sampled: 06/10/10	
Matrix: AQ - Ground Water	Date Received: 06/15/10	
Method: SW846 8260B	Percent Solids: n/a	
Project: MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0010085.D	1	06/18/10	RR	n/a	n/a	VC451
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1330-20-7	Xylene (total)	ND	6.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	m,p-Xylene	ND	4.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		79-122%
17060-07-0	1,2-Dichloroethane-D4	108%		75-121%
2037-26-5	Toluene-D8	103%		87-119%
460-00-4	4-Bromofluorobenzene	89%		80-133%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: R5	Date Sampled: 06/10/10
Lab Sample ID: T54504-6	Date Received: 06/15/10
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0010086.D	1	06/18/10	RR	n/a	n/a	VC451
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1330-20-7	Xylene (total)	ND	6.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	m,p-Xylene	ND	4.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		79-122%
17060-07-0	1,2-Dichloroethane-D4	110%		75-121%
2037-26-5	Toluene-D8	104%		87-119%
460-00-4	4-Bromofluorobenzene	89%		80-133%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.7

Client Sample ID: M7	Date Sampled: 06/10/10
Lab Sample ID: T54504-7	Date Received: 06/15/10
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0010087.D	1	06/18/10	RR	n/a	n/a	VC451
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1330-20-7	Xylene (total)	ND	6.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	m,p-Xylene	ND	4.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		79-122%
17060-07-0	1,2-Dichloroethane-D4	110%		75-121%
2037-26-5	Toluene-D8	104%		87-119%
460-00-4	4-Bromofluorobenzene	88%		80-133%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: M1	Date Sampled: 06/10/10
Lab Sample ID: T54504-8	Date Received: 06/15/10
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0010088.D	1	06/18/10	RR	n/a	n/a	VC451
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1330-20-7	Xylene (total)	ND	6.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	m,p-Xylene	ND	4.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		79-122%
17060-07-0	1,2-Dichloroethane-D4	110%		75-121%
2037-26-5	Toluene-D8	103%		87-119%
460-00-4	4-Bromofluorobenzene	85%		80-133%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.9


Client Sample ID: M3	Date Sampled: 06/10/10
Lab Sample ID: T54504-9	Date Received: 06/15/10
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0010089.D	1	06/18/10	RR	n/a	n/a	VC451
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1330-20-7	Xylene (total)	ND	6.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	m,p-Xylene	ND	4.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		79-122%
17060-07-0	1,2-Dichloroethane-D4	109%		75-121%
2037-26-5	Toluene-D8	103%		87-119%
460-00-4	4-Bromofluorobenzene	90%		80-133%

ND = Not detected.
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.10
3

Client Sample ID: M4	Date Sampled: 06/10/10
Lab Sample ID: T54504-10	Date Received: 06/15/10
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0010090.D	1	06/18/10	RR	n/a	n/a	VC451
Run #2	F026598.D	5	06/21/10	RR	n/a	n/a	VF3896

Run #	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	147 ^a	10	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1330-20-7	Xylene (total)	139	6.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	m,p-Xylene	139	4.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%	84%	79-122%
17060-07-0	1,2-Dichloroethane-D4	106%	80%	75-121%
2037-26-5	Toluene-D8	106%	91%	87-119%
460-00-4	4-Bromofluorobenzene	86%	111%	80-133%

(a) Result is from Run# 2

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.11

Client Sample ID: M5	Date Sampled: 06/10/10
Lab Sample ID: T54504-11	Date Received: 06/15/10
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F026599.D	1	06/21/10	RR	n/a	n/a	VF3896
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1330-20-7	Xylene (total)	ND	6.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	m,p-Xylene	ND	4.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	84%		79-122%
17060-07-0	1,2-Dichloroethane-D4	81%		75-121%
2037-26-5	Toluene-D8	90%		87-119%
460-00-4	4-Bromofluorobenzene	111%		80-133%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.12
3

Client Sample ID: M2	Date Sampled: 06/10/10
Lab Sample ID: T54504-12	Date Received: 06/15/10
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F026593.D	1	06/21/10	RR	n/a	n/a	VF3896
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1330-20-7	Xylene (total)	ND	6.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	m,p-Xylene	ND	4.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	84%		79-122%
17060-07-0	1,2-Dichloroethane-D4	81%		75-121%
2037-26-5	Toluene-D8	91%		87-119%
460-00-4	4-Bromofluorobenzene	111%		80-133%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: M6	Date Sampled: 06/10/10
Lab Sample ID: T54504-13	Date Received: 06/15/10
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F026600.D	1	06/21/10	RR	n/a	n/a	VF3896
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1330-20-7	Xylene (total)	ND	6.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	m,p-Xylene	ND	4.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	84%		79-122%
17060-07-0	1,2-Dichloroethane-D4	80%		75-121%
2037-26-5	Toluene-D8	91%		87-119%
460-00-4	4-Bromofluorobenzene	112%		80-133%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.14
3

Client Sample ID:	TRIP BLANK	Date Sampled:	06/10/10
Lab Sample ID:	T54504-14	Date Received:	06/15/10
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0010069.D	1	06/18/10	RR	n/a	n/a	VC451
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1330-20-7	Xylene (total)	ND	6.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	m,p-Xylene	ND	4.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		79-122%
17060-07-0	1,2-Dichloroethane-D4	111%		75-121%
2037-26-5	Toluene-D8	102%		87-119%
460-00-4	4-Bromofluorobenzene	92%		80-133%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

10165 Harwin, Suite 150 - Houston, TX 77036 - 713-271-4700 fax: 713-271-4770

FED-EX Tracking # _____ Bottle Order Control # _____
 Accutest Quote # _____ Accutest Job # **T54504**

Client / Reporting Information		Project Information		Requested Analyses										Matrix Codes		
Company Name MWH		Project Name / No.												DW - Drinking Water		
Project Contact Jed Smith		Bill to EPNG Pipeline												GW - Ground Water		
E-Mail jed.smith@mwhglobal.com		Invoice Attn. Ian Yanagisawa												WW - Wastewater		
Address 1801 California Street, Suite 2900		Address P.O. Box 2511												SO - Soil		
City State Zip Denver CO 80202		City State Zip Houston TX 77252												SL - Sludge		
Phone No. Fax No. 303-291-2276		Phone No. Fax No. 713 420-736												DI - Oil		
Sampler's Name Julie Linn, RG		Client Purchase Order #												LIQ - Liquid		
Accutest Sample #		Field ID / Point of Collection		Collection		Date		Time		Matrix		# of bottles		Number of preserved bottles		LAB USE ONLY
11		M5		6-10-10		1520		GW		3		X		X		
12		M2		↓		1540		GW		3		X		X		
13		M6		↓		1630		GW		3		X		X		
14		Trip Blank		↓		1700		GW		3		X		X		
								GW		3		X				
								GW		3		X				
								GW		3		X				
								GW		3		X				
								GW		3		X				
								GW		3		X				

4.1
4

Turnaround Time (Business days)		Approved By/Date:		Data Deliverable Information		Comments / Remarks	
<input checked="" type="checkbox"/> 10 Day STANDARD <input type="checkbox"/> 7 Day <input type="checkbox"/> 4 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input type="checkbox"/> Other: _____		Commercial "A" <input type="checkbox"/> TRRP-13 Commercial "B" <input checked="" type="checkbox"/> EDD Format _____ Reduced Tier 1 <input type="checkbox"/> Other: _____ Full Data Package <input type="checkbox"/>		Method 8260 also acceptable at 8021 Price 6-10-10 - 1800 put in sample Fridge at LT offices - P60 JF			
Real time analytical data available via Lablink							
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY							
Relinquished by: Julie Linn		Date/Time: 6/10/10 1800		Received By: Julie Linn		Date/Time: 6/14/10 1500	
Relinquished by: FED EX		Date/Time: 6/15/10 0930		Received By: [Signature]		Date/Time: _____	
Relinquished by: _____		Date/Time: _____		Received By: _____		Date/Time: _____	
5		5		Custody Seal #		Preserved where applicable <input type="checkbox"/>	
						Cooler Temp. 4.1°C	



GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: T54504
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC451-MB	C0010068.D	1	06/18/10	RR	n/a	n/a	VC451

The QC reported here applies to the following samples:

Method: SW846 8260B

T54504-1, T54504-2, T54504-3, T54504-4, T54504-5, T54504-6, T54504-7, T54504-8, T54504-9, T54504-10, T54504-14

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
1330-20-7	Xylene (total)	ND	6.0	ug/l	
	m,p-Xylene	ND	4.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Results	Limits
1868-53-7	Dibromofluoromethane	110%	79-122%
17060-07-0	1,2-Dichloroethane-D4	109%	75-121%
2037-26-5	Toluene-D8	103%	87-119%
460-00-4	4-Bromofluorobenzene	88%	80-133%

5.1.1
5

Method Blank Summary

Job Number: T54504
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF3896-MB	F026585.D	1	06/21/10	RR	n/a	n/a	VF3896

The QC reported here applies to the following samples:

Method: SW846 8260B

T54504-10, T54504-11, T54504-12, T54504-13

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
1330-20-7	Xylene (total)	ND	6.0	ug/l	
	m,p-Xylene	ND	4.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Result	Limits
1868-53-7	Dibromofluoromethane	86%	79-122%
17060-07-0	1,2-Dichloroethane-D4	82%	75-121%
2037-26-5	Toluene-D8	94%	87-119%
460-00-4	4-Bromofluorobenzene	113%	80-133%

5.1.2
5

Blank Spike Summary

Job Number: T54504
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC451-BS	C0010066.D	1	06/18/10	RR	n/a	n/a	VC451

The QC reported here applies to the following samples:

Method: SW846 8260B

T54504-1, T54504-2, T54504-3, T54504-4, T54504-5, T54504-6, T54504-7, T54504-8, T54504-9, T54504-10, T54504-14

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	25	26.3	105	76-118
100-41-4	Ethylbenzene	25	24.1	96	75-112
108-88-3	Toluene	25	25.1	100	77-114
1330-20-7	Xylene (total)	75	72.0	96	75-111
	m,p-Xylene	50	48.3	97	75-112
95-47-6	o-Xylene	25	23.7	95	74-110

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	109%	79-122%
17060-07-0	1,2-Dichloroethane-D4	109%	75-121%
2037-26-5	Toluene-D8	105%	87-119%
460-00-4	4-Bromofluorobenzene	90%	80-133%

5.2.1
5

Blank Spike Summary

Job Number: T54504
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF3896-BS	F026583.D	1	06/21/10	RR	n/a	n/a	VF3896

The QC reported here applies to the following samples:

Method: SW846 8260B

T54504-10, T54504-11, T54504-12, T54504-13

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	25	20.5	82	76-118
100-41-4	Ethylbenzene	25	20.5	82	75-112
108-88-3	Toluene	25	20.6	82	77-114
1330-20-7	Xylene (total)	75	62.6	83	75-111
	m,p-Xylene	50	41.9	84	75-112
95-47-6	o-Xylene	25	20.7	83	74-110

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	84%	79-122%
17060-07-0	1,2-Dichloroethane-D4	83%	75-121%
2037-26-5	Toluene-D8	91%	87-119%
460-00-4	4-Bromofluorobenzene	110%	80-133%

5.2.2
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T54504
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T54504-1MS	C0010071.D	1	06/18/10	RR	n/a	n/a	VC451
T54504-1MSD	C0010072.D	1	06/18/10	RR	n/a	n/a	VC451
T54504-1	C0010070.D	1	06/18/10	RR	n/a	n/a	VC451

The QC reported here applies to the following samples:

Method: SW846 8260B

T54504-1, T54504-2, T54504-3, T54504-4, T54504-5, T54504-6, T54504-7, T54504-8, T54504-9, T54504-10, T54504-14

CAS No.	Compound	T54504-1 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	25	24.4	98	23.8	95	2	76-118/16
100-41-4	Ethylbenzene	ND	25	22.4	90	21.6	86	4	75-112/12
108-88-3	Toluene	ND	25	23.2	93	22.5	90	3	77-114/12
1330-20-7	Xylene (total)	ND	75	67.0	89	64.5	86	4	75-111/12
	m,p-Xylene	ND	50	45.1	90	43.4	87	4	75-112/12
95-47-6	o-Xylene	ND	25	22.0	88	21.1	84	4	74-110/11

CAS No.	Surrogate Recoveries	MS	MSD	T54504-1	Limits
1868-53-7	Dibromofluoromethane	109%	108%	112%	79-122%
17060-07-0	1,2-Dichloroethane-D4	106%	104%	108%	75-121%
2037-26-5	Toluene-D8	104%	103%	105%	87-119%
460-00-4	4-Bromofluorobenzene	90%	89%	88%	80-133%

5.3.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T54504
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T54504-12MS	F026594.D	1	06/21/10	RR	n/a	n/a	VF3896
T54504-12MSD	F026596.D	1	06/21/10	RR	n/a	n/a	VF3896
T54504-12	F026593.D	1	06/21/10	RR	n/a	n/a	VF3896

The QC reported here applies to the following samples:

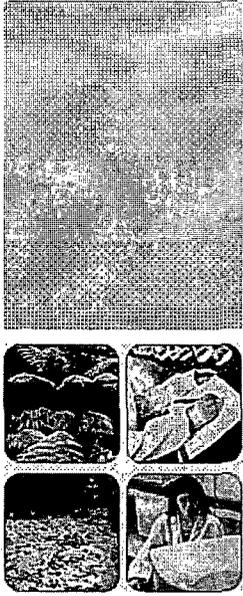
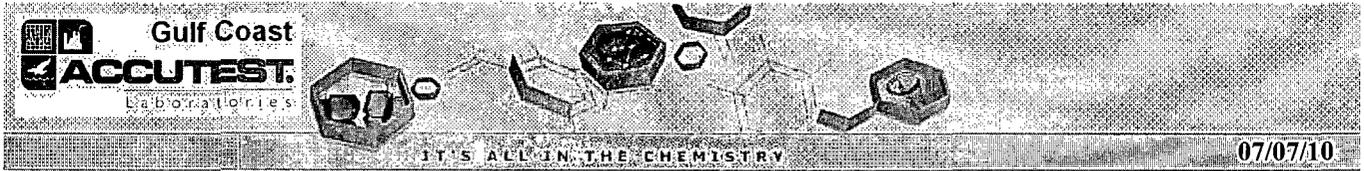
Method: SW846 8260B

T54504-10, T54504-11, T54504-12, T54504-13

CAS No.	Compound	T54504-12		MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q						
71-43-2	Benzene	ND	25	19.9	80	19.2	77	4	76-118/16
100-41-4	Ethylbenzene	ND	25	19.9	80	19.2	77	4	75-112/12
108-88-3	Toluene	ND	25	20.0	80	19.5	78	3	77-114/12
1330-20-7	Xylene (total)	ND	75	60.9	81	58.8	78	4	75-111/12
	m,p-Xylene	ND	50	40.5	81	39.1	78	4	75-112/12
95-47-6	o-Xylene	ND	25	20.4	82	19.7	79	3	74-110/11

CAS No.	Surrogate Recoveries	MS	MSD	T54504-12	Limits
1868-53-7	Dibromofluoromethane	83%	82%	84%	79-122%
17060-07-0	1,2-Dichloroethane-D4	82%	81%	81%	75-121%
2037-26-5	Toluene-D8	89%	90%	91%	87-119%
460-00-4	4-Bromofluorobenzene	108%	106%	111%	80-133%

5.3.2
5



Technical Report for

EL PASO CORPORATION
MWHCODE: San Juan River Basin Program
Jaquez Site
Accutest Job Number: T54517
Sampling Date: 06/11/10

Report to:

MWH
jed.smith@mwhglobal.com
ATTN: Jed Smith

Total number of pages in report: 35



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Paul K Canevaro
Paul Canevaro
Laboratory Director

Client Service contact: Georgia Jones 713-271-4700

Certifications: TX (T104704220-09C-TX) AR (88-0756) FL (E87628) KS (E-10366) LA (85695/04004) OK (9103) UT(7132714700)

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Sample Summary

EL PASO CORPORATION

Job No: T54517

MWHCODE: San Juan River Basin Program
Project No: Jaquez Site

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T54517-1	06/11/10	10:28 JL	06/15/10	SO	Soil	SB-3-5
T54517-2	06/11/10	13:12 JL	06/15/10	SO	Soil	SB-9-4
T54517-3	06/11/10	14:05 JL	06/15/10	SO	Soil	SB-11-32
T54517-4	06/11/10	12:11 JL	06/15/10	SO	Soil	SB-6-1

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



2

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: EL PASO CORPORATION

Job No T54517

Site: MWHCODE: San Juan River Basin Program

Report Date 7/7/2010 1:41:46 PM

4 Sample(s) were collected on 06/11/2010 and were received at Accutest on 06/15/2010 properly preserved, at 2.4 Deg. C and intact. These Samples received an Accutest job number of T54517. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix SO	Batch ID: VM1069
-----------	------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T54357-6MS, T54357-6MSD were used as the QC samples indicated.

Matrix SO	Batch ID: VY2544
-----------	------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T54623-4MS, T54623-4MSD were used as the QC samples indicated.

Volatiles by GC By Method SW846 8015

Matrix SO	Batch ID: GEE2855
-----------	-------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T54517-2MS, T54517-2MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8015 M

Matrix SO	Batch ID: OP15183
-----------	-------------------

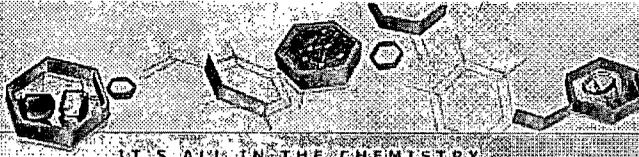
- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Wet Chemistry By Method SM 2540 G

Matrix SO	Batch ID: GN23517
-----------	-------------------

- Sample(s) T54412-8DUP were used as the QC samples for Solids, Percent.

Accutest Laboratories Gulf Coast (ALGC) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALGC and as stated on the COC. ALGC certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALGC Quality Manual except as noted above. This report is to be used in its entirety. ALGC is not responsible for any assumptions of data quality if partial data packages are used



Sample Results

Report of Analysis

Report of Analysis

3.1
3

Client Sample ID: SB 3-5	Date Sampled: 06/11/10
Lab Sample ID: T54517-1	Date Received: 06/15/10
Matrix: SO - Soil	Percent Solids: 87.2
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0040687.D	1	06/18/10	FI	n/a	n/a	VY2544
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.68 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.0	0.71	ug/kg	
108-88-3	Toluene	ND	4.0	0.96	ug/kg	
100-41-4	Ethylbenzene	ND	4.0	0.91	ug/kg	
1330-20-7	Xylene (total)	ND	12	2.1	ug/kg	
95-47-6	o-Xylene	ND	4.0	0.65	ug/kg	
	m,p-Xylene	ND	8.1	1.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	76%		70-121%
2037-26-5	Toluene-D8	78%		76-132%
460-00-4	4-Bromofluorobenzene	91%		73-165%
17060-07-0	1,2-Dichloroethane-D4	57%		57-122%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.1
3

Client Sample ID: SB 3-5	Date Sampled: 06/11/10
Lab Sample ID: T54517-1	Date Received: 06/15/10
Matrix: SO - Soil	Percent Solids: 87.2
Method: SW846 8015	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE055801.D	1	06/17/10	LB	n/a	n/a	GEE2855
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.81 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.7	0.34	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	108%		46-127%		
98-08-8	aaa-Trifluorotoluene	89%		44-120%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB 3-5	
Lab Sample ID: T54517-1	Date Sampled: 06/11/10
Matrix: SO - Soil	Date Received: 06/15/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 87.2
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF199058.D	1	06/29/10	EM	06/19/10	OP15183	GIF1044
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	3.8	3.1	mg/kg	
	TPH (> C28-C40)	ND	3.8	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	60%		33-115%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

3.1 3

Report of Analysis

3.2
3

Client Sample ID:	SB 9-4	Date Sampled:	06/11/10
Lab Sample ID:	T54517-2	Date Received:	06/15/10
Matrix:	SO - Soil	Percent Solids:	82.2
Method:	SW846 8260B		
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0026382.D	1	06/16/10	FI	n/a	n/a	VM1069
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.22 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.7	0.81	ug/kg	
108-88-3	Toluene	ND	4.7	1.1	ug/kg	
100-41-4	Ethylbenzene	ND	4.7	1.1	ug/kg	
1330-20-7	Xylene (total)	ND	14	2.4	ug/kg	
95-47-6	o-Xylene	ND	4.7	0.75	ug/kg	
	m,p-Xylene	ND	9.3	1.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		70-121%
2037-26-5	Toluene-D8	105%		76-132%
460-00-4	4-Bromofluorobenzene	114%		73-165%
17060-07-0	1,2-Dichloroethane-D4	94%		57-122%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB 9-4	Date Sampled: 06/11/10
Lab Sample ID: T54517-2	Date Received: 06/15/10
Matrix: SO - Soil	Percent Solids: 82.2
Method: SW846 8015	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE055802.D	1	06/17/10	LB	n/a	n/a	GEE2855
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.24 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.9	0.41	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	107%		46-127%
98-08-8	aaa-Trifluorotoluene	90%		44-120%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

3.2
 3

Report of Analysis

3.2
3

Client Sample ID:	SB 9-4	Date Sampled:	06/11/10
Lab Sample ID:	T54517-2	Date Received:	06/15/10
Matrix:	SO - Soil	Percent Solids:	82.2
Method:	SW846 8015 M SW846 3550B		
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF199059.D	1	06/29/10	EM	06/19/10	OP15183	GIB1044
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	4.0	3.3	mg/kg	
	TPH (>C28-C40)	ND	4.0	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	50%		33-115%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB 11-32	Date Sampled: 06/11/10
Lab Sample ID: T54517-3	Date Received: 06/15/10
Matrix: SO - Soil	Percent Solids: 80.4
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0026383.D	1	06/16/10	FI	n/a	n/a	VM1069
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.02 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	0.87	ug/kg	
108-88-3	Toluene	ND	5.0	1.2	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.1	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.6	ug/kg	
95-47-6	o-Xylene	ND	5.0	0.79	ug/kg	
	m,p-Xylene	ND	9.9	1.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		70-121%
2037-26-5	Toluene-D8	99%		76-132%
460-00-4	4-Bromofluorobenzene	124%		73-165%
17060-07-0	1,2-Dichloroethane-D4	98%		57-122%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.3
3

