

VIA FEDEX

March 2, 2012

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

RE: Supplemental Information - El Paso Corporation Pit Site Closure Requests
Hamner #9 (3RP-190)
Horton #1E (3RP-192)
Lindrith B#24 (3RP-214)
Jaquez Gas Com C#1 and E#1 (3RP-194)

Dear Mr. Von Gonten:

MWH Americas, Inc. (MWH), on behalf of El Paso Corporation (EPC), is submitting the enclosed supplemental site information in order to facilitate the OCD's review of EPC's closure requests for the above-referenced sites. These closure requests were previously submitted as follows:

1. Hamner #9: letter submitted on January 9, 2009.
2. Horton #1E: letter submitted on October 29, 2009.
3. Lindrith B#24: letter submitted on January 24, 2006; re-submitted on July 15, 2008.
4. Jaquez Gas Com C#1 and E#1: site excavation report submitted on September 2, 2011.

For your convenience, copies of these four (4) requests are also attached to this letter. **Appendix A** contains the closure request for the Hamner #9 location; **Appendix B** the Horton #1E; **Appendix C** the Lindrith B#24 location; and **Appendix D** the Jaquez C#1 / E#1 location.

During our meeting on October 19, 2011 the OCD requested that current plume maps, historic plume maps, and site cross-sections be submitted. The requested supplemental information has since been compiled / developed and is attached to this letter. **Appendix A** contains a site cross-section and a set of recent and historic plume maps for the Hamner site. **Appendices B, C, and D** contain similar figures for the Horton, Lindrith, and Jaquez sites, respectively.

Notes on the Supplemental Information:

1. Concentration Isopleths. Isopleths were drawn for benzene, toluene, ethylbenzene, and xylene. The intent of the isopleths is to represent the historic plume strength and extent in contrast with the residual plume strength and extent at the time of the closure requests. In instances where the site wells were not sampled simultaneously (often due to varied well installation dates in the 1990's), the sampling dates were noted in order to document the data sources.

2. Site Cross-Sections. Site cross-sections were developed based on the available records of soil borings and well construction diagrams. The intent of the cross-sections is to depict the various site soil types, the screened intervals, and the most recently gauged water table elevations.
3. Lindrith B#24: On December 13, 2005 EPC collected direct-push groundwater samples at three locations. These locations were selected in order to improve plume delineation to the west of the former EPC pit. **Appendix C** includes copies of the August 18, 2005 EPC Work Plan and the September 6, 2005 OCD conditional approval of the characterization efforts. The direct-push groundwater samples indicated that groundwater as far as 150 feet west of the former EPC pit met the NMWQCC groundwater protection standards.
4. Jaquez Gas Com C#1 and E#1. These wells are currently operated by BP America Production Company (BP). In March 2010, a release occurred from BP's Jaquez Gas Com C#1 gathering line topographically uphill and hydraulically upgradient of EPC's monitor well M-4. Site delineation activities conducted in Summer 2010 indicated shallow soil impacts and recontamination of groundwater in the M-4 area. An extensive, jointly-funded site excavation was conducted between December 2010 and March 2011. This excavation removed both the newer impacts from the March 2010 release and the residual impacts associated with EPC's former pit, which was originally excavated in 1993. During the 2010/2011 excavation, Citizens Ditch and various affected gathering lines were temporarily removed and/or excavated beneath. Impacted soils were excavated down to approximately 1-foot below the water table, which was seasonally low due to the project schedule. In all, approximately 16,231 yards of impacted soils were removed from the site and sent to a commercial landfarm. Copies of the 2010 delineation report and the 2011 excavation report / closure request are included in **Appendix D**. EPC's position is that, following various site remediation efforts, EPC had met the NMWQCC standards at M-4 (and all the other site wells) during each of the four quarters of 2005. M-4, in particular, had met these standards for three years (i.e., November 2002 through November 2005). Any remaining groundwater concerns in the M-4 area should be the responsibility of BP. As such, EPC has requested that its case be closed.
5. Approved EPC Generic Closure Plan. **Appendix E** contains the approved EPC closure plan for the New Mexico pit sites. Also included is the OCD closure plan approval and subsequent correspondence regarding the length of the confirmation period over which groundwater samples must meet the New Mexico Water Quality Control Commission groundwater protection standards.