Client Sample ID:	SB 11-32	Date Sampled:	06/11/10
Lab Sample ID:	T54517-3	Date Received:	06/15/10
Matrix:	SO - Soil	Percent Solids:	80.4
Method:	SW846 8015		
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE055803.D	1	06/17/10	LB	n/a	n/a	GEE2855
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.28 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	7.1	0.43	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	107%		46-127%		
98-08-8	aaa-Trifluorotoluene	88%		44-120%		

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB 11-32	Date Sampled: 06/11/10
Lab Sample ID: T54517-3	Date Received: 06/15/10
Matrix: SO - Soil	Percent Solids: 80.4
Method: SW846 8015 M SW846 3550B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF199060.D	1	06/29/10	EM	06/19/10	OP15183	GIF1044
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	9:06	4.1	3.4	mg/kg	
	TPH (> C28-C40)	9:05	4.1	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	57%		33-115%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

33
3

Report of Analysis



Client Sample ID:	SB 6-1	Date Sampled:	06/11/10
Lab Sample ID:	T54517-4	Date Received:	06/15/10
Matrix:	SO - Soil	Percent Solids:	91.9
Method:	SW846 8260B		
Project:	MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0026384.D	1	06/16/10	FI	n/a	n/a	VM1069
Run #2							

	Initial Weight	Final Volume
Run #1	5.53 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	3.9	0.69	ug/kg	
108-88-3	Toluene	ND	3.9	0.93	ug/kg	
100-41-4	Ethylbenzene	ND	3.9	0.89	ug/kg	
1330-20-7	Xylene (total)	ND	12	2.1	ug/kg	
95-47-6	o-Xylene	ND	3.9	0.63	ug/kg	
	m,p-Xylene	ND	7.9	1.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		70-121%
2037-26-5	Toluene-D8	106%		76-132%
460-00-4	4-Bromofluorobenzene	117%		73-165%
17060-07-0	1,2-Dichloroethane-D4	101%		57-122%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.4

3

Client Sample ID: SB 6-1	Date Sampled: 06/11/10
Lab Sample ID: T54517-4	Date Received: 06/15/10
Matrix: SO - Soil	Percent Solids: 91.9
Method: SW846 8015	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE055804.D	1	06/17/10	LB	n/a	n/a	GEE2855
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.35 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.5	0.33	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	109%		46-127%		
98-08-8	aaa-Trifluorotoluene	90%		44-120%		

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis



Client Sample ID:	SB 6-1	Date Sampled:	06/11/10
Lab Sample ID:	T54517-4	Date Received:	06/15/10
Matrix:	SO - Soil	Percent Solids:	91.9
Method:	SW846 8015 M SW846 3550B		
Project:	MWHCODE: San Juan River Basin Program		

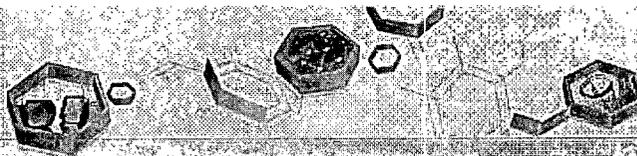
Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF199061.D	1	06/29/10	EM	06/19/10	OP15183	GIB1044
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	8:60	3.6	2.9	mg/kg	
	TPH (>C28-C40)	7:08	3.6	2.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	65%		33-115%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SAMPLE INSPECTION FORM

Accutest Job Number: T54517 Client: MWH Date/Time Received: 6-15-10 1300

of Coolers Received: 1 Thermometer #: FR-1 Temperature Adjustment Factor: +0.4°C

Cooler Temps: #1: 2.4°C #2: _____ #3: _____ #4: _____ #5: _____ #6: _____ #7: _____ #8: _____

Method of Delivery: FEDEX UPS Accutest Courier Greyhound Delivery Other

Airbill Numbers: 8689 3277 5587

COOLER INFORMATION

- Custody seal missing or not intact
- Temperature criteria not met
- Wet ice received in cooler

CHAIN OF CUSTODY

- Chain of Custody not received
- Sample D/T unclear or missing
- Analyses unclear or missing
- COC not properly executed

SAMPLE INFORMATION

- Sample containers received broken
- VOC vials have headspace
- Sample labels missing or illegible
- ID on COC does not match label(s)
- D/T on COC does not match label(s)
- Sample/Bottles rcvd but no analysis on COC
- Sample listed on COC, but not received
- Bottles missing for requested analysis
- Insufficient volume for analysis
- Sample received improperly preserved

TRIP-BLANK INFORMATION

- Trip Blank on COC but not received
- Trip Blank received but not on COC
- Trip Blank not intact
- Received Water Trip Blank
- Received Soil TB

Number of Encores? _____
 Number of 5035 kits? _____
 Number of lab-filtered metals? _____

Summary of Discrepancies:

TECHNICIAN SIGNATURE/DATE: Daniel Ruddlester 6-15-10
 INFORMATION AND SAMPLE LABELING VERIFIED BY: [Signature] 6/15/10

CORRECTIVE ACTIONS

Client Representative Notified: _____ Date: _____

By Accutest Representative: _____ Via: Phone Email

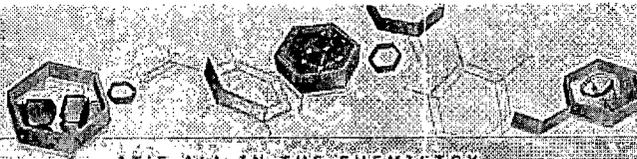
Client Instructions:

14200walkertformcompletionstatement

T54517: Chain of Custody

Page 2 of 3

4.1
4



GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: T54517
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1069-MB	M0026370.D 1		06/16/10	FI	n/a	n/a	VM1069

The QC reported here applies to the following samples:

Method: SW846 8260B

T54517-2, T54517-3, T54517-4

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.0	0.70	ug/kg	
100-41-4	Ethylbenzene	ND	4.0	0.90	ug/kg	
108-88-3	Toluene	ND	4.0	0.95	ug/kg	
1330-20-7	Xylene (total)	ND	12	2.1	ug/kg	
	m,p-Xylene	ND	8.0	1.5	ug/kg	
95-47-6	o-Xylene	ND	4.0	0.64	ug/kg	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	103% 70-121%
2037-26-5	Toluene-D8	106% 76-132%
460-00-4	4-Bromofluorobenzene	111% 73-165%
17060-07-0	1,2-Dichloroethane-D4	98% 57-122%

5.1.1
5

Method Blank Summary

Job Number: T54517
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY2544-MB	Y0040677.D 1		06/18/10	FI	n/a	n/a	VY2544

The QC reported here applies to the following samples:

Method: SW846 8260B

T54517-1

CAS No.	Compound	Result	RL	MDL	Units	Q.
71-43-2	Benzene	ND	4.0	0.70	ug/kg	
100-41-4	Ethylbenzene	ND	4.0	0.90	ug/kg	
108-88-3	Toluene	ND	4.0	0.95	ug/kg	
1330-20-7	Xylene (total)	ND	12	2.1	ug/kg	
	m,p-Xylene	ND	8.0	1.5	ug/kg	
95-47-6	o-Xylene	ND	4.0	0.64	ug/kg	

CAS No.	Surrogate Recoveries	Results	Limits
1868-53-7	Dibromofluoromethane	79%	70-121%
2037-26-5	Toluene-D8	81%	76-132%
460-00-4	4-Bromofluorobenzene	90%	73-165%
17060-07-0	1,2-Dichloroethane-D4	59%	57-122%

5.12
5

Blank Spike Summary

Job Number: T54517
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1069-BS	M0026368.D 1		06/16/10	FI	n/a	n/a	VM1069

The QC reported here applies to the following samples:

Method: SW846 8260B

T54517-2, T54517-3, T54517-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	46.3	93	70-114
100-41-4	Ethylbenzene	50	42.6	85	60-119
108-88-3	Toluene	50	42.5	85	68-115
1330-20-7	Xylene (total)	150	121	81	61-115
	m,p-Xylene	100	80.7	81	60-115
95-47-6	o-Xylene	50	40.5	81	63-114

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	108%	70-121%
2037-26-5	Toluene-D8	106%	76-132%
460-00-4	4-Bromofluorobenzene	116%	73-165%
17060-07-0	1,2-Dichloroethane-D4	97%	57-122%

5.2.1
5

Blank Spike Summary

Job Number: T54517
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY2544-BS	Y0040675.D 1		06/18/10	FI	n/a	n/a	VY2544

The QC reported here applies to the following samples:

Method: SW846 8260B

T54517-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	37.5	75	70-114
100-41-4	Ethylbenzene	50	36.8	74	60-119
108-88-3	Toluene	50	36.0	72	68-115
1330-20-7	Xylene (total)	150	115	77	61-115
	m,p-Xylene	100	76.4	76	60-115
95-47-6	o-Xylene	50	38.7	77	63-114

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	79%	70-121%
2037-26-5	Toluene-D8	87%	76-132%
460-00-4	4-Bromofluorobenzene	97%	73-165%
17060-07-0	1,2-Dichloroethane-D4	62%	57-122%

5.2.2
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T54517
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T54357-6MS	M0026377.D 1		06/16/10	FI	n/a	n/a	VM1069
T54357-6MSD	M0026378.D 1		06/16/10	FI	n/a	n/a	VM1069
T54357-6	M0026376.D 1		06/16/10	FI	n/a	n/a	VM1069

The QC reported here applies to the following samples:

Method: SW846 8260B

T54517-2, T54517-3, T54517-4

CAS No.	Compound	T54357-6 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	4.0 U		57.1	56.3	99	48.7	94	14	70-114/38
100-41-4	Ethylbenzene	4.0 U		57.1	51.8	91	45.0	87	14	60-119/40
108-88-3	Toluene	4.0 U		57.1	52.3	92	45.2	87	15	68-115/38
1330-20-7	Xylene (total)	12 U		171	148	86	127	82	15	61-115/39
	m,p-Xylene	8.1 U		114	99.1	87	84.8	82	16	60-115/40
95-47-6	o-Xylene	4.0 U		57.1	48.6	85	42.3	82	14	63-114/37

CAS No.	Surrogate Recoveries	MS	MSD	T54357-6	Limits
1868-53-7	Dibromofluoromethane	104%	103%	111%	70-121%
2037-26-5	Toluene-D8	107%	106%	99%	76-132%
460-00-4	4-Bromofluorobenzene	116%	115%	109%	73-165%
17060-07-0	1,2-Dichloroethane-D4	94%	92%	106%	57-122%

5.3.1

5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T54517
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T54623-4MS	Y0040679.D	1	06/18/10	FI	n/a	n/a	VY2544
T54623-4MSD	Y0040680.D	1	06/18/10	FI	n/a	n/a	VY2544
T54623-4	Y0040678.D	1	06/18/10	FI	n/a	n/a	VY2544

The QC reported here applies to the following samples:

Method: SW846 8260B

T54517-1

CAS No.	Compound	T54623-4 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	150 U		1830	1500	82	1490	81	1	70-114/38
100-41-4	Ethylbenzene	150 U		1830	1410	77	1410	77	0	60-119/40
108-88-3	Toluene	150 U		1830	1390	76	1390	76	0	68-115/38
1330-20-7	Xylene (total)	440 U		5490	4450	81	4450	81	0	61-115/39
	m,p-Xylene	290 U		3660	2940	80	2940	80	0	60-115/40
95-47-6	o-Xylene	150 U		1830	1510	82	1510	82	0	63-114/37

CAS No.	Surrogate Recoveries	MS	MSD	T54623-4	Limits
1868-53-7	Dibromofluoromethane	80%	80%	81%	70-121%
2037-26-5	Toluene-D8	79%	80%	82%	76-132%
460-00-4	4-Bromofluorobenzene	91%	87%	89%	73-165%
17060-07-0	1,2-Dichloroethane-D4	61%	60%	60%	57-122%

5.32
5



GC Volatiles

6

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: T54517
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE2855-MB	EE055800.D 1		06/17/10	LB	n/a	n/a	GEE2855

The QC reported here applies to the following samples:

Method: SW846 8015

T54517-1, T54517-2, T54517-3, T54517-4

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	0.30	mg/kg	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	108%	46-127%
98-08-8	aaa-Trifluorotoluene	89%	44-120%

6.1.1

6

Blank Spike Summary

Job Number: T54517
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE2855-BS	EE055797.D 1		06/17/10	LB	n/a	n/a	GEE2855

The QC reported here applies to the following samples:

Method: SW846 8015

T54517-1, T54517-2, T54517-3, T54517-4

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.345	86	78-115

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	111%	46-127%
98-08-8	aaa-Trifluorotoluene	96%	44-120%

6.2.1

6

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T54517
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T54517-2MS	EE055805.D	1	06/17/10	LB	n/a	n/a	GEE2855
T54517-2MSD	EE055806.D	1	06/17/10	LB	n/a	n/a	GEE2855
T54517-2	EE055802.D	1	06/17/10	LB	n/a	n/a	GEE2855

The QC reported here applies to the following samples:

Method: SW846 8015

T54517-1, T54517-2, T54517-3, T54517-4

CAS No.	Compound	T54517-2 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	27.5	23.4	85%	24.1	87%	3	78-115/14

CAS No.	Surrogate Recoveries	MS	MSD	T54517-2	Limits
460-00-4	4-Bromofluorobenzene	115%	114%	107%	46-127%
98-08-8	aaa-Trifluorotoluene	86%	92%	90%	44-120%

6.3.1
6



GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: T54517
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15183-MB	IF199055.D	1	06/29/10	EM	06/19/10	OP15183	GIB1044

The QC reported here applies to the following samples:

Method: SW846 8015 M

T54517-1, T54517-2, T54517-3, T54517-4

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	3.3	2.7	mg/kg	
	TPH (>C28-C40)	ND	3.3	2.2	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	55% 33-115%

7.1.1
7

Blank Spike/Blank Spike Duplicate Summary

Job Number: T54517
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15183-BS	IF199056.D	1	06/29/10	EM	06/19/10	OP15183	GIF1044
OP15183-BSD	IF199057.D	1	06/29/10	EM	06/19/10	OP15183	GIB1044

The QC reported here applies to the following samples:

Method: SW846 8015 M

T54517-1, T54517-2, T54517-3, T54517-4

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	33	16.4	50	14.9	45	10	45-107/30

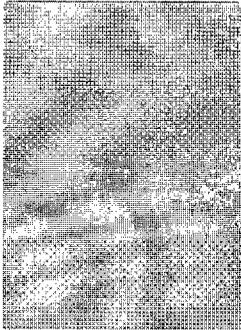
CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	56%	55%	33-115%

7.2.1





09/13/10



Technical Report for

EL PASO CORPORATION

MWHCODE: San Juan River Basin Program

Jaquez Site

Accutest Job Number: T58817

Sampling Date: 08/26/10

Report to:

MWH

jed.smith@mwhglobal.com

ATTN: Jed Smith

Total number of pages in report: 85



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Paul K Canevaro

**Paul Canevaro
Laboratory Director**

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Test results relate only to samples analyzed.

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Sample Summary

EL PASO CORPORATION

Job No: T58817

MWHCODE: San Juan River Basin Program
 Project No: Jaquez Site

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T58817-1	08/26/10	09:45 DH	08/27/10	SO	Soil	GP-7-15'-16'
T58817-2	08/26/10	09:10 DH	08/27/10	SO	Soil	GP-7-8'-9'
T58817-3	08/26/10	09:25 DH	08/27/10	SO	Soil	GP-7-14'-16'
T58817-4	08/26/10	13:10 DH	08/27/10	SO	Soil	GP-8-9'-10'
T58817-5	08/26/10	14:30 DH	08/27/10	SO	Soil	GP-8-12'-13'
T58817-6	08/26/10	15:00 DH	08/27/10	SO	Soil	GP-8-17'-18'
T58817-7	08/26/10	12:40 DH	08/27/10	SO	Soil	GP-4-8'-9'
T58817-8	08/26/10	13:20 DH	08/27/10	SO	Soil	GP-4-16'-17'
T58817-9	08/26/10	10:25 DH	08/27/10	SO	Soil	GP-4-13'-14'
T58817-10	08/26/10	08:10 DH	08/27/10	SO	Soil	GP-3-15'-16'
T58817-11	08/26/10	08:00 DH	08/27/10	SO	Soil	GP-3-14'-15'
T58817-12	08/26/10	16:00 DH	08/27/10	SO	Soil	GP-2-11'-12'
T58817-13	08/26/10	16:10 DH	08/27/10	SO	Soil	GP-2-(0-5')

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

EL PASO CORPORATION

Job No: T58817

MWHCODE: San Juan River Basin Program
Project No: Jaquez Site

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
T58817-14	08/26/10	07:00 DH	08/27/10	SO Trip Blank Soil	260810TB02

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: EL PASO CORPORATION

Job No T58817

Site: MWHCODE: San Juan River Basin Program

Report Date 9/8/2010 8:11:06 AM

13 Sample(s), 1 Trip Blank(s) were collected on 08/26/2010 and were received at Accutest on 08/27/2010 properly preserved, at 5.4 Deg. C and intact. These Samples received an Accutest job number of T58817. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix SO	Batch ID: VY2593
-----------	------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T58706-1MS, T58706-1MSD were used as the QC samples indicated.
- RPD(s) for MSD for o-Xylene, Toluene are outside control limits for sample T58706-1MSD. Probable cause due to sample homogeneity.
- T58817-11 for Toluene-D8: Outside control limits due to matrix interference. Confirmed by reanalysis.
- T58817-11 for 4-Bromofluorobenzene: Outside control limits due to matrix interference. Confirmed by reanalysis.
- T58817-11 for 1,2-Dichloroethane-D4: Outside control limits due to matrix interference. Confirmed by reanalysis.
- T58817-8 for 4-Bromofluorobenzene: Outside control limits due to matrix interference. Confirmed by reanalysis.

Matrix SO	Batch ID: VY2594
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- All samples were analyzed within the recommended method holding time.
- Sample(s) T58817-13MS, T58817-13MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for m,p-Xylene, Xylene (total) are outside control limits. Probable cause due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for m,p-Xylene are outside control limits. Probable cause due to matrix interference.
- RPD(s) for MSD for m,p-Xylene are outside control limits for sample T58817-13MSD. Probable cause due to sample homogeneity.

Matrix SO	Batch ID: VY2595
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- All samples were analyzed within the recommended method holding time.
- Sample(s) T58706-10MS, T58706-10MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Toluene are outside control limits. Probable cause due to matrix interference.
- T58706-10MS for Toluene-D8: Outside control limits due to matrix interference. Confirmed by MS/MSD.

Volatiles by GC By Method SW846 8015

Matrix AQ	Batch ID: GHH53
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- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Matrix SO	Batch ID: GBB100
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- All samples were analyzed within the recommended method holding time.
- Sample(s) T59027-1MS, T59027-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- T58817-13: Confirmation run for surrogate recoveries.

Matrix SO	Batch ID: GBB96
------------------	------------------------

- All samples were analyzed within the recommended method holding time.
- Sample(s) T58836-4MS, T58836-4MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- T58817-13 for 4-Bromofluorobenzene: Outside control limits due to matrix interference. Confirmed by reanalysis.
- T58817-10 for 4-Bromofluorobenzene: Outside control limits due to matrix interference. Confirmed by reanalysis.
- T58817-5 for 4-Bromofluorobenzene: Outside control limits due to matrix interference. Confirmed by reanalysis.
- T58817-13 for aaa-Trifluorotoluene: Outside control limits due to matrix interference. Confirmed by reanalysis.
- T58817-10 for aaa-Trifluorotoluene: Outside control limits due to matrix interference. Confirmed by reanalysis.

Matrix SO	Batch ID: GBB97
------------------	------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T58817-1MS, T58817-1MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for TPH-GRO (C6-C10) are outside control limits. Probable cause due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for TPH-GRO (C6-C10) are outside control limits. Probable cause due to matrix interference.

Matrix SO	Batch ID: GBB99
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- All samples were analyzed within the recommended method holding time.
- Sample(s) T58920-5AMS, T58920-5AMSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix SO	Batch ID: GHH53
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- Sample(s) T59026-4MS, T59026-4MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8015 M

Matrix SO	Batch ID: OP15844
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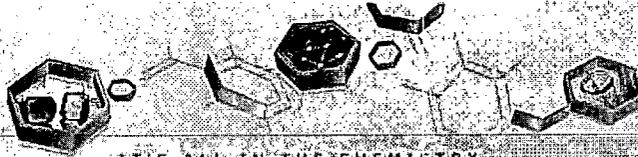
- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) T58817-7MS, T58817-7MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- T58817-5 for o-Terphenyl: Outside control limits due to dilution.
- T58817-9 for o-Terphenyl: Outside control limits due to dilution.

Wet Chemistry By Method SM 2540 G

Matrix SO	Batch ID: GN25049
------------------	--------------------------

- Sample(s) T58817-1DUP were used as the QC samples for Solids, Percent.

Accutest Laboratories Gulf Coast (ALGC) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALGC and as stated on the COC. ALGC certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALGC Quality Manual except as noted above. This report is to be used in its entirety. ALGC is not responsible for any assumptions of data quality if partial data packages are used



Sample Results

Report of Analysis

Report of Analysis

3.1
3

Client Sample ID: GP-7-15'-16'	Date Sampled: 08/26/10
Lab Sample ID: T58817-1	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 83.2
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0041718.D	1	08/30/10	FI	n/a	n/a	VY2593
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.22 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	2.8	4.6	0.80	ug/kg	J
108-88-3	Toluene	ND	4.6	1.1	ug/kg	
100-41-4	Ethylbenzene	ND	4.6	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	14	2.4	ug/kg	
	m,p-Xylene	ND	9.2	1.7	ug/kg	
95-47-6	o-Xylene	ND	4.6	0.74	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	88%		70-121%
2037-26-5	Toluene-D8	90%		76-132%
460-00-4	4-Bromofluorobenzene	103%		73-165%
17060-07-0	1,2-Dichloroethane-D4	74%		57-122%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.1
3

Client Sample ID: GP-7-15'-16'	Date Sampled: 08/26/10
Lab Sample ID: T58817-1	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 83.2
Method: SW846 8015	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0001640.D	1	08/30/10	AT	n/a	n/a	GBB97
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.57 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	3.25	6.4	0.38	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%		46-127%
98-08-8	aaa-Trifluorotoluene	106%		44-120%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: GP-7-15'-16'	Date Sampled: 08/26/10
Lab Sample ID: T58817-1	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 83.2
Method: SW846 8015 M SW846 3550B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF201032.D	1	09/04/10	HD	08/30/10	OP15844	GIB1088
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	18:1	4.0	3.3	mg/kg	
	TPH (> C28-C40)	13:4	4.0	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	85%		33-115%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

32
3

Client Sample ID: GP-7 8'-9'	Date Sampled: 08/26/10
Lab Sample ID: T58817-2	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 82.4
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	Y0041742.D	1	08/31/10	FI	n/a	n/a	VY2594
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.11 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	280	49	ug/kg	
108-88-3	Toluene	ND	280	66	ug/kg	
100-41-4	Ethylbenzene	ND	280	63	ug/kg	
1330-20-7	Xylene (total)	ND	840	150	ug/kg	
	m,p-Xylene	ND	560	100	ug/kg	
95-47-6	o-Xylene	ND	280	45	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	88%		70-121%
2037-26-5	Toluene-D8	93%		76-132%
460-00-4	4-Bromofluorobenzene	117%		73-165%
17060-07-0	1,2-Dichloroethane-D4	74%		57-122%

(a) Dilution required due to matrix interference.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

32
3

Client Sample ID: GP-7 8'-9'	Date Sampled: 08/26/10
Lab Sample ID: T58817-2	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 82.4
Method: SW846 8015 M SW846 3550B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF201033.D	1	09/04/10	HD	08/30/10	OP15844	GIF1088
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.6 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	61.3	4.0	3.3	mg/kg	
	TPH (> C28-C40)	28.7	4.0	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	77%		33-115%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.3
3

Client Sample ID: GP-7 14'-16'	Date Sampled: 08/26/10
Lab Sample ID: T58817-3	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 73.0
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0041719.D	1	08/30/10	FI	n/a	n/a	VY2593
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.91 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.6	0.81	ug/kg	
108-88-3	Toluene	ND	4.6	1.1	ug/kg	
100-41-4	Ethylbenzene	3.6	4.6	1.0	ug/kg	J
1330-20-7	Xylene (total)	20.5	14	2.4	ug/kg	
	m,p-Xylene	16.8	9.3	1.7	ug/kg	
95-47-6	o-Xylene	3.6	4.6	0.74	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	86%		70-121%
2037-26-5	Toluene-D8	96%		76-132%
460-00-4	4-Bromofluorobenzene	82%		73-165%
17060-07-0	1,2-Dichloroethane-D4	73%		57-122%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

33
3

Client Sample ID: GP-7 14'-16'	Date Sampled: 08/26/10
Lab Sample ID: T58817-3	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 73.0
Method: SW846 8015	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0001692.D	5	09/01/10	AT	n/a	n/a	GBB100
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.09 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	143	43	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	72%		46-127%
98-08-8	aaa-Trifluorotoluene	109%		44-120%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

33


Client Sample ID: GP-7 14'-16'	Date Sampled: 08/26/10
Lab Sample ID: T58817-3	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 73.0
Method: SW846 8015 M SW846 3550B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF201034.D	1	09/04/10	HD	08/30/10	OP15844	GIB1088
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	85:8	4.5	3.7	mg/kg	
	TPH (> C28-C40)	25:6	4.5	3.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	78%		33-115%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

3.4
3

Client Sample ID: GP-8 9'-10'	Date Sampled: 08/26/10
Lab Sample ID: T58817-4	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 76.8
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0041774.D	1	08/31/10	FI	n/a	n/a	VY2595
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.53 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.7	0.82	ug/kg	
108-88-3	Toluene	ND	4.7	1.1	ug/kg	
100-41-4	Ethylbenzene	ND	4.7	1.1	ug/kg	
1330-20-7	Xylene (total)	6:1	14	2.5	ug/kg	J
	m,p-Xylene	5:0	9.4	1.7	ug/kg	J
95-47-6	o-Xylene	1:1	4.7	0.75	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%		70-121%
2037-26-5	Toluene-D8	101%		76-132%
460-00-4	4-Bromofluorobenzene	122%		73-165%
17060-07-0	1,2-Dichloroethane-D4	75%		57-122%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.4
3

Client Sample ID:	GP-8 9'-10'	Date Sampled:	08/26/10
Lab Sample ID:	T58817-4	Date Received:	08/27/10
Matrix:	SO - Soil	Percent Solids:	76.8
Method:	SW846 8015		
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0001669.D	1	08/31/10	AT	n/a	n/a	GBB99
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.36 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	3.88	7.6	0.46	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%		46-127%
98-08-8	aaa-Trifluorotoluene	104%		44-120%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

34
3

Client Sample ID: GP-8 9'-10'	
Lab Sample ID: T58817-4	Date Sampled: 08/26/10
Matrix: SO - Soil	Date Received: 08/27/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 76.8
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF201035.D	1	09/04/10	HD	08/30/10	OP15844	GIF1088
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	196	4.3	3.5	mg/kg	
	TPH (> C28-C40)	120	4.3	2.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	82%		33-115%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

3.5
3

Client Sample ID:	GP-8 12'-13'	Date Sampled:	08/26/10
Lab Sample ID:	T58817-5	Date Received:	08/27/10
Matrix:	SO - Soil	Percent Solids:	76.0
Method:	SW846 8260B		
Project:	MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	Y0041744.D	1	08/31/10	FI	n/a	n/a	VY2594
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.26 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	310	55	ug/kg	
108-88-3	Toluene	ND	310	74	ug/kg	
100-41-4	Ethylbenzene	ND	310	71	ug/kg	
1330-20-7	Xylene (total)	1300	940	160	ug/kg	
	m,p-Xylene	1300	630	110	ug/kg	
95-47-6	o-Xylene	ND	310	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	88%		70-121%
2037-26-5	Toluene-D8	90%		76-132%
460-00-4	4-Bromofluorobenzene	139%		73-165%
17060-07-0	1,2-Dichloroethane-D4	72%		57-122%

(a) Dilution required due to matrix interference.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.5
3

Client Sample ID: GP-8 12'-13'	Date Sampled: 08/26/10
Lab Sample ID: T58817-5	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 76.0
Method: SW846 8015	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0001635.D	10	08/30/10	AT	n/a	n/a	GBB96
Run #2 ^a	BB0001693.D	10	09/01/10	AT	n/a	n/a	GBB100

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.26 g	5.0 ml	100 ul
Run #2	5.26 g	5.0 ml	100 ul

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	806	78	4.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	170% ^b	194% ^b	46-127%
98-08-8	aaa-Trifluorotoluene	119%	127% ^b	44-120%

- (a) Confirmation run for surrogate recoveries.
- (b) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

3.5


Client Sample ID: GP-8 12'-13'	Date Sampled: 08/26/10
Lab Sample ID: T58817-5	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 76.0
Method: SW846 8015 M SW846 3550B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF201036.D	10	09/04/10	HD	08/30/10	OP15844	GIB1088
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	498	43	36	mg/kg	
	TPH (>C28-C40)	85.8	43	29	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	0% ^a		33-115%

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.6
3

Client Sample ID: GP-8 17'-18'	Date Sampled: 08/26/10
Lab Sample ID: T58817-6	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 84.5
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0041720.D	1	08/30/10	FI	n/a	n/a	VY2593
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.73 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.1	0.72	ug/kg	
108-88-3	Toluene	ND	4.1	0.98	ug/kg	
100-41-4	Ethylbenzene	ND	4.1	0.93	ug/kg	
1330-20-7	Xylene (total)	ND	12	2.2	ug/kg	
	m,p-Xylene	ND	8.3	1.5	ug/kg	
95-47-6	o-Xylene	ND	4.1	0.66	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	85%		70-121%
2037-26-5	Toluene-D8	95%		76-132%
460-00-4	4-Bromofluorobenzene	125%		73-165%
17060-07-0	1,2-Dichloroethane-D4	71%		57-122%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.6

Client Sample ID:	GP-8 17'-18'	Date Sampled:	08/26/10
Lab Sample ID:	T58817-6	Date Received:	08/27/10
Matrix:	SO - Soil	Percent Solids:	84.5
Method:	SW846 8015		
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0001670.D	1	08/31/10	AT	n/a	n/a	GBB99
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.45 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	7.74	6.3	0.38	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	100%		46-127%		
98-08-8	aaa-Trifluorotoluene	101%		44-120%		

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: GP-8 17'-18'	Date Sampled: 08/26/10
Lab Sample ID: T58817-6	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 84.5
Method: SW846 8015 M SW846 3550B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF201037.D	1	09/04/10	HD	08/30/10	OP15844	GIF1088
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	137	3.9	3.2	mg/kg	
	TPH (> C28-C40)	102	3.9	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	69%		33-115%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.7
3

Client Sample ID: GP-4 8'-9'	Date Sampled: 08/26/10
Lab Sample ID: T58817-7	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 90.7
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0041721.D	1	08/30/10	FI	n/a	n/a	VY2593
Run #2							

Run #	Initial Weight	Final Volume
Run #1	4.99 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.4	0.77	ug/kg	
108-88-3	Toluene	ND	4.4	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	4.4	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	13	2.3	ug/kg	
	m,p-Xylene	ND	8.8	1.6	ug/kg	
95-47-6	o-Xylene	ND	4.4	0.71	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	84%		70-121%
2037-26-5	Toluene-D8	91%		76-132%
460-00-4	4-Bromofluorobenzene	93%		73-165%
17060-07-0	1,2-Dichloroethane-D4	69%		57-122%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.7
3

Client Sample ID:	GP-4 8'-9'	Date Sampled:	08/26/10
Lab Sample ID:	T58817-7	Date Received:	08/27/10
Matrix:	SO - Soil	Percent Solids:	90.7
Method:	SW846 8015		
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0001625.D	1	08/30/10	AT	n/a	n/a	GBB96
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.20 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.8	0.35	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	90%		46-127%		
98-08-8	aaa-Trifluorotoluene	100%		44-120%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.7
3

Client Sample ID:	GP-4 8'-9'	Date Sampled:	08/26/10
Lab Sample ID:	T58817-7	Date Received:	08/27/10
Matrix:	SO - Soil	Percent Solids:	90.7
Method:	SW846 8015 M SW846 3550B		
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF201038.D	1	09/04/10	HD	08/30/10	OP15844	GIB1088
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	3.6	3.0	mg/kg	
	TPH (> C28-C40)	2.64	3.6	2.4	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	75%		33-115%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

3.8
3

Client Sample ID: GP-4 16'-17'	Date Sampled: 08/26/10
Lab Sample ID: T58817-8	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 79.8
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0041722.D	1	08/30/10	FI	n/a	n/a	VY2593
Run #2	Y0041775.D	1	08/31/10	FI	n/a	n/a	VY2595

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.12 g	5.0 ml	
Run #2	5.24 g	5.0 ml	100 ul

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	36.8	4.1	0.72	ug/kg	
108-88-3	Toluene	ND	4.1	0.97	ug/kg	
100-41-4	Ethylbenzene	68.6	4.1	0.92	ug/kg	
1330-20-7	Xylene (total)	651 ^a	870	150	ug/kg	J
	m,p-Xylene	498 ^a	580	110	ug/kg	J
95-47-6	o-Xylene	151	4.1	0.66	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%	87%	70-121%
2037-26-5	Toluene-D8	98%	96%	76-132%
460-00-4	4-Bromofluorobenzene	1589% ^b	133%	73-165%
17060-07-0	1,2-Dichloroethane-D4	93%	72%	57-122%

(a) Result is from Run# 2

(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.8
3

Client Sample ID: GP-4 16'-17'	Date Sampled: 08/26/10
Lab Sample ID: T58817-8	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 79.8
Method: SW846 8015	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0001674.D	10	08/31/10	AT	n/a	n/a	GBB99
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.24 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	277	72	4.3	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	70%		46-127%		
98-08-8	aaa-Trifluorotoluene	113%		44-120%		

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

38
3

Client Sample ID: GP-4 16'-17'	Date Sampled: 08/26/10
Lab Sample ID: T58817-8	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 79.8
Method: SW846 8015 M SW846 3550B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF201039.D	10	09/04/10	HD	08/30/10	OP15844	GIF1088
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	339	41	34	mg/kg	
	TPH (> C28-C40)	299	41	27	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	82%		33-115%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.9

Client Sample ID:	GP-4 13'-14'	Date Sampled:	08/26/10
Lab Sample ID:	T58817-9	Date Received:	08/27/10
Matrix:	SO - Soil	Percent Solids:	83.6
Method:	SW846 8260B		
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0041745.D	1	08/31/10	FI	n/a	n/a	VY2594
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.69 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	132	250	44	ug/kg	J
108-88-3	Toluene	ND	250	59	ug/kg	
100-41-4	Ethylbenzene	292	250	56	ug/kg	
1330-20-7	Xylene (total)	3460	750	130	ug/kg	
	m,p-Xylene	3320	500	90	ug/kg	
95-47-6	o-Xylene	137	250	40	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	89%		70-121%
2037-26-5	Toluene-D8	91%		76-132%
460-00-4	4-Bromofluorobenzene	144%		73-165%
17060-07-0	1,2-Dichloroethane-D4	79%		57-122%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

39
3

Client Sample ID: GP-4 13'-14'	Date Sampled: 08/26/10
Lab Sample ID: T58817-9	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 83.6
Method: SW846 8015	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0001675.D	40	08/31/10	AT	n/a	n/a	GBB99
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.69 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	1090	250	15	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	63%		46-127%		
98-08-8	aaa-Trifluorotoluene	119%		44-120%		

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	GP-4 13'-14'	Date Sampled:	08/26/10
Lab Sample ID:	T58817-9	Date Received:	08/27/10
Matrix:	SO - Soil	Percent Solids:	83.6
Method:	SW846 8015 M SW846 3550B		
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF201040.D	10	09/04/10	HD	08/30/10	OP15844	GIB1088
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	1110	40	33	mg/kg	
	TPH (>C28-C40)	205	40	26	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	0% ^a		33-115%

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.10
3

Client Sample ID: GP-3 15'-16'	Date Sampled: 08/26/10
Lab Sample ID: T58817-10	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 79.2
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	Y0041746.D	1	08/31/10	FI	n/a	n/a	VY2594
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.25 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	290	51	ug/kg	
108-88-3	Toluene	ND	290	70	ug/kg	
100-41-4	Ethylbenzene	107	290	66	ug/kg	J
1330-20-7	Xylene (total)	475	880	150	ug/kg	J
	m,p-Xylene	393	590	110	ug/kg	J
95-47-6	o-Xylene	82.0	290	47	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	86%		70-121%
2037-26-5	Toluene-D8	90%		76-132%
460-00-4	4-Bromofluorobenzene	124%		73-165%
17060-07-0	1,2-Dichloroethane-D4	77%		57-122%

(a) Dilution required due to matrix interference.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.10
3

Client Sample ID: GP-3 15'-16'	Date Sampled: 08/26/10
Lab Sample ID: T58817-10	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 79.2
Method: SW846 8015 M SW846 3550B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF201041.D	1	09/04/10	HD	08/30/10	OP15844	GIF1088
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	138	4.2	3.5	mg/kg	
	TPH (> C28-C40)	56:7	4.2	2.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	58%		33-115%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.11
3

Client Sample ID: GP-3 14'-15'	Date Sampled: 08/26/10
Lab Sample ID: T58817-11	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 74.3
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0041777.D	1	08/31/10	FI	n/a	n/a	VY2595
Run #2	Y0041723.D	1	08/30/10	FI	n/a	n/a	VY2593

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.05 g	5.0 ml	100 ul
Run #2	3.83 g	5.0 ml	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND ^a	7.0	1.2	ug/kg	
108-88-3	Toluene	25.3 ^a	7.0	1.7	ug/kg	
100-41-4	Ethylbenzene	340	340	76	ug/kg	
1330-20-7	Xylene (total)	13300	1000	180	ug/kg	
	m,p-Xylene	12000	670	120	ug/kg	
95-47-6	o-Xylene	1270	340	54	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%	85%	70-121%
2037-26-5	Toluene-D8	95%	2204% ^b	76-132%
460-00-4	4-Bromofluorobenzene	165%	1470% ^b	73-165%
17060-07-0	1,2-Dichloroethane-D4	74%	304% ^b	57-122%

(a) Result is from Run# 2

(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

3.11
3

Client Sample ID: GP-3 14'-15'	Date Sampled: 08/26/10
Lab Sample ID: T58817-11	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 74.3
Method: SW846 8015	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0001676.D	40	08/31/10	AT	n/a	n/a	GBB99
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.05 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	1090	340	20	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	123%		46-127%		
98-08-8	aaa-Trifluorotoluene	111%		44-120%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	GP-3 14'-15'	Date Sampled:	08/26/10
Lab Sample ID:	T58817-11	Date Received:	08/27/10
Matrix:	SO - Soil	Percent Solids:	74.3
Method:	SW846 8015 M SW846 3550B		
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF201042.D	1	09/04/10	HD	08/30/10	OP15844	GIB1088
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	156	4.4	3.6	mg/kg	
	TPH (> C28-C40)	36.2	4.4	2.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	88%		33-115%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.12

3

Client Sample ID: GP-2 11'-12'	Date Sampled: 08/26/10
Lab Sample ID: T58817-12	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 85.2
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0041776.D	1	08/31/10	FI	n/a	n/a	VY2595
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.30 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	1.6	4.4	0.77	ug/kg	J
108-88-3	Toluene	ND	4.4	1.1	ug/kg	
100-41-4	Ethylbenzene	13.5	4.4	1.0	ug/kg	
1330-20-7	Xylene (total)	258	13	2.3	ug/kg	
	m,p-Xylene	257	8.9	1.6	ug/kg	
95-47-6	o-Xylene	0.82	4.4	0.71	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	82%		70-121%
2037-26-5	Toluene-D8	94%		76-132%
460-00-4	4-Bromofluorobenzene	120%		73-165%
17060-07-0	1,2-Dichloroethane-D4	68%		57-122%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.12



Client Sample ID: GP-2 11'-12'	Date Sampled: 08/26/10
Lab Sample ID: T58817-12	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 85.2
Method: SW846 8015	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0001631.D	1	08/30/10	AT	n/a	n/a	GBB96
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.08 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	8.46	6.6	0.40	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	111%		46-127%		
98-08-8	aaa-Trifluorotoluene	105%		44-120%		

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

3.12
3

Client Sample ID: GP-2 11'-12'	Date Sampled: 08/26/10
Lab Sample ID: T58817-12	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 85.2
Method: SW846 8015-M SW846 3550B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF201043.D	1	09/04/10	HD	08/30/10	OP15844	GIF1088
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	32.6	3.9	3.2	mg/kg	
	TPH (> C28-C40)	19.1	3.9	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	70%		33-115%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.13

Client Sample ID: GP-2 (0-5')	Date Sampled: 08/26/10
Lab Sample ID: T58817-13	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 86.5
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0041735.D	1	08/30/10	FI	n/a	n/a	VY2594
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.61 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.1	0.72	ug/kg	
108-88-3	Toluene	ND	4.1	0.98	ug/kg	
100-41-4	Ethylbenzene	1:5	4.1	0.93	ug/kg	J
1330-20-7	Xylene (total)	41:3	12	2.2	ug/kg	
	m,p-Xylene	41:3	8.2	1.5	ug/kg	
95-47-6	o-Xylene	ND	4.1	0.66	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	85%		70-121%
2037-26-5	Toluene-D8	90%		76-132%
460-00-4	4-Bromofluorobenzene	109%		73-165%
17060-07-0	1,2-Dichloroethane-D4	72%		57-122%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.13
3

Client Sample ID: GP-2 (0-5')	Date Sampled: 08/26/10
Lab Sample ID: T58817-13	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 86.5
Method: SW846 8015	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0001632.D	1	08/30/10	AT	n/a	n/a	GBB96
Run #2 ^a	BB0001689.D	1	09/01/10	AT	n/a	n/a	GBB100

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.20 g	5.0 ml	100 ul
Run #2	5.20 g	5.0 ml	100 ul

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	26.8	6.3	0.38	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	142% ^b	149% ^b	46-127%
98-08-8	aaa-Trifluorotoluene	122% ^b	119%	44-120%

- (a) Confirmation run for surrogate recoveries.
- (b) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.13
3

Client Sample ID: GP-2 (0-5')	Date Sampled: 08/26/10
Lab Sample ID: T58817-13	Date Received: 08/27/10
Matrix: SO - Soil	Percent Solids: 86.5
Method: SW846 8015 M SW846 3550B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF201044.D	1	09/04/10	HD	08/30/10	OP15844	GIB1088
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	3.8	3.1	mg/kg	
	TPH (> C28-C40)	2:90	3.8	2.5	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	78%		33-115%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.14
3

Client Sample ID: 260810TB02	Date Sampled: 08/26/10
Lab Sample ID: T58817-14	Date Received: 08/27/10
Matrix: SO - Trip Blank Soil	Percent Solids: n/a
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0041716.D	1	08/30/10	FI	n/a	n/a	VY2593
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.0	0.70	ug/kg	
108-88-3	Toluene	ND	4.0	0.95	ug/kg	
100-41-4	Ethylbenzene	ND	4.0	0.90	ug/kg	
1330-20-7	Xylene (total)	ND	12	2.1	ug/kg	
	m,p-Xylene	ND	8.0	1.5	ug/kg	
95-47-6	o-Xylene	ND	4.0	0.64	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%		70-121%
2037-26-5	Toluene-D8	93%		76-132%
460-00-4	4-Bromofluorobenzene	92%		73-165%
17060-07-0	1,2-Dichloroethane-D4	78%		57-122%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.14