EPC has invested a considerable amount of effort to address the historic pit-related impacts at these four sites. EPC looks forward to OCD's review of the enclosed information and approval of EPC's site closure requests. If you have any questions or comments concerning the enclosed materials, or if you need additional information, please feel free to contact either Ian Yanagisawa (713-420-7361) or myself (303-291-2276). Additionally, EPC and MWH are available at your convenience to discuss these four locations.

Mr. Glenn von Gonten
March 2, 2012
Page 3

El Paso Corporation Supplemental Site Information

Sincerely,

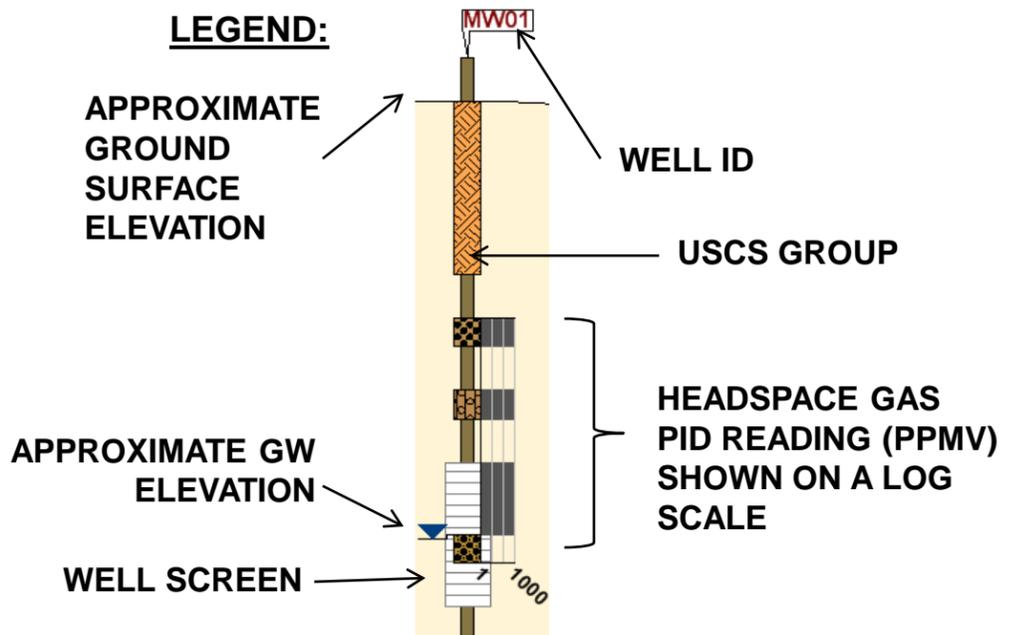
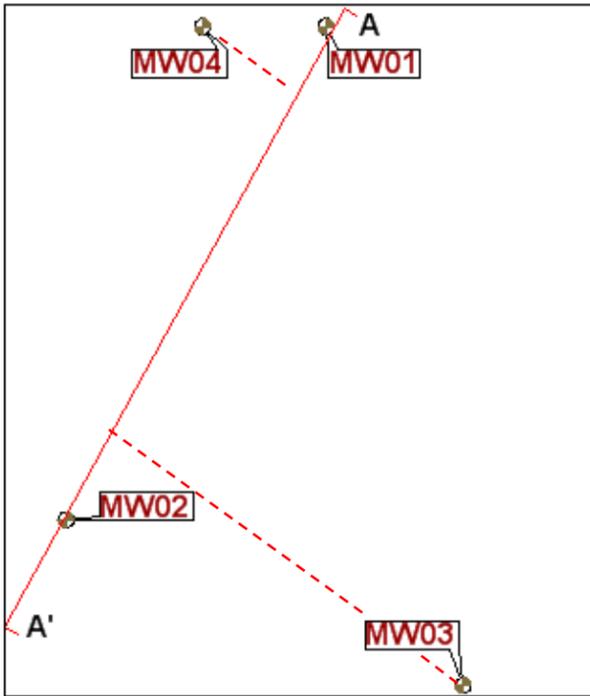
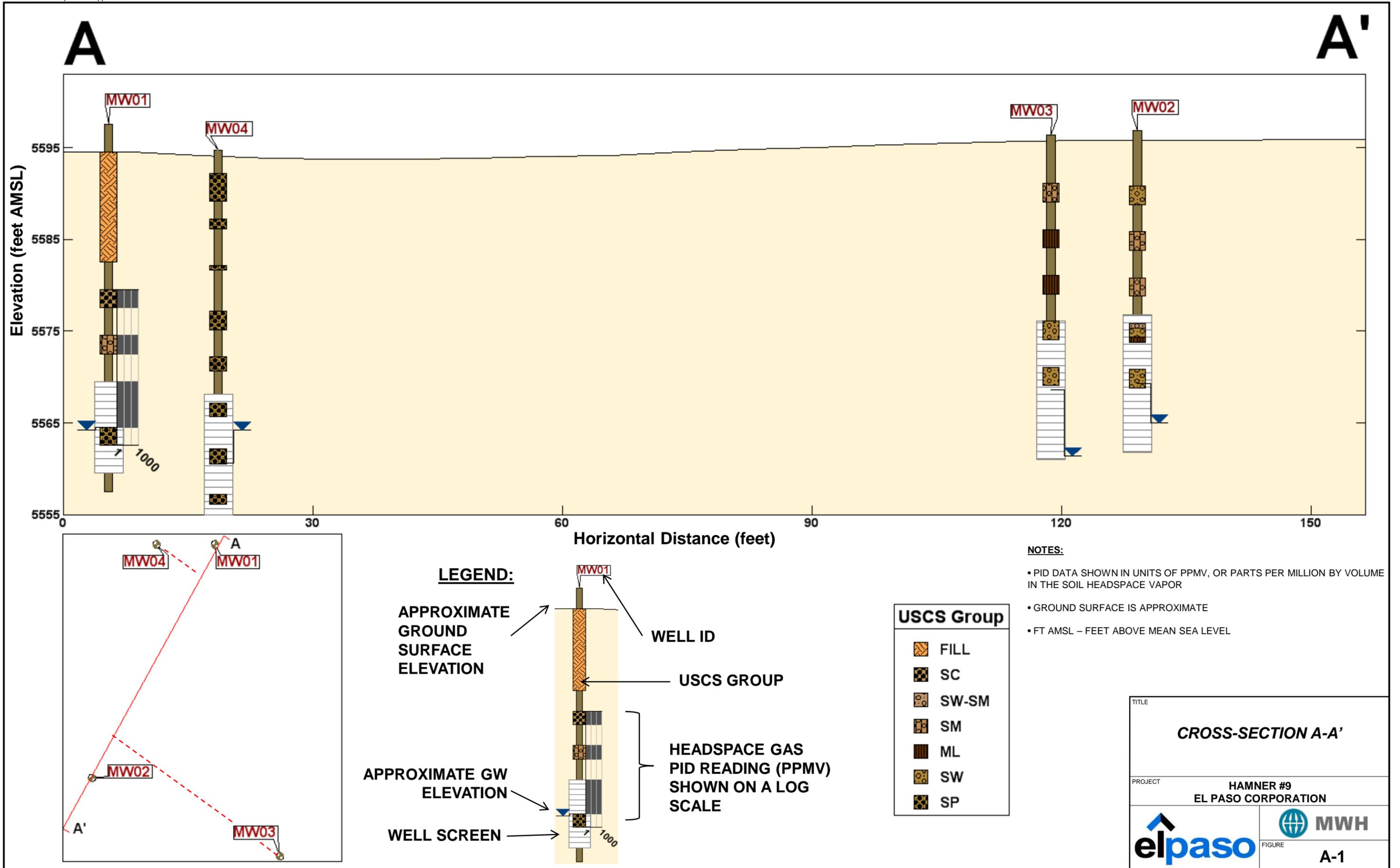
MWH Americas, Inc.