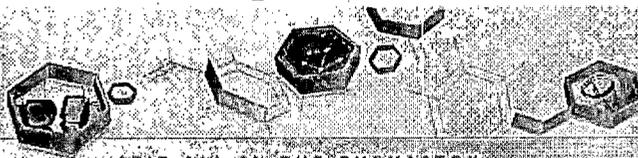
Client Sample ID: 260810TB02	Date Sampled: 08/26/10
Lab Sample ID: T58817-14	Date Received: 08/27/10
Matrix: SO - Trip Blank Soil	Percent Solids: n/a
Method: SW846 8015	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH0001017.D	1	09/01/10	LB	n/a	n/a	GHH53
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.0060	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	88%		46-127%		
98-08-8	aaa-Trifluorotoluene	110%		44-120%		

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

10165 Harwin Dr. Ste 150 Houston, TX 77036
TEL: 713-271-4700 FAX: 713-271-4770
www.accutest.com

FED-EX Tracking # _____ Bottle Order Control # _____
Accutest Quote # _____ Accutest Job # **T58817**

Client / Reporting Information		Project Information				Requested Analyses												Matrix Codes			
Company Name MWH		Project Name Jaquez				8260/TPH/GRO TPH/GRO												DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank			
Street Address 1901 California St. Ste 2900		Billing Information (If different from Report to)																			
City State Zip Denver CO 80202		Company Name																			
Project Contact Jed Smith		Street Address																			
Phone # 303-291-2276		Client Purchase Order #																			
Sampler(s) Name(s) Devin H		Project Manager Ashley Ager																			
Accutest Sample #	Field ID / Point of Collection	Date	Time	Sampled By	Matrix	# of bottles	PH	NRCH	ZNRCH	HRCH	RESCA	NRONE	DR Water	NRCH	NRCH	TPP	NRCH	NRCH	OTHER	LAB USE ONLY	
13	G-P-2	082610	1610	PH	SO	2															X
14	07H260210TB 02	082610	0700	DH	SO	2															X
Turnaround Time (Business days)		Data Deliverable Information				Comments / Special Instructions															
<input type="checkbox"/> Standard <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 4 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day EMERGENCY Emergency & Rush T/A data available VIA Lablink		Approved By (Accutest PM): / Date: _____				<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULL1 (Level 3+4) <input type="checkbox"/> REDT1 (Level 3+4) <input type="checkbox"/> Commercial "C"				<input type="checkbox"/> TRRP <input type="checkbox"/> EDD Format <input type="checkbox"/> Other _____											
Commercial "A" = Results Only Commercial "B" = Results + QC Summary Commercial "C" = Results + QC & Surrogate Summary																					
Sample Custody must be documented below each time samples change possession, including courier delivery.																					
Relinquished by Sampler 1 F...		Date Time: 1620 8/26/10		Received By: 1 T...		Relinquished By: 2 T...		Date Time: 1625		Received By: 2		Relinquished by Sampler 3 M...		Date Time: _____		Received By: 4		Date Time: _____		Received By: 4	
Relinquished by: FedEx		Date Time: 8-27-10 0930		Received By: ALG		Relinquished By: ALG		Date Time: _____		Received By: ALG		Date Time: _____		Received By: ALG		Date Time: _____		Received By: ALG		Date Time: _____	
Custody Seal # _____ <input type="checkbox"/> In tact <input type="checkbox"/> Not In tact Preserved where applicable <input type="checkbox"/> On Ice <input checked="" type="checkbox"/> Cooler Temp. 9.4°C																					

4.1
4

SAMPLE RECEIPT LOG

pg. 1 of 2

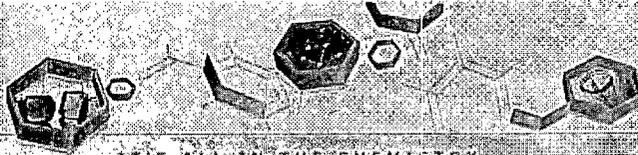
JOB #: T58817 DATE/TIME RECEIVED: 8-27-10 0930
 CLIENT: MWH Americas INITIALS: DR A

COOLER#	SAMPLE ID	FIELD ID	DATE	MATRIX	VOL	BOTTLE #	LOCATION	PRESERV	PH
1	1	GP-7 (15-16)	8-26-10 945	soil	4oz	1	VR	① 2 3 4 5 6 7 8	<2 >12
	↓	↓	↓		Encore	2		① 2 3 4 5 6 7 8	<2 >12
	2	GP-7 (8-9)	910		4oz	1		① 2 3 4 5 6 7 8	<2 >12
	↓	↓	↓		Encore	2		① 2 3 4 5 6 7 8	<2 >12
	3	GP-7 (14-15)	925		4oz	1		① 2 3 4 5 6 7 8	<2 >12
	↓	↓	↓		Encore	2		① 2 3 4 5 6 7 8	<2 >12
	4	GP-8 (9-10)	1310		4oz	1		① 2 3 4 5 6 7 8	<2 >12
	↓	↓	↓		Encore	2		① 2 3 4 5 6 7 8	<2 >12
	5	GP-8 (12-13)	1430		4oz	1		① 2 3 4 5 6 7 8	<2 >12
	↓	↓	↓		Encore	2		① 2 3 4 5 6 7 8	<2 >12
	6	GP-8 (17-18)	1500		4oz	1		① 2 3 4 5 6 7 8	<2 >12
	↓	↓	↓		Encore	2		① 2 3 4 5 6 7 8	<2 >12
	7	GP-4 (8-9)	1240		4oz	1		① 2 3 4 5 6 7 8	<2 >12
	↓	↓	↓		Encore	2		① 2 3 4 5 6 7 8	<2 >12
	8	GP-4 (16-17)	1320		4oz	1		① 2 3 4 5 6 7 8	<2 >12
	↓	↓	↓		Encore	2		① 2 3 4 5 6 7 8	<2 >12
	9	GP-4 (13-14)	1025		4oz	1		① 2 3 4 5 6 7 8	<2 >12
	↓	↓	↓		Encore	2		① 2 3 4 5 6 7 8	<2 >12
	10	GP-3 (15-16)	810		4oz	1		① 2 3 4 5 6 7 8	<2 >12
	↓	↓	↓		Encore	2		① 2 3 4 5 6 7 8	<2 >12
	11	GP-3 (14-15)	800		4oz	1		① 2 3 4 5 6 7 8	<2 >12
↓	↓	↓	↓	↓	Encore	2	↓	① 2 3 4 5 6 7 8	<2 >12

PRESERVATIVES: 1: None 2: HCL 3: HNO3 4: H2SO4 5: NAOH 6: DI 7: MeOH 8: Other
 LOCATION: 1: Walk-In #1 (Waters) 2: Walk-In #2 (Soils) VR: Volatile Fridge M: Metals SUB: Subcontract EF: Encore Freezer
 Rev 8/13/01 ewp

T58817: Chain of Custody
 Page 4 of 5

4.1
4



GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: T58817
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY2593-MB	Y0041706.D 1		08/30/10	FI	n/a	n/a	VY2593

The QC reported here applies to the following samples:

Method: SW846 8260B

T58817-1, T58817-3, T58817-6, T58817-7, T58817-8, T58817-11, T58817-14

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.0	0.70	ug/kg	
100-41-4	Ethylbenzene	ND	4.0	0.90	ug/kg	
108-88-3	Toluene	ND	4.0	0.95	ug/kg	
1330-20-7	Xylene (total)	ND	12	2.1	ug/kg	
	m,p-Xylene	ND	8.0	1.5	ug/kg	
95-47-6	o-Xylene	ND	4.0	0.64	ug/kg	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	85% 70-121%
2037-26-5	Toluene-D8	90% 76-132%
460-00-4	4-Bromofluorobenzene	90% 73-165%
17060-07-0	1,2-Dichloroethane-D4	72% 57-122%

5.1.1
5

Method Blank Summary

Job Number: T58817
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY2594-MB	Y0041734.D 1		08/30/10	FI	n/a	n/a	VY2594

The QC reported here applies to the following samples:

Method: SW846 8260B

T58817-2, T58817-5, T58817-9, T58817-10, T58817-13

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.0	0.70	ug/kg	
100-41-4	Ethylbenzene	ND	4.0	0.90	ug/kg	
108-88-3	Toluene	ND	4.0	0.95	ug/kg	
1330-20-7	Xylene (total)	ND	12	2.1	ug/kg	
	m,p-Xylene	ND	8.0	1.5	ug/kg	
95-47-6	o-Xylene	ND	4.0	0.64	ug/kg	

CAS No.	Surrogate Recoveries	Results	Limits
1868-53-7	Dibromofluoromethane	88%	70-121%
2037-26-5	Toluene-D8	91%	76-132%
460-00-4	4-Bromofluorobenzene	89%	73-165%
17060-07-0	1,2-Dichloroethane-D4	74%	57-122%

5.12
5

Method Blank Summary

Job Number: T58817
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY2595-MB	Y0041759.D	1	08/31/10	FI	n/a	n/a	VY2595

The QC reported here applies to the following samples:

Method: SW846 8260B

T58817-4, T58817-8, T58817-11, T58817-12

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.0	0.70	ug/kg	
100-41-4	Ethylbenzene	ND	4.0	0.90	ug/kg	
108-88-3	Toluene	ND	4.0	0.95	ug/kg	
1330-20-7	Xylene (total)	ND	12	2.1	ug/kg	
	m,p-Xylene	ND	8.0	1.5	ug/kg	
95-47-6	o-Xylene	ND	4.0	0.64	ug/kg	

CAS No.	Surrogate Recoveries	Result	Limits
1868-53-7	Dibromofluoromethane	83%	70-121%
2037-26-5	Toluene-D8	92%	76-132%
460-00-4	4-Bromofluorobenzene	92%	73-165%
17060-07-0	1,2-Dichloroethane-D4	69%	57-122%

5.1.3
5

Blank Spike Summary

Job Number: T58817
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY2593-BS	Y0041704.D	1	08/30/10	FI	n/a	n/a	VY2593

The QC reported here applies to the following samples:

Method: SW846 8260B

T58817-1, T58817-3, T58817-6, T58817-7, T58817-8, T58817-11, T58817-14

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	47.0	94	70-114
100-41-4	Ethylbenzene	50	46.3	93	60-119
108-88-3	Toluene	50	44.5	89	68-115
1330-20-7	Xylene (total)	150	143	95	61-115
	m,p-Xylene	100	94.6	95	60-115
95-47-6	o-Xylene	50	48.6	97	63-114

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	86%	70-121%
2037-26-5	Toluene-D8	88%	76-132%
460-00-4	4-Bromofluorobenzene	90%	73-165%
17060-07-0	1,2-Dichloroethane-D4	75%	57-122%

5.2.1
5

Blank Spike Summary

Job Number: T58817
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY2594-BS	Y0041730.D	1	08/30/10	FI	n/a	n/a	VY2594

5.2.2
5

The QC reported here applies to the following samples:

Method: SW846 8260B

T58817-2, T58817-5, T58817-9, T58817-10, T58817-13

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	44.5	89	70-114
100-41-4	Ethylbenzene	50	40.6	81	60-119
108-88-3	Toluene	50	42.5	85	68-115
1330-20-7	Xylene (total)	150	126	84	61-115
	m,p-Xylene	100	83.0	83	60-115
95-47-6	o-Xylene	50	43.4	87	63-114

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	93%	70-121%
2037-26-5	Toluene-D8	92%	76-132%
460-00-4	4-Bromofluorobenzene	93%	73-165%
17060-07-0	1,2-Dichloroethane-D4	76%	57-122%

Blank Spike Summary

Job Number: T58817
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY2595-BS	Y0041757.D 1		08/31/10	FI	n/a	n/a	VY2595

The QC reported here applies to the following samples:

Method: SW846 8260B

T58817-4, T58817-8, T58817-11, T58817-12

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	43.5	87	70-114
100-41-4	Ethylbenzene	50	43.8	88	60-119
108-88-3	Toluene	50	43.3	87	68-115
1330-20-7	Xylene (total)	150	137	91	61-115
	m,p-Xylene	100	89.8	90	60-115
95-47-6	o-Xylene	50	47.1	94	63-114

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	85%	70-121%
2037-26-5	Toluene-D8	91%	76-132%
460-00-4	4-Bromofluorobenzene	93%	73-165%
17060-07-0	1,2-Dichloroethane-D4	72%	57-122%

5.23
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T58817
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T58706-1MS	Y0041713.D	1	08/30/10	FI	n/a	n/a	VY2593
T58706-1MSD	Y0041714.D	1	08/30/10	FI	n/a	n/a	VY2593
T58706-1	Y0041707.D	1	08/30/10	FI	n/a	n/a	VY2593

The QC reported here applies to the following samples:

Method: SW846 8260B

T58817-1, T58817-3, T58817-6, T58817-7, T58817-8, T58817-11, T58817-14

CAS No.	Compound	T58706-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		43.9	32.6	74	44.6	93	31	70-114/38
100-41-4	Ethylbenzene	ND		43.9	30.5	70	44.6	93	38	60-119/40
108-88-3	Toluene	ND		43.9	35.2	80	53.4	112	41*	68-115/38
1330-20-7	Xylene (total)	ND		132	95.5	73	142	99	39	61-115/39
	m,p-Xylene	ND		87.7	64.7	74	95.8	100	39	60-115/40
95-47-6	o-Xylene	ND		43.9	30.8	70	46.4	97	40*	63-114/37

CAS No.	Surrogate Recoveries	MS	MSD	T58706-1	Limits
1868-53-7	Dibromofluoromethane	88%	84%	84%	70-121%
2037-26-5	Toluene-D8	89%	93%	93%	76-132%
460-00-4	4-Bromofluorobenzene	91%	96%	95%	73-165%
17060-07-0	1,2-Dichloroethane-D4	74%	69%	71%	57-122%

5.3.1

5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T58817
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T58817-13MS	Y0041736.D	1	08/31/10	FI	n/a	n/a	VY2594
T58817-13MSD	Y0041737.D	1	08/31/10	FI	n/a	n/a	VY2594
T58817-13	Y0041735.D	1	08/30/10	FI	n/a	n/a	VY2594

The QC reported here applies to the following samples:

Method: SW846 8260B

T58817-2, T58817-5, T58817-9, T58817-10, T58817-13

CAS No.	Compound	T58817-13 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	-	55.9	51.7	92	49.3	90	5	70-114/38
100-41-4	Ethylbenzene	1.5	J	55.9	39.1	67	46.1	81	16	60-119/40
108-88-3	Toluene	ND		55.9	48.4	87	47.7	87	1	68-115/38
1330-20-7	Xylene (total)	41.3		168	110	41*	149	65	30	61-115/39
	m,p-Xylene	41.3		112	64.6	21*	99.6	53*	43*	60-115/40
95-47-6	o-Xylene	ND		55.9	45.4	81	49.1	89	8	63-114/37

CAS No.	Surrogate Recoveries	MS	MSD	T58817-13	Limits
1868-53-7	Dibromofluoromethane	92%	87%	85%	70-121%
2037-26-5	Toluene-D8	93%	91%	90%	76-132%
460-00-4	4-Bromofluorobenzene	95%	93%	109%	73-165%
17060-07-0	1,2-Dichloroethane-D4	72%	72%	72%	57-122%

5.32
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T58817
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T58706-10MS	Y0041761.D 1		08/31/10	FI	n/a	n/a	VY2595
T58706-10MSD	Y0041762.D 1		08/31/10	FI	n/a	n/a	VY2595
T58706-10	Y0041760.D 1		08/31/10	FI	n/a	n/a	VY2595

The QC reported here applies to the following samples:

Method: SW846 8260B

T58817-4, T58817-8, T58817-11, T58817-12

CAS No.	Compound	T58706-10 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	8.3	44.6	50.7	95	43.9	80	14	70-114/38
100-41-4	Ethylbenzene	5.2	44.6	56.9	116	44.7	89	24	60-119/40
108-88-3	Toluene	24.2	44.6	89.8	147*	64.6	91	33	68-115/38
1330-20-7	Xylene (total)	19.4	134	165	109	130	83	24	61-115/39
	m,p-Xylene	14.8	89.1	113	110	87.5	82	25	60-115/40
95-47-6	o-Xylene	4.6	44.6	52.0	106	42.0	84	21	63-114/37

CAS No.	Surrogate Recoveries	MS	MSD	T58706-10	Limits
1868-53-7	Dibromofluoromethane	89%	86%	89%	70-121%
2037-26-5	Toluene-D8	133%* ^a	122%	136%* ^a	76-132%
460-00-4	4-Bromofluorobenzene	146%	141%	144%	73-165%
17060-07-0	1,2-Dichloroethane-D4	72%	70%	73%	57-122%

(a) Outside control limits due to matrix interference. Confirmed by MS/MSD.

5.3.3





GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: T58817
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB96-MB	BB0001609.DI		08/30/10	AT	n/a	n/a	GBB96

The QC reported here applies to the following samples:

Method: SW846 8015

T58817-5, T58817-7, T58817-10, T58817-12, T58817-13

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	0.30	mg/kg	

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	90% 46-127%
98-08-8	aaa-Trifluorotoluene	99% 44-120%

6.1.1

6

Method Blank Summary

Job Number: T58817
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB97-MB	BB0001639.DI		08/30/10	AT	n/a	n/a	GBB97

The QC reported here applies to the following samples:

Method: SW846 8015

T58817-1, T58817-2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	0.30	mg/kg	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	91%	46-127%
98-08-8	aaa-Trifluorotoluene	99%	44-120%

6.1.2

6

Method Blank Summary

Job Number: T58817
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB99-MB	BB0001651.DI		08/31/10	AT	n/a	n/a	GBB99

The QC reported here applies to the following samples:

Method: SW846 8015

T58817-4, T58817-6, T58817-8, T58817-9, T58817-11

6.1.3



CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	0.30	mg/kg	

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	93%	46-127%
98-08-8	aaa-Trifluorotoluene	101%	44-120%

Method Blank Summary

Job Number: T58817
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GHH53-MB	HH0001007.D		09/01/10	LB	n/a	n/a	GHH53

The QC reported here applies to the following samples:

Method: SW846 8015

T58817-14

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.050	0.0060	mg/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	86%	42-123%
98-08-8	aaa-Trifluorotoluene	114%	51-130%

6.1.4
6

Method Blank Summary

Job Number: T58817
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB100-MB	BB0001682.D1		09/01/10	AT	n/a	n/a	GBB100

The QC reported here applies to the following samples:

Method: SW846 8015

T58817-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	0.30	mg/kg	

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	93%	46-127%
98-08-8	aaa-Trifluorotoluene	101%	44-120%

6.1.5



Blank Spike Summary

Job Number: T58817
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB96-BS	BB0001607.DI		08/30/10	AT	n/a	n/a	GBB96

The QC reported here applies to the following samples:

Method: SW846 8015

T58817-5, T58817-7, T58817-10, T58817-12, T58817-13

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.340	85	78-115

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	94%	46-127%
98-08-8	aaa-Trifluorotoluene	108%	44-120%

6.2.1

6

Blank Spike Summary

Job Number: T58817
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB97-BS	BB0001637.D1		08/30/10	AT	n/a	n/a	GBB97

The QC reported here applies to the following samples:

Method: SW846 8015

T58817-1, T58817-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.339	85	78-115

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	94%	46-127%
98-08-8	aaa-Trifluorotoluene	105%	44-120%

6.2.2

6

Blank Spike Summary

Job Number: T58817
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB99-BS	BB0001650.DI		08/31/10	AT	n/a	n/a	GBB99

The QC reported here applies to the following samples:

Method: SW846 8015

T58817-4, T58817-6, T58817-8, T58817-9, T58817-11

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.349	87	78-115

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	96%	46-127%
98-08-8	aaa-Trifluorotoluene	108%	44-120%

6.2.3

6

Blank Spike Summary

Job Number: T58817
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GHH53-BS	HH0001005.D		09/01/10	LB	n/a	n/a	GHH53

The QC reported here applies to the following samples:

Method: SW846 8015

T58817-14

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.387	97	81-113

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	87%	42-123%
98-08-8	aaa-Trifluorotoluene	115%	51-130%

6.2.4

6

Blank Spike Summary

Job Number: T58817
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB100-BS	BB0001680.DI		09/01/10	AT	n/a	n/a	GBB100

The QC reported here applies to the following samples:

Method: SW846 8015

T58817-3

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.359	90	78-115

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	96%	46-127%
98-08-8	aaa-Trifluorotoluene	106%	44-120%

6.2.5

6

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T58817
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T58836-4MS	BB0001620.DI		08/30/10	AT	n/a	n/a	GBB96
T58836-4MSD	BB0001621.DI		08/30/10	AT	n/a	n/a	GBB96
T58836-4	BB0001619.DI		08/30/10	AT	n/a	n/a	GBB96

The QC reported here applies to the following samples:

Method: SW846 8015

T58817-5, T58817-7, T58817-10, T58817-12, T58817-13

CAS No.	Compound	T58836-4 mg/kg	Spike Q	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	0.818	J	24.6	21.1	83	21.5	84	2 78-115/14

CAS No.	Surrogate Recoveries	MS	MSD	T58836-4	Limits
460-00-4	4-Bromofluorobenzene	93%	96%	93%	46-127%
98-08-8	aaa-Trifluorotoluene	106%	107%	103%	44-120%

6.3.1
6

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T58817
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T58817-1MS	BB0001641.DI		08/31/10	AT	n/a	n/a	GBB97
T58817-1MSD	BB0001642.DI		08/31/10	AT	n/a	n/a	GBB97
T58817-1	BB0001640.DI		08/30/10	AT	n/a	n/a	GBB97

The QC reported here applies to the following samples:

Method: SW846 8015

T58817-1, T58817-2

CAS No.	Compound	T58817-1 mg/kg	Spike Q	mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	3.25	J	25.6	22.6	76%	22.5	75%	0	78-115/14

CAS No.	Surrogate Recoveries	MS	MSD	T58817-1	Limits
460-00-4	4-Bromofluorobenzene	94%	94%	93%	46-127%
98-08-8	aaa-Trifluorotoluene	106%	108%	106%	44-120%

6.3.2
6

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T58817
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T58920-5AMS	BB0001658.DI		08/31/10	AT	n/a	n/a	GBB99
T58920-5AMSD	BB0001659.DI		08/31/10	AT	n/a	n/a	GBB99
T58920-5A	BB0001657.DI		08/31/10	AT	n/a	n/a	GBB99

The QC reported here applies to the following samples:

Method: SW846 8015

T58817-4, T58817-6, T58817-8, T58817-9, T58817-11

CAS No.	Compound	T58920-5A mg/kg	Spike Q	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	7.5 U	30.1	25.6	85	25.8	86	1	78-115/14

CAS No.	Surrogate Recoveries	MS	MSD	T58920-5A	Limits
460-00-4	4-Bromofluorobenzene	96%	96%	91%	46-127%
98-08-8	aaa-Trifluorotoluene	105%	105%	99%	44-120%

6.3.3

6

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T58817
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T59027-1MS	BB0001687.DI		09/01/10	AT	n/a	n/a	GBB100
T59027-1MSD	BB0001688.DI		09/01/10	AT	n/a	n/a	GBB100
T59027-1	BB0001685.DI		09/01/10	AT	n/a	n/a	GBB100

The QC reported here applies to the following samples:

Method: SW846 8015

T58817-3

CAS No.	Compound	T59027-1 mg/kg	Spike Q mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	14 U	54	49.1	91	48.0	89	2	78-115/14

CAS No.	Surrogate Recoveries	MS	MSD	T59027-1	Limits
460-00-4	4-Bromofluorobenzene	93%	95%	91%	46-127%
98-08-8	aaa-Trifluorotoluene	107%	105%	101%	44-120%

6.3.4
6

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T58817
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T59026-4MS	HH0001025.D		09/01/10	LB	n/a	n/a	GHH53
T59026-4MSD	HH0001026.D		09/01/10	LB	n/a	n/a	GHH53
T59026-4	HH0001009.D		09/01/10	LB	n/a	n/a	GHH53

The QC reported here applies to the following samples:

Method: SW846 8015

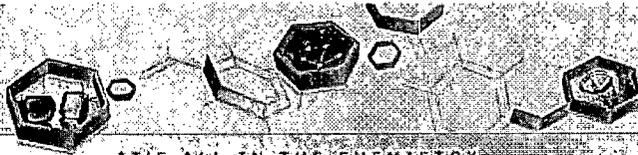
T58817-14

CAS No.	Compound	T59026-4 mg/l	Spike Q	mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	0.050 U	0.4	0.417	104	0.409	102	2		81-113/31

CAS No.	Surrogate Recoveries	MS	MSD	T59026-4	Limits
460-00-4	4-Bromofluorobenzene	89%	87%	89%	42-123%
98-08-8	aaa-Trifluorotoluene	115%	115%	110%	51-130%

6.3.5

6



GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: T58817
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15844-MB	IF201028.D	1	09/04/10	HD	08/30/10	OP15844	GIB1088

The QC reported here applies to the following samples:

Method: SW846 8015 M

T58817-1, T58817-2, T58817-3, T58817-4, T58817-5, T58817-6, T58817-7, T58817-8, T58817-9, T58817-10, T58817-11, T58817-12, T58817-13

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	3.3	2.7	mg/kg	
	TPH (>C28-C40)	ND	3.3	2.2	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	77% 33-115%

7.1.1
7

Blank Spike Summary

Job Number: T58817
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15844-BS	IF201029.D	1	09/04/10	HD	08/30/10	OP15844	GIF1088

The QC reported here applies to the following samples:

Method: SW846 8015 M

T58817-1, T58817-2, T58817-3, T58817-4, T58817-5, T58817-6, T58817-7, T58817-8, T58817-9, T58817-10, T58817-11, T58817-12, T58817-13

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	33.2	25.6	77	45-107

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	73%	33-115%

7.2.1
7

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T58817
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15844-MS	IF201030.D	1	09/04/10	HD	08/30/10	OP15844	GIB1088
OP15844-MSD	IF201031.D	1	09/04/10	HD	08/30/10	OP15844	GIF1088
T58817-7	IF201038.D	1	09/04/10	HD	08/30/10	OP15844	GIB1088

The QC reported here applies to the following samples:

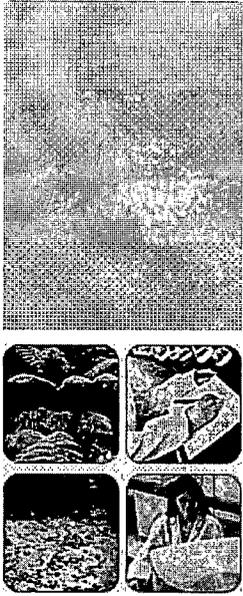
Method: SW846 8015 M

T58817-1, T58817-2, T58817-3, T58817-4, T58817-5, T58817-6, T58817-7, T58817-8, T58817-9, T58817-10, T58817-11, T58817-12, T58817-13

CAS No.	Compound	T58817-7 mg/kg	Spike Q	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	ND	36.1	27.2	75%	30.8	85%	12	45-107/34

CAS No.	Surrogate Recoveries	MS	MSD	T58817-7	Limits
84-15-1	o-Terphenyl	83%	77%	75%	33-115%

7.3.1
7



Technical Report for

EL PASO CORPORATION
MWHCODE: San Juan River Basin Program
Jaquez Site
Accutest Job Number: T58848
Sampling Date: 08/26/10

Report to:

MWH

jed.smith@mwhglobal.com

ATTN: Jed Smith

Total number of pages in report: 28



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Paul K Canevaro

Paul Canevaro
Laboratory Director

Client Service contact: Georgia Jones 713-271-4700

Certifications: TX (T104704220-09C-TX) AR (88-0756) FL (E87628) KS (E-10366) LA (85695/04004) OK (9103) UT(7132714700)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.

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Sample Summary

EL PASO CORPORATION

Job No: T58848

MWHCODE: San Juan River Basin Program
 Project No: Jaquez Site

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T58848-1	08/26/10	16:00	08/28/10	SO	Soil	GP-2-11-12
T58848-2	08/26/10	16:30	08/28/10	SO	Soil	GP-2-15-16
T58848-3	08/26/10	15:40	08/28/10	SO	Soil	GP-2-9-10
T58848-4	08/26/10	17:10	08/28/10	AQ	Equipment Blank	EQUIPMENT RINSE
T58848-5	08/26/10	18:20	08/28/10	AQ	Field Blank Water	FIELD BLANK

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: EL PASO CORPORATION

Job No T58848

Site: MWHCODE: San Juan River Basin Program

Report Date 9/9/2010 5:11:37 PM

1 Sample(s), 1 Field Blank(s) were collected on 08/26/2010 and were received at Accutest on 08/28/2010 properly preserved, at 2.3 Deg. C and intact. These Samples received an Accutest job number of T58848. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ	Batch ID: VE95
-----------	----------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T58851-4MS, T58851-4MSD were used as the QC samples indicated.

Volatiles by GC By Method SW846 8015

Matrix AQ	Batch ID: GHH52
-----------	-----------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T58921-2MS, T58921-2MSD were used as the QC samples indicated.

Matrix AQ	Batch ID: GHH53
-----------	-----------------

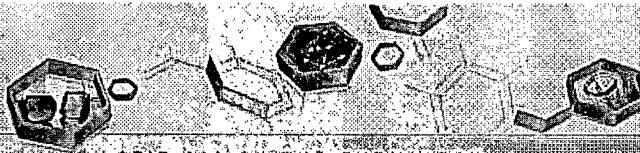
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T59026-4MS, T59026-4MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8015 M

Matrix AQ	Batch ID: OP15973
-----------	-------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Accutest Laboratories Gulf Coast (ALGC) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALGC and as stated on the COC. ALGC certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALGC Quality Manual except as noted above. This report is to be used in its entirety. ALGC is not responsible for any assumptions of data quality if partial data packages are used



Sample Results

Report of Analysis

Report of Analysis

3.1
3

Client Sample ID: EQUIPMENT RINSE	Date Sampled: 08/26/10
Lab Sample ID: T58848-4	Date Received: 08/28/10
Matrix: AQ - Equipment Blank	Percent Solids: n/a
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E0001519.D	1	08/30/10	MH	n/a	n/a	VE95
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.0	0.50	ug/l	
108-88-3	Toluene	ND	2.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.55	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.7	ug/l	
	m,p-Xylene	ND	4.0	1.1	ug/l	
95-47-6	o-Xylene	ND	2.0	0.53	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		79-122%
17060-07-0	1,2-Dichloroethane-D4	90%		75-121%
2037-26-5	Toluene-D8	103%		87-119%
460-00-4	4-Bromofluorobenzene	113%		80-133%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.1



Client Sample ID: EQUIPMENT RINSE	Date Sampled: 08/26/10
Lab Sample ID: T58848-4	Date Received: 08/28/10
Matrix: AQ - Equipment Blank	Percent Solids: n/a
Method: SW846 8015	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH0000987.D	1	08/31/10	LB	n/a	n/a	GHH52
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.050	0.0060	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	86%		42-123%		
98-08-8	aaa-Trifluorotoluene	126%		51-130%		

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

3.1
3

Client Sample ID:	EQUIPMENT RINSE		Date Sampled:	08/26/10
Lab Sample ID:	T58848-4		Date Received:	08/28/10
Matrix:	AQ - Equipment Blank		Percent Solids:	n/a
Method:	SW846 8015 M SW846 3510C			
Project:	MWHCODE: San Juan River Basin Program			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF201086.D	1	09/05/10	EM	09/01/10	OP15973	GIB1089
Run #2							

Run #	Initial Volume	Final Volume
Run #1	800 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	0.13	0.029	mg/l	
	TPH (> C28-C40)	ND	0.13	0.030	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	70%		25-112%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

32
3

Client Sample ID:	FIELD BLANK	Date Sampled:	08/26/10
Lab Sample ID:	T58848-5	Date Received:	08/28/10
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E0001520.D	1	08/30/10	MH	n/a	n/a	VE95
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.0	0.50	ug/l	
108-88-3	Toluene	ND	2.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.55	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.7	ug/l	
	m,p-Xylene	ND	4.0	1.1	ug/l	
95-47-6	o-Xylene	ND	2.0	0.53	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		79-122%
17060-07-0	1,2-Dichloroethane-D4	85%		75-121%
2037-26-5	Toluene-D8	98%		87-119%
460-00-4	4-Bromofluorobenzene	105%		80-133%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.2
3

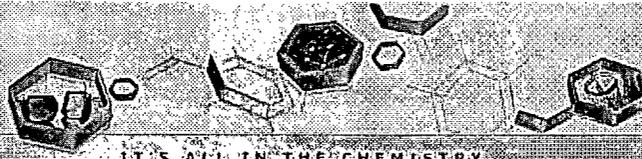
Client Sample ID:	FIELD BLANK	Date Sampled:	08/26/10
Lab Sample ID:	T58848-5	Date Received:	08/28/10
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	SW846 8015		
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH0001010.D	1	09/01/10	LB	n/a	n/a	GHH53
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.050	0.0060	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	86%		42-123%		
98-08-8	aaa-Trifluorotoluene	111%		51-130%		

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SAMPLE INSPECTION FORM

Accutest Job Number: T58848 Client: MWH Americas Date/Time Received: 8-28-10 1050

of Coolers Received: 1 Thermometer #: IP Gun 04 Temperature Adjustment Factor: 0

Cooler Temperatures (initial/adjusted): #1: 2.3°C #2: _____ #3: _____ #4: _____ #5: _____

#6: _____ #7: _____ #8: _____ #9: _____ #10: _____ #11: _____ #12: _____

Method of Delivery: FEDEX UPS Accutest Courier Greyhound Delivery Other

COOLER INFORMATION

- Custody seal missing or not intact
- Temperature criteria not met
- Wet ice received in cooler

CHAIN OF CUSTODY

- Chain of Custody not received
- Sample D/T unclear or missing
- Analyses unclear or missing
- COC not properly executed

SAMPLE INFORMATION

- Sample containers received broken
- VOC vials have headspace
- Sample labels missing or illegible
- ID on COC does not match label(s)
- D/T on COC does not match label(s)
- Sample/Bottles rcvd but no analysis on COC
- Sample listed on COC, but not received
- Bottles missing for requested analysis
- Insufficient volume for analysis
- Sample received improperly preserved

TRIP BLANK INFORMATION

- Trip Blank on COC but not received
- Trip Blank received but not on COC
- Trip Blank not intact
- Received Water Trip Blank
- Received Soil TB

Number of Encores? 3
 Number of 5035 kits? _____
 Number of lab-filtered metals? _____

Summary of Discrepancies:

Field Blank listed on COC as soil matrix with 2 bottles, received Field Blank as water matrix with three 40 ml vials. Equipment Rinse listed on COC as soil matrix with 2 bottles, Equipment Rinse received as water matrix with 5 bottles - 2 LAG bottles + 3 40 ml vials. Equipment Rinse COC Time 1710, 40 ml vials sample time 1647. Water Trip Blank received, not listed on COC. GP-2 (11-12) no bottle received for TPH 8015 analysis.

TECHNICIAN SIGNATURE/DATE: Daniel Huddleston 8-28-10

INFORMATION AND SAMPLE LABELING VERIFIED BY: _____

CORRECTIVE ACTIONS

Client Representative Notified: _____ Date: _____
 By Accutest Representative: _____ Via: Phone Email
 Client Instructions: _____

L:\mwalker\forms\samplemanagement SM023 Revised 8/11/10

4.1
4

SAMPLE RECEIPT LOG

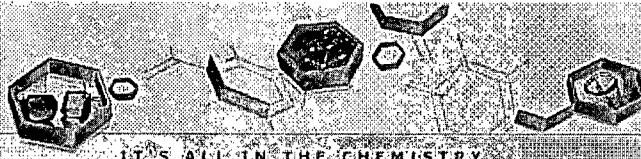
JOB #: T58848 DATE/TIME RECEIVED: 8-28-10 1050
 CLIENT: MWH Americas INITIALS: DRH

COOLER#	SAMPLE ID	FIELD ID	DATE	MATRIX	VOL	BOTTLE #	LOCATION	PRESERV	PH
1	1	GP-2 (11-12)	8-26-10 1600	Soil	Encore	1	VR	① 2 3 4 5 6 7 8	<2 >12
	2	GP-2 (15-16)	8-26-10 1630		4oz	1		① 2 3 4 5 6 7 8	<2 >12
	↓	↓	↓	↓	Encore	2		① 2 3 4 5 6 7 8	<2 >12
	3	GP-2 (9-10)	8-26-10 1540		4oz	1		① 2 3 4 5 6 7 8	<2 >12
	↓	↓	↓	↓	Encore	2		① 2 3 4 5 6 7 8	<2 >12
	4	Equipment Rinse	8-26-10 1710	W	1 LAG	1-2	1MM	1 2 3 4 5 6 7 8	<2 >12
	4	Equipment Rinse	8-26-10 1647	W	40ml	3-5	VR	1 ② 3 4 5 6 7 8	<2 >12
	5	Field Blank	8-26-10 1820	W	40ml	1-3	VR	1 ② 3 4 5 6 7 8	<2 >12
	6	TRIP BLANK	8-20-10 1130	WTB	40ml	1-2	VR	1 ② 3 4 5 6 7 8	<2 >12
DRH 8/28/10									
								1 2 3 4 5 6 7 8	<2 >12
								1 2 3 4 5 6 7 8	<2 >12
								1 2 3 4 5 6 7 8	<2 >12
								1 2 3 4 5 6 7 8	<2 >12
								1 2 3 4 5 6 7 8	<2 >12
								1 2 3 4 5 6 7 8	<2 >12
								1 2 3 4 5 6 7 8	<2 >12
								1 2 3 4 5 6 7 8	<2 >12
								1 2 3 4 5 6 7 8	<2 >12
								1 2 3 4 5 6 7 8	<2 >12
								1 2 3 4 5 6 7 8	<2 >12
								1 2 3 4 5 6 7 8	<2 >12

PRESERVATIVES: 1: None 2: HCL 3: HNO3 4: H2SO4 5: NAOH 6: DI 7: MeOH 8: Other
 LOCATION: 1: Walk-In #1 (Waters) 2: Walk-In #2 (Soils) VR: Volatile Fridge M: Metals SUB: Subcontract EF: Encore Freezer
 Rev 8/13/01 ewp



4.1
4



GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: T58848
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VE95-MB	E0001508.D	1	08/30/10	MH	n/a	n/a	VE95

The QC reported here applies to the following samples:

Method: SW846 8260B

T58848-4, T58848-5

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.55	ug/l	
108-88-3	Toluene	ND	2.0	0.43	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.7	ug/l	
	m,p-Xylene	ND	4.0	1.1	ug/l	
95-47-6	o-Xylene	ND	2.0	0.53	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	90% 79-122%
17060-07-0	1,2-Dichloroethane-D4	85% 75-121%
2037-26-5	Toluene-D8	97% 87-119%
460-00-4	4-Bromofluorobenzene	104% 80-133%

5.1.1
5

Blank Spike Summary

Job Number: T58848
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VE95-BS	E0001507.D	1	08/30/10	MH	n/a	n/a	VE95

The QC reported here applies to the following samples:

Method: SW846 8260B

T58848-4, T58848-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	25	25.4	102	76-118
100-41-4	Ethylbenzene	25	25.8	103	75-112
108-88-3	Toluene	25	25.8	103	77-114
1330-20-7	Xylene (total)	75	78.8	105	75-111
	m,p-Xylene	50	52.7	105	75-112
95-47-6	o-Xylene	25	26.0	104	74-110

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	94%	79-122%
17060-07-0	1,2-Dichloroethane-D4	86%	75-121%
2037-26-5	Toluene-D8	97%	87-119%
460-00-4	4-Bromofluorobenzene	107%	80-133%

5.2.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T58848
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T58851-4MS	E0001516.D	1	08/30/10	MH	n/a	n/a	VE95
T58851-4MSD	E0001517.D	1	08/30/10	MH	n/a	n/a	VE95
T58851-4	E0001515.D	1	08/30/10	MH	n/a	n/a	VE95

The QC reported here applies to the following samples:

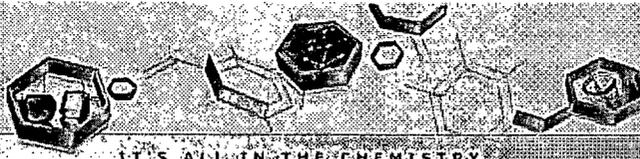
Method: SW846 8260B

T58848-4, T58848-5

CAS No.	Compound	T58851-4 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	2.0 U	25	25.8	103	24.5	98	5	76-118/16
100-41-4	Ethylbenzene	2.0 U	25	26.5	106	24.8	99	7	75-112/12
108-88-3	Toluene	0.78 J	25	26.9	104	25.5	99	5	77-114/12
1330-20-7	Xylene (total)	6.0 U	75	79.7	106	74.2	99	7	75-111/12
	m,p-Xylene	4.0 U	50	53.4	107	49.1	98	8	75-112/12
95-47-6	o-Xylene	2.0 U	25	26.3	105	25.1	100	5	74-110/11

CAS No.	Surrogate Recoveries	MS	MSD	T58851-4	Limits
1868-53-7	Dibromofluoromethane	91%	90%	91%	79-122%
17060-07-0	1,2-Dichloroethane-D4	83%	85%	86%	75-121%
2037-26-5	Toluene-D8	97%	96%	97%	87-119%
460-00-4	4-Bromofluorobenzene	103%	104%	104%	80-133%

5.3.1
5



IT'S ALL IN THE CHEMISTRY

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: T58848
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GHH52-MB	HH0000984.D		08/31/10	LB	n/a	n/a	GHH52

The QC reported here applies to the following samples:

Method: SW846 8015

T58848-4

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.050	0.0060	mg/l	

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	85% 42-123%
98-08-8	aaa-Trifluorotoluene	111% 51-130%

6.1.1

6

Method Blank Summary

Job Number: T58848
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GHH53-MB	HH0001007.D		09/01/10	LB	n/a	n/a	GHH53

The QC reported here applies to the following samples:

Method: SW846 8015

T58848-5

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.050	0.0060	mg/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	86%	42-123%
98-08-8	aaa-Trifluorotoluene	114%	51-130%

6.1.2

6

Blank Spike Summary

Job Number: T58848
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GHH52-BS	HH0000982.D		08/31/10	LB	n/a	n/a	GHH52

The QC reported here applies to the following samples:

Method: SW846 8015

T58848-4

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.336	84	81-113

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	91%	42-123%
98-08-8	aaa-Trifluorotoluene	111%	51-130%

6.2.1

6

Blank Spike Summary

Job Number: T58848
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GHH53-BS	HH0001005.D		09/01/10	LB	n/a	n/a	GHH53

The QC reported here applies to the following samples:

Method: SW846 8015

T58848-5

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.387	97%	81-113

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	87%	42-123%
98-08-8	aaa-Trifluorotoluene	115%	51-130%

6.2.2

6

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T58848
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T58921-2MS	HH0000988.D		08/31/10	LB	n/a	n/a	GHH52
T58921-2MSD	HH0000989.D		08/31/10	LB	n/a	n/a	GHH52
T58921-2	HH0000985.D		08/31/10	LB	n/a	n/a	GHH52

The QC reported here applies to the following samples:

Method: SW846 8015

T58848-4

CAS No.	Compound	T58921-2 mg/l	Spike Q	mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	0.050 U	0.4	0.403	101%	0.370	93%	9%		81-113/31

CAS No.	Surrogate Recoveries	MS	MSD	T58921-2	Limits
460-00-4	4-Bromofluorobenzene	89%	90%	99%	42-123%
98-08-8	aaa-Trifluorotoluene	111%	115%	113%	51-130%

6.3.1

6

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T58848
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T59026-4MS	HH0001025.D		09/01/10	LB	n/a	n/a	GHH53
T59026-4MSD	HH0001026.D		09/01/10	LB	n/a	n/a	GHH53
T59026-4	HH0001009.D		09/01/10	LB	n/a	n/a	GHH53

The QC reported here applies to the following samples:

Method: SW846 8015

T58848-5

CAS No.	Compound	T59026-4 mg/l	Spike Q	mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	0.050 U	0.4	0.417	104	0.409	102	2		81-113/31

CAS No.	Surrogate Recoveries	MS	MSD	T59026-4	Limits
460-00-4	4-Bromofluorobenzene	89%	87%	89%	42-123%
98-08-8	aaa-Trifluorotoluene	115%	115%	110%	51-130%

6.3.2

6



GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: T58848
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15973-MB	IF201208.D	1	09/09/10	EM	09/01/10	OP15973	GIB1093

The QC reported here applies to the following samples:

Method: SW846 8015 M

T58848-4

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	0.10	0.023	mg/l	
	TPH (> C28-C40)	ND	0.10	0.024	mg/l	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	62% 25-112%

7.1.1
7

Blank Spike/Blank Spike Duplicate Summary

Job Number: T58848
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15973-BS	IF201209.D	1	09/09/10	EM	09/01/10	OP15973	GIF1093
OP15973-BSD	IF201212.D	1	09/09/10	EM	09/01/10	OP15973	GIB1093

The QC reported here applies to the following samples:

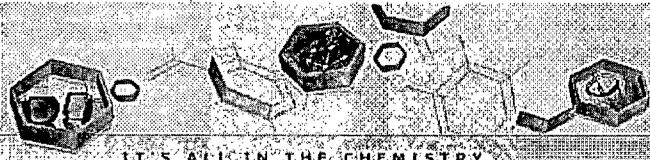
Method: SW846 8015 M

T58848-4

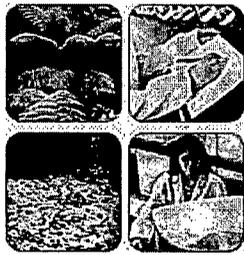
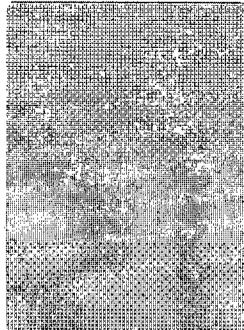
CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	1	0.713	71	1.45	73	68	22-84/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	67%	80%	25-112%

7.2.1
7



09/13/10



Technical Report for

EL PASO CORPORATION
MWHCODE: San Juan River Basin Program
JAQUEZ SITE
Accutest Job Number: T59243

Sampling Dates: 09/01/10 - 09/02/10

Report to:

MWH

jed.smith@mwhglobal.com

ATTN: Jed Smith

Total number of pages in report: 89



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Paul K Canevaro

Paul Canevaro
Laboratory Director

Client Service contact: Georgia Jones 713-271-4700

Certifications: TX (T104704220-09C-TX) AR (88-0756) FL (E87628) KS (E-10366) LA (85695/04004)
OK (9103) UT(7132714700)

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Test results relate only to samples analyzed.



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Sample Summary

EL PASO CORPORATION

Job No: T59243

MWHCODE: San Juan River Basin Program
 Project No: JAQUEZ SITE

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T59243-1	09/02/10	08:20	09/03/10	SO	Soil	GP-19(5-5-6-5)
T59243-2	09/02/10	11:55	09/03/10	SO	Soil	GP-25(7-8)
T59243-2D	09/02/10	11:55	09/03/10	SO	Soil Dup/MSD	GP-25(7-8) MSD
T59243-2S	09/02/10	11:55	09/03/10	SO	Soil Matrix Spike	GP-25(7-8) MS
T59243-3	09/02/10	09:30	09/03/10	AQ	Water	GP-23 RINSE BLANK
T59243-4	09/02/10	09:30	09/03/10	AQ	Field Blank Water	FIELD BLANK
T59243-5	09/01/10	09:00	09/03/10	AQ	Trip Blank Water	TRIP BLANK #1 09-02-1010
T59243-6	09/01/10	14:26	09/03/10	SO	Soil	GP-15(4-5)
T59243-7	09/01/10	14:55	09/03/10	SO	Soil	GP-15(9-5-10)
T59243-8	09/01/10	15:41	09/03/10	SO	Soil	GP-11(12-5-13)
T59243-9	09/01/10	16:30	09/03/10	SO	Soil	GP-12(12-13)
T59243-10	09/01/10	16:35	09/03/10	SO	Soil	GP-12(7-8)
T59243-11	09/01/10	17:20	09/03/10	SO	Soil	GP-13(8-9)

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary (continued)

EL PASO CORPORATION

Job No: T59243

MWHCODE: San Juan River Basin Program
Project No: JAQUEZ SITE

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T59243-12	09/02/10	09:38	09/03/10	SO	Soil	GP-23 (6-7)
T59243-13	09/02/10	10:27	09/03/10	SO	Soil	GP-27 (6-7)
T59243-15	09/02/10	00:00	09/03/10	SO	Trip Blank Soil	TRIP BLANK

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: EL PASO CORPORATION

Job No T59243

Site: MWHCODE: San Juan River Basin Program

Report Date 9/10/2010 8:38:02 AM

11 Sample(s), 2 Trip Blank(s) and 1 Field Blank(s) were collected on between 09/01/2010 and 09/02/2010 and were received at Accutest on 09/03/2010 properly preserved, at 2.6 Deg. C and intact. These Samples received an Accutest job number of T59243. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ	Batch ID: VF3985
------------------	-------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T59288-4MS, T59288-4MSD were used as the QC samples indicated.

Matrix SO	Batch ID: VM1141
------------------	-------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T59403-1MS, T59403-1MSD were used as the QC samples indicated.
- T59243-6 for Toluene-D8: Outside control limits due to matrix interference. Confirmed by reanalysis.

Matrix SO	Batch ID: VM1142
------------------	-------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T59272-4MS, T59272-4MSD were used as the QC samples indicated.
- Matrix Spike Duplicate Recovery(s) for m,p-Xylene, o-Xylene, Xylene (total) are outside control limits. Probable cause due to matrix interference.

Matrix SO	Batch ID: VY2603
------------------	-------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T59243-2MS, T59243-2MSD were used as the QC samples indicated.

Matrix SO	Batch ID: VY2605
------------------	-------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Volatiles by GC By Method SW846 8015

Matrix AQ	Batch ID: GEE2912
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T59243-3MS, T59243-3MSD were used as the QC samples indicated.

Matrix SO	Batch ID: GBB106
------------------	-------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T59306-2MS, T59306-2MSD were used as the QC samples indicated.

Matrix SO	Batch ID: GBB111
------------------	-------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Matrix SO	Batch ID: GEE2912
------------------	--------------------------

- Sample(s) T59243-3MS, T59243-3MSD were used as the QC samples indicated.

Matrix SO	Batch ID: GEE2913
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- Sample(s) T59243-2MS, T59243-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Extractables by GC By Method SW846 8015 M

Matrix AQ	Batch ID: OP15901
------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Matrix AQ	Batch ID: OP15986
------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T59243-10 have surrogates outside control limits. Probable cause due to matrix interference.

Matrix SO	Batch ID: OP15901
------------------	--------------------------

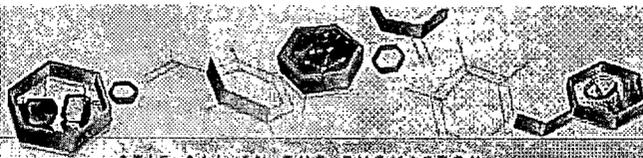
- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T59243-2MS, T59243-2MSD were used as the QC samples indicated.

Wet Chemistry By Method SM 2540 G

Matrix SO	Batch ID: GN25173
------------------	--------------------------

- Sample(s) T59243-2DUP were used as the QC samples for Solids, Percent.

Accutest Laboratories Gulf Coast (ALGC) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALGC and as stated on the COC. ALGC certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALGC Quality Manual except as noted above. This report is to be used in its entirety. ALGC is not responsible for any assumptions of data quality if partial data packages are used



Sample Results

Report of Analysis

Report of Analysis

3.1
3

Client Sample ID: GP-19 (5.5-6.5')	Date Sampled: 09/02/10
Lab Sample ID: T59243-1	Date Received: 09/03/10
Matrix: SO - Soil	Percent Solids: 76.6
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0041959.D	1	09/07/10	FI	n/a	n/a	VY2603
Run #2							

Run #	Initial Weight	Final Volume
Run #1	2.03 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	13	2.2	ug/kg	
100-41-4	Ethylbenzene	ND	13	2.9	ug/kg	
108-88-3	Toluene	ND	13	3.1	ug/kg	
1330-20-7	Xylene (total)	ND	39	6.7	ug/kg	
	m,p-Xylene	ND	26	4.7	ug/kg	
95-47-6	o-Xylene	ND	13	2.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		70-121%
2037-26-5	Toluene-D8	100%		76-132%
460-00-4	4-Bromofluorobenzene	87%		73-165%
17060-07-0	1,2-Dichloroethane-D4	80%		57-122%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

3

Client Sample ID: GP-19 (5.5-6.5')	Date Sampled: 09/02/10
Lab Sample ID: T59243-1	Date Received: 09/03/10
Matrix: SO - Soil	Percent Solids: 76.6
Method: SW846 8015	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0001816.D	1	09/05/10	AT	n/a	n/a	GBB106
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	2.45 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	15	0.89	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	91%		46-127%		
98-08-8	aaa-Trifluorotoluene	99%		44-120%		

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

3.1
3

Client Sample ID: GP-19 (5.5-6.5')	Date Sampled: 09/02/10
Lab Sample ID: T59243-1	Date Received: 09/03/10
Matrix: SO - Soil	Percent Solids: 76.6
Method: SW846 8015 M SW846 3550B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF201055.D	1	09/04/10	HD	09/03/10	OP15901	GIF1088
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.8 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	11.7	4.2	3.5	mg/kg	
	TPH (> C28-C40)	ND	4.2	2.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	59%		33-115%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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3

Client Sample ID: GP-25 (7-8')	Date Sampled: 09/02/10
Lab Sample ID: T59243-2	Date Received: 09/03/10
Matrix: SO - Soil	Percent Solids: 82.6
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0041960.D	1	09/08/10	FI	n/a	n/a	VY2603
Run #2							

Run #	Initial Weight	Final Volume
Run #1	3.95 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	6.1	1.1	ug/kg	
100-41-4	Ethylbenzene	ND	6.1	1.4	ug/kg	
108-88-3	Toluene	ND	6.1	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	18	3.2	ug/kg	
	m,p-Xylene	ND	12	2.2	ug/kg	
95-47-6	o-Xylene	ND	6.1	0.98	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		70-121%
2037-26-5	Toluene-D8	101%		76-132%
460-00-4	4-Bromofluorobenzene	86%		73-165%
17060-07-0	1,2-Dichloroethane-D4	81%		57-122%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

3.2
3

Client Sample ID: GP-25 (7-8')	Date Sampled: 09/02/10
Lab Sample ID: T59243-2	Date Received: 09/03/10
Matrix: SO - Soil	Percent Solids: 82.6
Method: SW846 8015	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE056792.D	1	09/08/10	AT	n/a	n/a	GEE2913
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.19 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	8.3	0.50	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	95%		46-127%		
98-08-8	aaa-Trifluorotoluene	99%		44-120%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.2
33

Client Sample ID: GP-25 (7-8')	Date Sampled: 09/02/10
Lab Sample ID: T59243-2	Date Received: 09/03/10
Matrix: SO - Soil	Percent Solids: 82.6
Method: SW846 8015 M SW846 3550B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF201056.D	1	09/04/10	HD	09/03/10	OP15901	GIB1088
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	4.0	3.3	mg/kg	
	TPH (> C28-C40)	ND	4.0	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	65%		33-115%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: GP-23 RINSE BLANK	Date Sampled: 09/02/10
Lab Sample ID: T59243-3	Date Received: 09/03/10
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F028633.D	1	09/07/10	AK	n/a	n/a	VF3985
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.55	ug/l	
108-88-3	Toluene	ND	2.0	0.43	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.7	ug/l	
	m,p-Xylene	ND	4.0	1.1	ug/l	
95-47-6	o-Xylene	ND	2.0	0.53	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		79-122%
17060-07-0	1,2-Dichloroethane-D4	101%		75-121%
2037-26-5	Toluene-D8	97%		87-119%
460-00-4	4-Bromofluorobenzene	100%		80-133%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

33
3

Client Sample ID: GP-23 RINSE BLANK	Date Sampled: 09/02/10
Lab Sample ID: T59243-3	Date Received: 09/03/10
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8015	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE056783.D	1	09/08/10	AT	n/a	n/a	GEE2912
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.050	0.0060	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	90%		42-123%		
98-08-8	aaa-Trifluorotoluene	97%		51-130%		

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: GP-23 RINSE BLANK	Date Sampled: 09/02/10
Lab Sample ID: T59243-3	Date Received: 09/03/10
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8015 M SW846 3510C	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF201186.D	1	09/08/10	EM	09/07/10	OP15986	GIB1093
Run #2							

Run #	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	0.10	0.024	mg/l	
	TPH (> C28-C40)	ND	0.10	0.024	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	68%		25-112%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.4
3

Client Sample ID:	FIELD BLANK		Date Sampled:	09/02/10
Lab Sample ID:	T59243-4		Date Received:	09/03/10
Matrix:	AQ - Field Blank Water		Percent Solids:	n/a
Method:	SW846 8260B			
Project:	MWHCODE: San Juan River Basin Program			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F028632.D	1	09/07/10	AK	n/a	n/a	VF3985
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.55	ug/l	
108-88-3	Toluene	ND	2.0	0.43	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.7	ug/l	
	m,p-Xylene	ND	4.0	1.1	ug/l	
95-47-6	o-Xylene	ND	2.0	0.53	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		79-122%
17060-07-0	1,2-Dichloroethane-D4	101%		75-121%
2037-26-5	Toluene-D8	97%		87-119%
460-00-4	4-Bromofluorobenzene	95%		80-133%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.4
3

Client Sample ID:	FIELD BLANK	Date Sampled:	09/02/10
Lab Sample ID:	T59243-4	Date Received:	09/03/10
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	SW846 8015		
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE056787.D	1	09/08/10	AT	n/a	n/a	GEE2912
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.050	0.0060	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	90%		42-123%
98-08-8	aaa-Trifluorotoluene	99%		51-130%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

3.5
3

Client Sample ID:	TRIP BLANK #1 09-02-1010	Date Sampled:	09/01/10
Lab Sample ID:	T59243-5	Date Received:	09/03/10
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F028631.D	1	09/07/10	AK	n/a	n/a	VF3985
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.55	ug/l	
108-88-3	Toluene	ND	2.0	0.43	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.7	ug/l	
	m,p-Xylene	ND	4.0	1.1	ug/l	
95-47-6	o-Xylene	ND	2.0	0.53	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		79-122%
17060-07-0	1,2-Dichloroethane-D4	101%		75-121%
2037-26-5	Toluene-D8	98%		87-119%
460-00-4	4-Bromofluorobenzene	96%		80-133%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.5
3

Client Sample ID: TRIP BLANK #1 09-02-1010 Lab Sample ID: T59243-5 Matrix: AQ - Trip Blank Water Method: SW846 8015 Project: MWHCODE: San Juan River Basin Program	Date Sampled: 09/01/10 Date Received: 09/03/10 Percent Solids: n/a
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE056788.D	1	09/08/10	AT	n/a	n/a	GEE2912
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.0161	0.050	0.0060	mg/l	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	92%		42-123%		
98-08-8	aaa-Trifluorotoluene	98%		51-130%		

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

3.6
3

Client Sample ID: GP-15 (4-5')	Date Sampled: 09/01/10
Lab Sample ID: T59243-6	Date Received: 09/03/10
Matrix: SO - Soil	Percent Solids: 80.3
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0027947.D	1	09/08/10	FI	n/a	n/a	VM1141
Run #2	M0027942.D	10	09/08/10	FI	n/a	n/a	VM1141

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.58 g	5.0 ml	100 ul
Run #2	4.58 g	5.0 ml	100 ul

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	9590	320	56	ug/kg	
100-41-4	Ethylbenzene	18000 ^a	3200	720	ug/kg	
108-88-3	Toluene	176	320	76	ug/kg	J
1330-20-7	Xylene (total)	143000 ^a	9600	1700	ug/kg	
	m,p-Xylene	143000 ^a	6400	1200	ug/kg	
95-47-6	o-Xylene	ND	320	51	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	88%	77%	70-121%
2037-26-5	Toluene-D8	161% ^b	126%	76-132%
460-00-4	4-Bromofluorobenzene	150%	105%	73-165%
17060-07-0	1,2-Dichloroethane-D4	80%	68%	57-122%

(a) Result is from Run# 2

(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.6
3

Client Sample ID: GP-15 (4-5')	Date Sampled: 09/01/10
Lab Sample ID: T59243-6	Date Received: 09/03/10
Matrix: SO - Soil	Percent Solids: 80.3
Method: SW846 8015	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE056799.D	200	09/08/10	AT	n/a	n/a	GEE2913
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.58 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	5320	1600	96	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	104%		46-127%		
98-08-8	aaa-Trifluorotoluene	105%		44-120%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.6
3

Client Sample ID: GP-15 (4-5')	Date Sampled: 09/01/10
Lab Sample ID: T59243-6	Date Received: 09/03/10
Matrix: SO - Soil	Percent Solids: 80.3
Method: SW846 8015 M SW846 3550B	
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF201057.D	1	09/04/10	HD	09/03/10	OP15901	GIF1088
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	408	4.1	3.4	mg/kg	
	TPH (> C28-C40)	78.7	4.1	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	70%		33-115%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

3.7
3

Client Sample ID: GP-15 (9.5-10')	Date Sampled: 09/01/10
Lab Sample ID: T59243-7	Date Received: 09/03/10
Matrix: SO - Soil	Percent Solids: 86.7
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0041963.D	1	09/08/10	FI	n/a	n/a	VY2603
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.71 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	6:7	4.0	0.71	ug/kg	
100-41-4	Ethylbenzene	15:3	4.0	0.91	ug/kg	
108-88-3	Toluene	ND	4.0	0.96	ug/kg	
1330-20-7	Xylene (total)	120	12	2.1	ug/kg	
	m,p-Xylene	119	8.1	1.5	ug/kg	
95-47-6	o-Xylene	1:5	4.0	0.65	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-121%
2037-26-5	Toluene-D8	99%		76-132%
460-00-4	4-Bromofluorobenzene	108%		73-165%
17060-07-0	1,2-Dichloroethane-D4	84%		57-122%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.7
3

Client Sample ID: GP-15 (9.5-10')	Date Sampled: 09/01/10
Lab Sample ID: T59243-7	Date Received: 09/03/10
Matrix: SO - Soil	Percent Solids: 86.7
Method: SW846 8015	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0001823.D	1	09/05/10	AT	n/a	n/a	GBB106
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.35 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	4.77	6.2	0.37	mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	92%		46-127%		
98-08-8	aaa-Trifluorotoluene	102%		44-120%		

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

3.7
3

Client Sample ID:	GP-15 (9.5-10')	Date Sampled:	09/01/10
Lab Sample ID:	T59243-7	Date Received:	09/03/10
Matrix:	SO - Soil	Percent Solids:	86.7
Method:	SW846 8015 M SW846 3550B		
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF201058.D	1	09/04/10	HD	09/03/10	OP15901	GIB1088
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.7 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	3.8	3.1	mg/kg	
	TPH (> C28-C40)	ND	3.8	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	71%		33-115%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

38
3

Client Sample ID: GP-11 (12.5-13')	Date Sampled: 09/01/10
Lab Sample ID: T59243-8	Date Received: 09/03/10
Matrix: SO - Soil	Percent Solids: 83.5
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0041964.D	1	09/08/10	FI	n/a	n/a	VY2603
Run #2							

Run #	Initial Weight	Final Volume
Run #1	3.44 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	7.0	1.2	ug/kg	
100-41-4	Ethylbenzene	16.7	7.0	1.6	ug/kg	
108-88-3	Toluene	3.3	7.0	1.7	ug/kg	J
1330-20-7	Xylene (total)	158	21	3.6	ug/kg	
	m,p-Xylene	124	14	2.5	ug/kg	
95-47-6	o-Xylene	34.4	7.0	1.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		70-121%
2037-26-5	Toluene-D8	98%		76-132%
460-00-4	4-Bromofluorobenzene	97%		73-165%
17060-07-0	1,2-Dichloroethane-D4	79%		57-122%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.8
3

Client Sample ID: GP-11 (12.5-13')	Date Sampled: 09/01/10
Lab Sample ID: T59243-8	Date Received: 09/03/10
Matrix: SO - Soil	Percent Solids: 83.5
Method: SW846 8015	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE056796.D	20	09/08/10	AT	n/a	n/a	GEE2913
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	1.34 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	1860	470	28	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	104%		46-127%		
98-08-8	aaa-Trifluorotoluene	106%		44-120%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.9
3

Client Sample ID: GP-12 (12-13')	Date Sampled: 09/01/10
Lab Sample ID: T59243-9	Date Received: 09/03/10
Matrix: SO - Soil	Percent Solids: 83.7
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0041965.D	1	09/08/10	FI	n/a	n/a	VY2603
Run #2							

Run #	Initial Weight	Final Volume
Run #1	4.29 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	3.7	5.6	0.97	ug/kg	J
100-41-4	Ethylbenzene	11.6	5.6	1.3	ug/kg	
108-88-3	Toluene	1.4	5.6	1.3	ug/kg	J
1330-20-7	Xylene (total)	108	17	2.9	ug/kg	
	m,p-Xylene	88.7	11	2.0	ug/kg	
95-47-6	o-Xylene	19.0	5.6	0.89	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		70-121%
2037-26-5	Toluene-D8	105%		76-132%
460-00-4	4-Bromofluorobenzene	69% ^a		73-165%
17060-07-0	1,2-Dichloroethane-D4	104%		57-122%

(a) Outside control limits biased low. There are no target compounds associated with this surrogate.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

6.9
3

Client Sample ID: GP-12 (12-13')	Date Sampled: 09/01/10
Lab Sample ID: T59243-9	Date Received: 09/03/10
Matrix: SO - Soil	Percent Solids: 83.7
Method: SW846 8015	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE056798.D	100	09/08/10	AT	n/a	n/a	GEE2913
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	3.42 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	2260	970	58	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	106%		46-127%		
98-08-8	aaa-Trifluorotoluene	104%		44-120%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.9
3

Client Sample ID: GP-12 (12-13')	Date Sampled: 09/01/10
Lab Sample ID: T59243-9	Date Received: 09/03/10
Matrix: SO - Soil	Percent Solids: 83.7
Method: SW846 8015 M SW846 3550B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF201060.D	1	09/04/10	HD	09/03/10	OP15901	GIB1088
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	379	3.9	3.2	mg/kg	
	TPH (> C28-C40)	88.1	3.9	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	103%		33-115%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.10
3

Client Sample ID: GP-12 (7-8')	Date Sampled: 09/01/10
Lab Sample ID: T59243-10	Date Received: 09/03/10
Matrix: SO - Soil	Percent Solids: 79.1
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0042031.D	1	09/09/10	FI	n/a	n/a	VY2605
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	1.94 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	700	120	ug/kg	
100-41-4	Ethylbenzene	662	700	160	ug/kg	J
108-88-3	Toluene	ND	700	170	ug/kg	
1330-20-7	Xylene (total)	4540	2100	370	ug/kg	
	m,p-Xylene	4070	1400	260	ug/kg	
95-47-6	o-Xylene	473	700	110	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-121%
2037-26-5	Toluene-D8	94%		76-132%
460-00-4	4-Bromofluorobenzene	123%		73-165%
17060-07-0	1,2-Dichloroethane-D4	93%		57-122%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

3.10
3

Client Sample ID: GP-12 (7-8')	Date Sampled: 09/01/10
Lab Sample ID: T59243-10	Date Received: 09/03/10
Matrix: SO - Soil	Percent Solids: 79.1
Method: SW846 8015	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE056797.D	40	09/08/10	AT	n/a	n/a	GEE2913
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	1.94 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	2510	700	42	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	104%		46-127%		
98-08-8	aaa-Trifluorotoluene	108%		44-120%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.10

3

Client Sample ID: GP-12 (7-8')	Date Sampled: 09/01/10
Lab Sample ID: T59243-10	Date Received: 09/03/10
Matrix: SO - Soil	Percent Solids: 79.1
Method: SW846-8015 M SW846 3550B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF201099.D	5	09/05/10	EM	09/03/10	OP15901	GIF1089
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	663	21	17	mg/kg	
	TPH (>C28-C40)	141	21	14	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	0%		33-115%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.11
3

Client Sample ID: GP-13 (8-9')	Date Sampled: 09/01/10
Lab Sample ID: T59243-11	Date Received: 09/03/10
Matrix: SO - Soil	Percent Solids: 76.4
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0027975.D	5	09/09/10	FI	n/a	n/a	VM1142
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.57 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	823	1500	260	ug/kg	J
100-41-4	Ethylbenzene	2250	1500	330	ug/kg	
108-88-3	Toluene	9940	1500	350	ug/kg	
1330-20-7	Xylene (total)	24300	4500	780	ug/kg	
	m,p-Xylene	19700	3000	540	ug/kg	
95-47-6	o-Xylene	4610	1500	240	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	81%		70-121%
2037-26-5	Toluene-D8	109%		76-132%
460-00-4	4-Bromofluorobenzene	105%		73-165%
17060-07-0	1,2-Dichloroethane-D4	69%		57-122%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.11
3

Client Sample ID: GP-13 (8-9')	Date Sampled: 09/01/10
Lab Sample ID: T59243-11	Date Received: 09/03/10
Matrix: SO - Soil	Percent Solids: 76.4
Method: SW846 8015 M SW846 3550B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF201062.D	1	09/04/10	HD	09/03/10	OP15901	GIB1088
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	14.3	4.3	3.5	mg/kg	
	TPH (> C28-C40)	6.25	4.3	2.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	58%		33-115%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

3.12
3

Client Sample ID: GP-23 (6-7')	Date Sampled: 09/02/10
Lab Sample ID: T59243-12	Date Received: 09/03/10
Matrix: SO - Soil	Percent Solids: 86.0
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0027943.D	1	09/08/10	FI	n/a	n/a	VM1141
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.18 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	4:0	4.5	0.78	ug/kg	J
100-41-4	Ethylbenzene	ND	4.5	1.0	ug/kg	
108-88-3	Toluene	ND	4.5	1.1	ug/kg	
1330-20-7	Xylene (total)	52:0	13	2.3	ug/kg	
	m,p-Xylene	52:0	9.0	1.6	ug/kg	
95-47-6	o-Xylene	ND	4.5	0.72	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	82%		70-121%
2037-26-5	Toluene-D8	90%		76-132%
460-00-4	4-Bromofluorobenzene	103%		73-165%
17060-07-0	1,2-Dichloroethane-D4	66%		57-122%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.12

3

Client Sample ID: GP-23 (6-7')	Date Sampled: 09/02/10
Lab Sample ID: T59243-12	Date Received: 09/03/10
Matrix: SO - Soil	Percent Solids: 86.0
Method: SW846 8015	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0001896.D	1	09/09/10	AT	n/a	n/a	GBB111
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.09 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.6	0.34	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%		46-127%
98-08-8	aaa-Trifluorotoluene	105%		44-120%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.12
3

Client Sample ID: GP-23 (6-7')	Date Sampled: 09/02/10
Lab Sample ID: T59243-12	Date Received: 09/03/10
Matrix: SO - Soil	Percent Solids: 86.0
Method: SW846 8015 M SW846 3550B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF201063.D	1	09/04/10	HD	09/03/10	OP15901	GIF1088
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.7 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	27:2	3.8	3.1	mg/kg	
	TPH (>C28-C40)	22:8	3.8	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	69%		33-115%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.13
3

Client Sample ID: GP-27 (6-7')	Date Sampled: 09/02/10
Lab Sample ID: T59243-13	Date Received: 09/03/10
Matrix: SO - Soil	Percent Solids: 85.3
Method: SW846 8260B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0027944.D	1	09/08/10	FI	n/a	n/a	VM1141
Run #2							

Run #	Initial Weight	Final Volume
Run #1	3.34 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	20.9	7.0	1.2	ug/kg	
100-41-4	Ethylbenzene	ND	7.0	1.6	ug/kg	
108-88-3	Toluene	ND	7.0	1.7	ug/kg	
1330-20-7	Xylene (total)	36.8	21	3.7	ug/kg	
	m,p-Xylene	36.8	14	2.5	ug/kg	
95-47-6	o-Xylene	ND	7.0	1.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	86%		70-121%
2037-26-5	Toluene-D8	91%		76-132%
460-00-4	4-Bromofluorobenzene	105%		73-165%
17060-07-0	1,2-Dichloroethane-D4	69%		57-122%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: GP-27 (6-7')	Date Sampled: 09/02/10
Lab Sample ID: T59243-13	Date Received: 09/03/10
Matrix: SO - Soil	Percent Solids: 85.3
Method: SW846 8015	
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0001817.D	1	09/05/10	AT	n/a	n/a	GBB106
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.04 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	1.36	8.1	0.49	mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	90%		46-127%		
98-08-8	aaa-Trifluorotoluene	100%		44-120%		

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

3.13
3

Client Sample ID: GP-27 (6-7')	Date Sampled: 09/02/10
Lab Sample ID: T59243-13	Date Received: 09/03/10
Matrix: SO - Soil	Percent Solids: 85.3
Method: SW846 8015 M SW846 3550B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF201064.D	1	09/05/10	HD	09/03/10	OP15901	GIB1088
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	125	3.8	3.2	mg/kg	
	TPH (>C28-C40)	45.5	3.8	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	80%		33-115%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

3.14

3

Client Sample ID:	TRIP BLANK	Date Sampled:	09/02/10
Lab Sample ID:	T59243-15	Date Received:	09/03/10
Matrix:	SO - Trip Blank Soil	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0041957.D	1	09/07/10	FI	n/a	n/a	VY2603
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.0	0.70	ug/kg	
100-41-4	Ethylbenzene	ND	4.0	0.90	ug/kg	
108-88-3	Toluene	ND	4.0	0.95	ug/kg	
1330-20-7	Xylene (total)	ND	12	2.1	ug/kg	
	m,p-Xylene	ND	8.0	1.5	ug/kg	
95-47-6	o-Xylene	ND	4.0	0.64	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		70-121%
2037-26-5	Toluene-D8	103%		76-132%
460-00-4	4-Bromofluorobenzene	89%		73-165%
17060-07-0	1,2-Dichloroethane-D4	88%		57-122%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.14
3

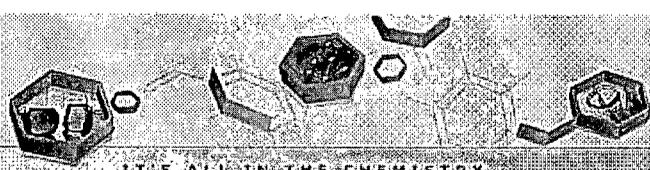
Client Sample ID: TRIP BLANK	Date Sampled: 09/02/10
Lab Sample ID: T59243-15	Date Received: 09/03/10
Matrix: SO - Trip Blank Soil	Percent Solids: n/a
Method: SW846 8015	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE056786.D	1	09/08/10	AT	n/a	n/a	GEE2912
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.0060	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	90%		46-127%		
98-08-8	aaa-Trifluorotoluene	97%		44-120%		

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

10165 Harwin Dr. Ste 150 Houston, TX 77036
 TEL: 713-271-4700 FAX: 713-271-4770
 www.accutest.com

FED-EX Tracking # 89317020 9260
 Accutest Quote #
 Bottle Order Control #
 Accutest Job # T59243

Client / Reporting Information		Project Information		Requested Analyses										Matrix Codes								
Company Name MWH Americas		Project Name Jaquez		5037 include in P.O. # BIEX-82608 x Jaquez GRD-8015 DRD-8015										DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIO - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank								
Street Address 1801 California St., Ste 2900		Street																				
City State Zip Denver, CO 80202		City State																				
Project Contact Jed Smith		Project #																				
Billing Information (If different from Report to)		Street Address																				
Company Name		City State Zip																				
Phone # 303 291 2270		Client Purchase Order #																				
Sample(s) Name(s) Ashley Ager		Project Manager Ashley Ager																				
Attention:		Collection																				
Field ID / Point of Collection		Date		Time		Sampled By		Matrix		# of bottles		Number of preserved bottles										LAB USE ONLY
												<input type="checkbox"/> HCl <input type="checkbox"/> NaOH <input type="checkbox"/> Zn/NaOH <input type="checkbox"/> HNO3 <input type="checkbox"/> H2SO4 <input type="checkbox"/> H2O2 <input type="checkbox"/> DI Water <input type="checkbox"/> MEOR <input type="checkbox"/> TSP <input type="checkbox"/> N/MSHA <input type="checkbox"/> ENCORE <input type="checkbox"/> OTHER										
GP-15 (4-5')		9-1-10		14:26		AA		SD		5		<input checked="" type="checkbox"/> BIEX-82608 <input checked="" type="checkbox"/> GRD-8015 <input checked="" type="checkbox"/> DRD-8015										
GP-15 (9.5-10')		9-1-10		14:55		AA		SD		5												
GP-11 (12.5-13')		9-1-10		15:41		AA		SD		5												
GP-12 (12-13')		9-1-10		16:30		AA		SD		5												
GP-12 (7-8')		9-1-10		16:35		AA		SD		5												
GP-13 (8-9')		9-1-10		17:20		AA		SD		5												
GP-23 (6-7')		9-2-10		09:38		AA		SD		5												
GP-27 (6-7')		9-2-10		10:27		AA		SD		5												
Trip Blank #2 09-02-2010		9-2-10		10:15		AA		WW		2												
Turnaround Time (Business days)		Approved By (Accutest PM) / Date:		Data Deliverable Information		Comments / Special Instructions																
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 4 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day EMERGENCY Emergency & Rush TIA data available VIA Lablink		<input type="checkbox"/> Commercial "A" (Level 1) <input checked="" type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> REDT1 (Level 3+4) <input type="checkbox"/> Commercial "C"		<input type="checkbox"/> TRRP <input type="checkbox"/> EDD Format <input type="checkbox"/> Other _____																		
Commercial "A" = Results Only Commercial "B" = Results + QC Summary Commercial "C" = Results + QC & Surrogate Summary																						
Sample Custody must be documented below each time samples change possession, including courier delivery.																						
Relinquished By Sampler: Ashley Ager		Date/Time: 9-2-10/505		Received By: Jed Smith		Date/Time: 9/2/10		Relinquished By: Jed Smith		Date/Time: 9/2/10		Received By: [Signature]										
Relinquished by sampler:		Date/Time:		Received By:		Date/Time:		Relinquished By:		Date/Time:		Received By:										
Relinquished by:		Date/Time:		Received By:		Date/Time:		Relinquished By:		Date/Time:		Received By:										
Custody Seal #		<input type="checkbox"/> Intact		<input type="checkbox"/> Preserved where applicable		<input type="checkbox"/> On Ice		<input type="checkbox"/> Cooler Temp.														
														0.7								

4.1
4

SAMPLE INSPECTION FORM

Accutest Job Number: T59243 Client: MWH Americas Date/Time Received: 9-3-10 945

of Coolers Received: 2 Thermometer #: 110 Temperature Adjustment Factor: -1.5°C

Cooler Temperatures (initial/adjusted): #1: 3.1°C/2.6°C #2: 1.2°C/0.7°C #3: _____ #4: _____ #5: _____

#6: _____ #7: _____ #8: _____ #9: _____ #10: _____ #11: _____ #12: _____

Method of Delivery: FEDEX UPS Accutest Courier Greyhound Delivery Other

- COOLER INFORMATION**
- Custody seal missing or not intact
 - Temperature criteria not met
 - Wet ice received in cooler

- SAMPLE INFORMATION**
- Sample containers received broken
 - VOC vials have headspace
 - Sample labels missing or illegible
 - ID on COC does not match label(s)
 - D/T on COC does not match label(s)
 - Sample/Bottles recvd but no analysis on COC
 - Sample listed on COC, but not received
 - Bottles missing for requested analysis
 - Insufficient volume for analysis
 - Sample received improperly preserved

- TRIP BLANK INFORMATION**
- Trip Blank on COC but not received
 - Trip Blank received but not on COC
 - Trip Blank not intact
 - Received Water Trip Blank
 - Received Soil TB

- CHAIN OF CUSTODY**
- Chain of Custody not received
 - Sample D/T unclear or missing
 - Analyses unclear or missing
 - COC not properly executed

Number of Encores? 11
 Number of 5035 kits? _____
 Number of lab-filtered metals? _____

Summary of Discrepancies:
 ① Sample # 5 received as Trip Blank #1 (09-01-2010) (Water Trip Blank) Customer Made Cooler
 ② Sample # 14 received as Trip Blank #2 (09-02-2010) (Water Trip Blank) Customer made Cooler
 ③ Received extra Soil Trip Blank inside cooler #2 (Accutest Trip Blank) Added to end of job

TECHNICIAN SIGNATURE/DATE: [Signature] 9-3-10
 INFORMATION AND SAMPLE LABELING VERIFIED BY: [Signature] 9-3-10

♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ **CORRECTIVE ACTIONS** ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦

Client Representative Notified: _____ Date: _____
 By Accutest Representative: _____ Via: Phone Email
 Client Instructions: _____

HWalker/Vormisamplemanagement SM023 Revised 8/11/10



4.1
4

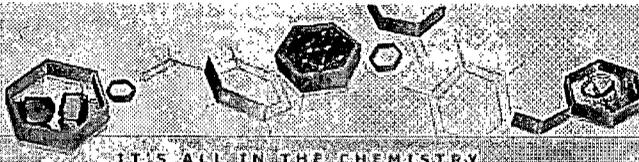
SAMPLE RECEIPT LOG

JOB #: T59243 DATE/TIME RECEIVED: 9-3-10 945
 CLIENT: MWH Americas INITIALS: EC

COOLER#	SAMPLE ID	FIELD ID	DATE	MATRIX	VOL	BOTTLE #	LOCATION	PRESERV	PH
1	1	GP-19 (5.5-6.5')	9-2-10 820	S	402	1	2-61	① 2 3 4 5 6 7 8	<2 >12
	1				Encore	2-5	VR	① 2 3 4 5 6 7 8	<2 >12
	2	GP-25 (7-8')	1145		402	1	2-61	① 2 3 4 5 6 7 8	<2 >12
	2				Encore	2-5	VR	① 2 3 4 5 6 7 8	<2 >12
	2	GP-25 (7-8')ms	1150		402	6	2-61	① 2 3 4 5 6 7 8	<2 >12
	2				Encore	2-10	VR	① 2 3 4 5 6 7 8	<2 >12
	2	GP-25-(7-8')ms	1155		402	11	2-61	① 2 3 4 5 6 7 8	<2 >12
	2			VR	Encore	2-5	VR	① 2 3 4 5 6 7 8	<2 >12
	3	GP-23 Rinse Blank	9-2-10 943	W	LAG	1-2	1-A	① 2 3 4 5 6 7 8	<2 >12
	3	"			40	3-5	VR	① 2 3 4 5 6 7 8	<2 >12
	4	Field Blank	930		40	1-3	VR	① 2 3 4 5 6 7 8	<2 >12
✓	5	Trap Blank #1040200	9-1-10-930	WTRB	40ml	1-2	VR	① 2 3 4 5 6 7 8	<2 >12
2	6	GP-15 (4-5')	9-1-10 144	S	402	1	2-61	① 2 3 4 5 6 7 8	<2 >12
	6	"			Encore	2-5	VR	① 2 3 4 5 6 7 8	<2 >12
	7	GP 15 (9.5-10')	1455		402	1	2-61	① 2 3 4 5 6 7 8	<2 >12
	7	"			Encore	2-5	VR	① 2 3 4 5 6 7 8	<2 >12
	8	GP 11 (12.5-13')	1541		402	1	2-61	① 2 3 4 5 6 7 8	<2 >12
	8	"			Encore	2-5	VR	① 2 3 4 5 6 7 8	<2 >12
	9	GP 12 (12-13')	1630		402	1	2-61	① 2 3 4 5 6 7 8	<2 >12
	9	"			Encore	2-5	VR	① 2 3 4 5 6 7 8	<2 >12
✓	10	GP-12 (7.8')	1635		402	1	2-61	① 2 3 4 5 6 7 8	<2 >12
✓	10	"			Encore	2-5	VR	① 2 3 4 5 6 7 8	<2 >12

PRESERVATIVES: 1: None 2: HCL 3: HNO3 4: H2SO4 5: NAOH 6: DI 7: MeOH 8: Other
 LOCATION: 1: Walk-In #1 (Waters) 2: Walk-In #2 (Solls) VR: Volatile Fridge M: Metals SUB: Subcontract EF: Encore Freezer

4.1
4



GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: T59243
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF3985-MB	F028630.D	1	09/07/10	AK	n/a	n/a	VF3985

The QC reported here applies to the following samples:

Method: SW846 8260B

T59243-3, T59243-4, T59243-5

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.55	ug/l	
108-88-3	Toluene	ND	2.0	0.43	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.7	ug/l	
	m,p-Xylene	ND	4.0	1.1	ug/l	
95-47-6	o-Xylene	ND	2.0	0.53	ug/l	

CAS No.	Surrogate Recoveries	Results	Limits
1868-53-7	Dibromofluoromethane	104%	79-122%
17060-07-0	1,2-Dichloroethane-D4	98%	75-121%
2037-26-5	Toluene-D8	97%	87-119%
460-00-4	4-Bromofluorobenzene	96%	80-133%

5.1.1
5

Method Blank Summary

Job Number: T59243
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY2603-MB	Y0041956.D	1	09/07/10	FI	n/a	n/a	VY2603

5.1.2
5

The QC reported here applies to the following samples:

Method: SW846 8260B

T59243-1, T59243-2, T59243-7, T59243-8, T59243-9, T59243-15

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.0	0.70	ug/kg	
100-41-4	Ethylbenzene	ND	4.0	0.90	ug/kg	
108-88-3	Toluene	ND	4.0	0.95	ug/kg	
1330-20-7	Xylene (total)	ND	12	2.1	ug/kg	
	m,p-Xylene	ND	8.0	1.5	ug/kg	
95-47-6	o-Xylene	ND	4.0	0.64	ug/kg	

CAS No.	Surrogate Recoveries	Results	Limits
1868-53-7	Dibromofluoromethane	105%	70-121%
2037-26-5	Toluene-D8	100%	76-132%
460-00-4	4-Bromofluorobenzene	85%	73-165%
17060-07-0	1,2-Dichloroethane-D4	84%	57-122%

Method Blank Summary

Job Number: T59243
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1141-MB	M0027931.D 1		09/08/10	FI	n/a	n/a	VM1141

The QC reported here applies to the following samples:

Method: SW846 8260B

T59243-6, T59243-12, T59243-13

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.0	0.70	ug/kg	
100-41-4	Ethylbenzene	ND	4.0	0.90	ug/kg	
108-88-3	Toluene	ND	4.0	0.95	ug/kg	
1330-20-7	Xylene (total)	ND	12	2.1	ug/kg	
	m,p-Xylene	ND	8.0	1.5	ug/kg	
95-47-6	o-Xylene	ND	4.0	0.64	ug/kg	

CAS No.	Surrogate Recoveries	Results	Limits
1868-53-7	Dibromofluoromethane	87%	70-121%
2037-26-5	Toluene-D8	91%	76-132%
460-00-4	4-Bromofluorobenzene	102%	73-165%
17060-07-0	1,2-Dichloroethane-D4	69%	57-122%

5.13
5

Method Blank Summary

Job Number: T59243
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1142-MB	M0027954.D 1		09/08/10	FI	n/a	n/a	VM1142

The QC reported here applies to the following samples:

Method: SW846 8260B

T59243-11

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.0	0.70	ug/kg	
100-41-4	Ethylbenzene	ND	4.0	0.90	ug/kg	
108-88-3	Toluene	ND	4.0	0.95	ug/kg	
1330-20-7	Xylene (total)	ND	12	2.1	ug/kg	
	m,p-Xylene	ND	8.0	1.5	ug/kg	
95-47-6	o-Xylene	ND	4.0	0.64	ug/kg	

CAS No.	Surrogate Recoveries	Results	Limits
1868-53-7	Dibromofluoromethane	87%	70-121%
2037-26-5	Toluene-D8	90%	76-132%
460-00-4	4-Bromofluorobenzene	102%	73-165%
17060-07-0	1,2-Dichloroethane-D4	70%	57-122%

5.1.4
5

Method Blank Summary

Job Number: T59243
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY2605-MB	Y0042028.D	1	09/09/10	FI	n/a	n/a	VY2605

The QC reported here applies to the following samples:

Method: SW846 8260B

T59243-10

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.0	0.70	ug/kg	
100-41-4	Ethylbenzene	ND	4.0	0.90	ug/kg	
108-88-3	Toluene	ND	4.0	0.95	ug/kg	
1330-20-7	Xylene (total)	ND	12	2.1	ug/kg	
	m,p-Xylene	ND	8.0	1.5	ug/kg	
95-47-6	o-Xylene	ND	4.0	0.64	ug/kg	

CAS No.	Surrogate Recoveries	Results	Limits
1868-53-7	Dibromofluoromethane	98%	70-121%
2037-26-5	Toluene-D8	97%	76-132%
460-00-4	4-Bromofluorobenzene	88%	73-165%
17060-07-0	1,2-Dichloroethane-D4	81%	57-122%

5.15
5

Blank Spike Summary

Job Number: T59243
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF3985-BS	F028628.D	1	09/07/10	AK	n/a	n/a	VF3985

The QC reported here applies to the following samples:

Method: SW846 8260B

T59243-3, T59243-4, T59243-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	25	21.2	85	76-118
100-41-4	Ethylbenzene	25	22.4	90	75-112
108-88-3	Toluene	25	21.3	85	77-114
1330-20-7	Xylene (total)	75	68.3	91	75-111
	m,p-Xylene	50	45.5	91	75-112
95-47-6	o-Xylene	25	22.9	92	74-110

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	79-122%
17060-07-0	1,2-Dichloroethane-D4	94%	75-121%
2037-26-5	Toluene-D8	93%	87-119%
460-00-4	4-Bromofluorobenzene	94%	80-133%

5.2.1
5

Blank Spike Summary

Job Number: T59243
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY2603-BS	Y0041954.D	1	09/07/10	FI	n/a	n/a	VY2603

The QC reported here applies to the following samples:

Method: SW846 8260B

T59243-1, T59243-2, T59243-7, T59243-8, T59243-9, T59243-15

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	43.5	87	70-114
100-41-4	Ethylbenzene	50	40.1	80	60-119
108-88-3	Toluene	50	40.9	82	68-115
1330-20-7	Xylene (total)	150	126	84	61-115
	m,p-Xylene	100	82.5	83	60-115
95-47-6	o-Xylene	50	43.5	87	63-114

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	103%	70-121%
2037-26-5	Toluene-D8	100%	76-132%
460-00-4	4-Bromofluorobenzene	87%	73-165%
17060-07-0	1,2-Dichloroethane-D4	84%	57-122%

5.2.2
5

Blank Spike Summary

Job Number: T59243
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1141-BS	M0027929.D	1	09/08/10	FI	n/a	n/a	VM1141

The QC reported here applies to the following samples:

Method: SW846 8260B

T59243-6, T59243-12, T59243-13

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	42.5	85	70-114
100-41-4	Ethylbenzene	50	41.1	82	60-119
108-88-3	Toluene	50	41.0	82	68-115
1330-20-7	Xylene (total)	150	124	83	61-115
	m,p-Xylene	100	83.4	83	60-115
95-47-6	o-Xylene	50	41.0	82	63-114

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	87%	70-121%
2037-26-5	Toluene-D8	90%	76-132%
460-00-4	4-Bromofluorobenzene	99%	73-165%
17060-07-0	1,2-Dichloroethane-D4	70%	57-122%

5.2.3

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Blank Spike Summary

Job Number: T59243
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1142-BS	M0027952.D1		09/08/10	FI	n/a	n/a	VM1142

The QC reported here applies to the following samples:

Method: SW846 8260B

T59243-11

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	42.9	86	70-114
100-41-4	Ethylbenzene	50	40.5	81	60-119
108-88-3	Toluene	50	40.6	81	68-115
1330-20-7	Xylene (total)	150	119	79	61-115
	m,p-Xylene	100	79.1	79	60-115
95-47-6	o-Xylene	50	40.3	81	63-114

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	85%	70-121%
2037-26-5	Toluene-D8	92%	76-132%
460-00-4	4-Bromofluorobenzene	98%	73-165%
17060-07-0	1,2-Dichloroethane-D4	70%	57-122%

5.2.4
5

Blank Spike Summary

Job Number: T59243
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY2605-BS	Y0042025.D	1	09/09/10	FI	n/a	n/a	VY2605

The QC reported here applies to the following samples:

Method: SW846 8260B

T59243-10

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	49.0	98	70-114
100-41-4	Ethylbenzene	50	48.9	98	60-119
108-88-3	Toluene	50	46.8	94	68-115
1330-20-7	Xylene (total)	150	153	102	61-115
	m,p-Xylene	100	102	102	60-115
95-47-6	o-Xylene	50	51.1	102	63-114

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	70-121%
2037-26-5	Toluene-D8	98%	76-132%
460-00-4	4-Bromofluorobenzene	87%	73-165%
17060-07-0	1,2-Dichloroethane-D4	81%	57-122%

5.2.5
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Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T59243
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T59288-4MS	F028636.D	1	09/07/10	AK	n/a	n/a	VF3985
T59288-4MSD	F028637.D	1	09/07/10	AK	n/a	n/a	VF3985
T59288-4	F028635.D	1	09/07/10	AK	n/a	n/a	VF3985

The QC reported here applies to the following samples:

Method: SW846 8260B

T59243-3, T59243-4, T59243-5

CAS No.	Compound	T59288-4 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	25	20.6	82	20.5	82	0	76-118/16
100-41-4	Ethylbenzene	ND	25	22.4	90	22.6	90	1	75-112/12
108-88-3	Toluene	ND	25	21.3	85	21.1	84	1	77-114/12
1330-20-7	Xylene (total)	ND	75	68.1	91	69.2	92	2	75-111/12
	m,p-Xylene	ND	50	45.2	90	45.8	92	1	75-112/12
95-47-6	o-Xylene	ND	25	23.0	92	23.4	94	2	74-110/11

CAS No.	Surrogate Recoveries	MS	MSD	T59288-4	Limits
1868-53-7	Dibromofluoromethane	103%	105%	105%	79-122%
17060-07-0	1,2-Dichloroethane-D4	98%	99%	101%	75-121%
2037-26-5	Toluene-D8	94%	94%	97%	87-119%
460-00-4	4-Bromofluorobenzene	95%	96%	96%	80-133%

5.3.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T59243
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T59243-2MS	Y0041961.D 1		09/08/10	FI	n/a	n/a	VY2603
T59243-2MSD	Y0041962.D 1		09/08/10	FI	n/a	n/a	VY2603
T59243-2	Y0041960.D 1		09/08/10	FI	n/a	n/a	VY2603

The QC reported here applies to the following samples:

Method: SW846 8260B

T59243-1, T59243-2, T59243-7, T59243-8, T59243-9, T59243-15

CAS No.	Compound	T59243-2 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		61.8	53.8	87	66.8	92	22	70-114/38
100-41-4	Ethylbenzene	ND		61.8	51.7	84	63.2	87	20	60-119/40
108-88-3	Toluene	ND		61.8	52.5	85	64.2	88	20	68-115/38
1330-20-7	Xylene (total)	ND		185	160	86	198	90	21	61-115/39
	m,p-Xylene	ND		124	106	86	130	89	20	60-115/40
95-47-6	o-Xylene	ND		61.8	54.6	88	67.7	93	21	63-114/37

CAS No.	Surrogate Recoveries	MS	MSD	T59243-2	Limits
1868-53-7	Dibromofluoromethane	101%	103%	102%	70-121%
2037-26-5	Toluene-D8	99%	101%	101%	76-132%
460-00-4	4-Bromofluorobenzene	87%	88%	86%	73-165%
17060-07-0	1,2-Dichloroethane-D4	78%	82%	81%	57-122%

5.3.2
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T59243
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T59403-1MS	M0027939.D 1		09/08/10	FI	n/a	n/a	VM1141
T59403-1MSD	M0027940.D 1		09/08/10	FI	n/a	n/a	VM1141
T59403-1	M0027932.D 1		09/08/10	FI	n/a	n/a	VM1141

The QC reported here applies to the following samples:

Method: SW846 8260B

T59243-6, T59243-12, T59243-13

CAS No.	Compound	T59403-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	5.9 U	83.8	69.4	83	70.4	82	1	70-114/38
100-41-4	Ethylbenzene	5.9 U	83.8	66.4	79	66.7	78	0	60-119/40
108-88-3	Toluene	5.9 U	83.8	67.5	81	69.0	81	2	68-115/38
1330-20-7	Xylene (total)	18 U	251	194	77	199	78	3	61-115/39
	m,p-Xylene	12 U	168	130	78	133	78	2	60-115/40
95-47-6	o-Xylene	5.9 U	83.8	64.6	77	66.5	78	3	63-114/37

CAS No.	Surrogate Recoveries	MS	MSD	T59403-1	Limits
1868-53-7	Dibromofluoromethane	82%	87%	84%	70-121%
2037-26-5	Toluene-D8	92%	96%	98%	76-132%
460-00-4	4-Bromofluorobenzene	112%	114%	115%	73-165%
17060-07-0	1,2-Dichloroethane-D4	65%	66%	68%	57-122%

5.33
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T59243
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T59272-4MS	M0027956.D 1		09/08/10	FI	n/a	n/a	VM1142
T59272-4MSD	M0027957.D 1		09/09/10	FI	n/a	n/a	VM1142
T59272-4	M0027955.D 1		09/08/10	FI	n/a	n/a	VM1142

The QC reported here applies to the following samples:

Method: SW846 8260B

T59243-11

CAS No.	Compound	T59272-4 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	4.7 U		60.4	48.3	80	45.5	75	6	70-114/38
100-41-4	Ethylbenzene	4.7 U		60.4	42.6	71	36.2	60	16	60-119/40
108-88-3	Toluene	4.7 U		60.4	49.0	81	44.9	74	9	68-115/38
1330-20-7	Xylene (total)	14 U		181	124	68	106	58*	16	61-115/39
	m,p-Xylene	9.5 U		121	83.5	69	71.8	59*	15	60-115/40
95-47-6	o-Xylene	4.7 U		60.4	40.7	67	34.0	56*	18	63-114/37

CAS No.	Surrogate Recoveries	MS	MSD	T59272-4	Limits
1868-53-7	Dibromofluoromethane	85%	87%	86%	70-121%
2037-26-5	Toluene-D8	92%	90%	90%	76-132%
460-00-4	4-Bromofluorobenzene	106%	102%	109%	73-165%
17060-07-0	1,2-Dichloroethane-D4	71%	69%	70%	57-122%

5.3.4
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T59243
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T59488-2MS	Y0042032.D	1	09/09/10	FI	n/a	n/a	VY2605
T59488-2MSD	Y0042033.D	1	09/09/10	FI	n/a	n/a	VY2605
T59488-2	Y0042029.D	1	09/09/10	FI	n/a	n/a	VY2605

The QC reported here applies to the following samples:

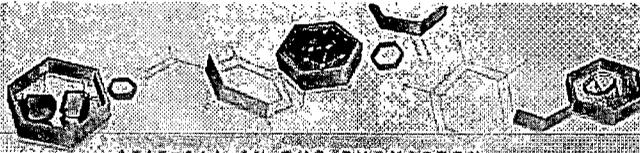
Method: SW846 8260B

T59243-10

CAS No.	Compound	T59488-2 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	7.6 U	95.8	84.9	89	86.2	86	2	70-114/38
100-41-4	Ethylbenzene	7.6 U	95.8	86.8	91	87.3	87	1	60-119/40
108-88-3	Toluene	2.0 J	95.8	84.7	86	85.1	82	0	68-115/38
1330-20-7	Xylene (total)	23 U	288	271	94	273	90	1	61-115/39
	m,p-Xylene	15 U	192	179	93	181	90	1	60-115/40
95-47-6	o-Xylene	7.6 U	95.8	91.6	96	92.1	91	1	63-114/37

CAS No.	Surrogate Recoveries	MS	MSD	T59488-2	Limits
1868-53-7	Dibromofluoromethane	93%	94%	95%	70-121%
2037-26-5	Toluene-D8	101%	99%	105%	76-132%
460-00-4	4-Bromofluorobenzene	93%	94%	92%	73-165%
17060-07-0	1,2-Dichloroethane-D4	73%	75%	77%	57-122%

5.3.5
 5



GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries



Method Blank Summary

Job Number: T59243
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB106-MB	BB0001810.DI		09/05/10	AT	n/a	n/a	GBB106

The QC reported here applies to the following samples:

Method: SW846 8015

T59243-1, T59243-7, T59243-13

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	0.30	mg/kg	

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	94% 46-127%
98-08-8	aaa-Trifluorotoluene	101% 44-120%

6.1.1
6

Method Blank Summary

Job Number: T59243
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE2913-MB	EE056782.D 1		09/08/10	AT	n/a	n/a	GEE2913

The QC reported here applies to the following samples:

Method: SW846 8015

T59243-2, T59243-6, T59243-8, T59243-9, T59243-10, T59243-11

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	0.30	mg/kg	

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	97% 46-127%
98-08-8	aaa-Trifluorotoluene	99% 44-120%

6.1.2
6

Method Blank Summary

Job Number: T59243
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE2912-MB	EE056782.D 1		09/08/10	AT	n/a	n/a	GEE2912

The QC reported here applies to the following samples:

Method: SW846 8015

T59243-3, T59243-4, T59243-5, T59243-15

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.050	0.0060	mg/l	

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	97%
98-08-8	aaa-Trifluorotoluene	99%
		42-123%
		51-130%

6.1.3
6

Method Blank Summary

Job Number: T59243
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB111-MB	BB0001894.D1		09/09/10	AT	n/a	n/a	GBB111

The QC reported here applies to the following samples:

Method: SW846 8015

T59243-12

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	0.30	mg/kg	

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	95%	46-127%
98-08-8	aaa-Trifluorotoluene	103%	44-120%

6.1.4
6

Blank Spike Summary

Job Number: T59243
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB106-BS	BB0001808.DI		09/05/10	AT	n/a	n/a	GBB106

The QC reported here applies to the following samples:

Method: SW846 8015

T59243-1, T59243-7, T59243-13

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.362	91	78-115

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	96%	46-127%
98-08-8	aaa-Trifluorotoluene	106%	44-120%

6.2.1

6

Blank Spike Summary

Job Number: T59243
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE2913-BS	EE056779.D	1	09/08/10	AT	n/a	n/a	GEE2913

The QC reported here applies to the following samples:

Method: SW846 8015

T59243-2, T59243-6, T59243-8, T59243-9, T59243-10, T59243-11

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.367	92	78-115

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	96%	46-127%
98-08-8	aaa-Trifluorotoluene	95%	44-120%

6.2.2

6

Blank Spike Summary

Job Number: T59243
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE2912-BS	EE056779.D 1		09/08/10	AT	n/a	n/a	GEE2912

The QC reported here applies to the following samples:

Method: SW846 8015

T59243-3, T59243-4, T59243-5, T59243-15

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.367	92	81-113

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	96%	42-123%
98-08-8	aaa-Trifluorotoluene	95%	51-130%

6.2.3
6

Blank Spike Summary

Job Number: T59243
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB111-BS	BB0001892.D1		09/09/10	AT	n/a	n/a	GBB111

The QC reported here applies to the following samples:

Method: SW846 8015

T59243-12

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.368	92	78-115

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	96%	46-127%
98-08-8	aaa-Trifluorotoluene	109%	44-120%

6.2.4

6

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T59243
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T59306-2MS	BB0001813.DI		09/05/10	AT	n/a	n/a	GBB106
T59306-2MSD	BB0001814.DI		09/05/10	AT	n/a	n/a	GBB106
T59306-2	BB0001812.DI		09/05/10	AT	n/a	n/a	GBB106

The QC reported here applies to the following samples:

Method: SW846 8015

T59243-1, T59243-7, T59243-13

CAS No.	Compound	T59306-2 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	18 U	73.6	64.2	87	64.4	87	0	78-115/14

CAS No.	Surrogate Recoveries	MS	MSD	T59306-2	Limits
460-00-4	4-Bromofluorobenzene	94%	96%	93%	46-127%
98-08-8	aaa-Trifluorotoluene	103%	107%	101%	44-120%

6.3.1
6

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T59243
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T59243-3MS	EE056784.D	1	09/08/10	AT	n/a	n/a	GEE2912
T59243-3MSD	EE056785.D	1	09/08/10	AT	n/a	n/a	GEE2912
T59243-3	EE056783.D	1	09/08/10	AT	n/a	n/a	GEE2912

The QC reported here applies to the following samples:

Method: SW846 8015

T59243-3, T59243-4, T59243-5, T59243-15

CAS No.	Compound	T59243-3 mg/l	Spike Q	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	0.4	0.408	102	0.403	101	1	81-113/31

CAS No.	Surrogate Recoveries	MS	MSD	T59243-3	Limits
460-00-4	4-Bromofluorobenzene	95%	93%	90%	42-123%
98-08-8	aaa-Trifluorotoluene	91%	100%	97%	51-130%

6.3.2



Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T59243
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T59243-2MS	EE056793.D	1	09/08/10	AT	n/a	n/a	GEE2913
T59243-2MSD	EE056794.D	1	09/08/10	AT	n/a	n/a	GEE2913
T59243-2	EE056792.D	1	09/08/10	AT	n/a	n/a	GEE2913

The QC reported here applies to the following samples:

Method: SW846 8015

T59243-2, T59243-6, T59243-8, T59243-9, T59243-10, T59243-11

CAS No.	Compound	T59243-2 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	33.1	25.8	78	26.3	79	2	78-115/14

CAS No.	Surrogate Recoveries	MS	MSD	T59243-2	Limits
460-00-4	4-Bromofluorobenzene	95%	95%	95%	46-127%
98-08-8	aaa-Trifluorotoluene	96%	97%	99%	44-120%

6.3.3
6

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T59243
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T59488-1MS	BB0001900.D1		09/09/10	AT	n/a	n/a	GBB111
T59488-1MSD	BB0001901.D1		09/09/10	AT	n/a	n/a	GBB111
T59488-1	BB0001895.D1		09/09/10	AT	n/a	n/a	GBB111

The QC reported here applies to the following samples:

Method: SW846 8015

T59243-12

CAS No.	Compound	T59488-1 mg/kg	Spike Q	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	9.2 U		36.8	30.4	83	31.7	86	4 78-115/14
CAS No.	Surrogate Recoveries	MS	MSD	T59488-1	Limits				
460-00-4	4-Bromofluorobenzene	95%	98%	94%	46-127%				
98-08-8	aaa-Trifluorotoluene	106%	110%	103%	44-120%				

6.3.4

6



GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: T59243
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15901-MB	IF201045.D	1	09/04/10	HD	09/03/10	OP15901	GIF1088

The QC reported here applies to the following samples:

Method: SW846 8015 M

T59243-1, T59243-2, T59243-6, T59243-7, T59243-8, T59243-9, T59243-10, T59243-11, T59243-12, T59243-13

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	3.3	2.7	mg/kg	
	TPH (> C28-C40)	ND	3.3	2.2	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	76% 33-115%

7.1.1
7

Method Blank Summary

Job Number: T59243
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15901-MB	IF201045.D	1	09/04/10	HD	09/03/10	OP15901	GIF1088

The QC reported here applies to the following samples: Method: SW846 8015 M

T59243-1, T59243-2, T59243-6, T59243-7, T59243-8, T59243-9, T59243-10, T59243-11, T59243-12, T59243-13

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	3.3	0.78	mg/l	
	TPH (> C28-C40)	ND	3.3	0.80	mg/l	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	76% 25-112%

7.1.2

7

Method Blank Summary

Job Number: T59243
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15986-MB	IF201207.D	1	09/08/10	EM	09/07/10	OP15986	GIF1093

The QC reported here applies to the following samples:

Method: SW846 8015 M

T59243-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	0.10	0.023	mg/l	
	TPH (> C28-C40)	ND	0.10	0.024	mg/l	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	84% 25-112%

7.1.3
7

Blank Spike Summary

Job Number: T59243
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15901-BS	IF201046.D	1	09/04/10	HD	09/03/10	OP15901	GIB1088

The QC reported here applies to the following samples: Method: SW846 8015 M

T59243-1, T59243-2, T59243-6, T59243-7, T59243-8, T59243-9, T59243-10, T59243-11, T59243-12, T59243-13

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH (C10-C28)	33.3	26.5	80	22-84

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	92%	25-112%

7.2.1

7

Blank Spike Summary

Job Number: T59243
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15901-BS	IF201046.D	1	09/04/10	HD	09/03/10	OP15901	GIB1088

The QC reported here applies to the following samples:

Method: SW846 8015 M

T59243-1, T59243-2, T59243-6, T59243-7, T59243-8, T59243-9, T59243-10, T59243-11, T59243-12, T59243-13

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	33.3	26.5	80	45-107

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	92%	33-115%

7.2.2

7

Blank Spike/Blank Spike Duplicate Summary

Job Number: T59243
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15986-BS	IF201211.D	1	09/09/10	EM	09/07/10	OP15986	GIF1093
OP15986-BSD	IF201213.D	1	09/09/10	EM	09/07/10	OP15986	GIF1093

The QC reported here applies to the following samples:

Method: SW846 8015 M

T59243-3

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	1	0.828	83	0.836	84	1	22-84/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	78%	78%	25-112%

7.3.1

7

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T59243
 Account: ELPASOX EL PASO CORPORATION
 Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15901-MS	IF201047.D	1	09/04/10	HD	09/03/10	OP15901	GIF1088
OP15901-MSD	IF201054.D	1	09/04/10	HD	09/03/10	OP15901	GIB1088
T59243-2	IF201056.D	1	09/04/10	HD	09/03/10	OP15901	GIB1088

The QC reported here applies to the following samples:

Method: SW846 8015 M

T59243-1, T59243-2, T59243-6, T59243-7, T59243-8, T59243-9, T59243-10, T59243-11, T59243-12, T59243-13

CAS No.	Compound	T59243-2 mg/kg	Spike Q	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	ND	39.8	22.7	57	24.9	63	9	45-107/34

CAS No.	Surrogate Recoveries	MS	MSD	T59243-2	Limits
84-15-1	o-Terphenyl	67%	78%	65%	33-115%

7.4.1
7