Jed Smith
Project Manager

cc: Ian Yanagisawa – EPC

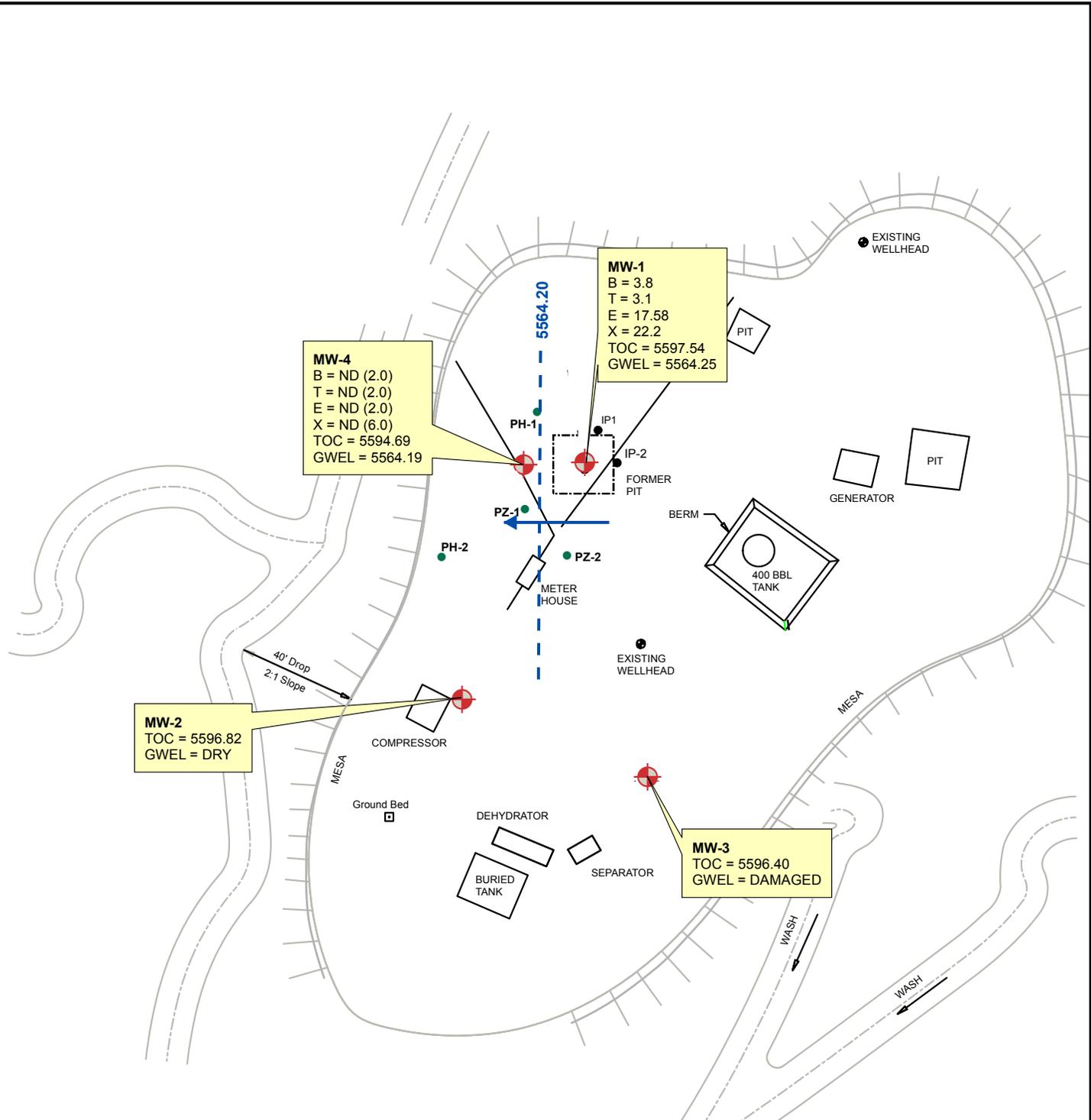
enclosures: Appendices A (Hamner), B (Horton), C (Jaquez), D (Lindrith), E (EPC Closure Plan)



NOTES:

- PID DATA SHOWN IN UNITS OF PPMV, OR PARTS PER MILLION BY VOLUME IN THE SOIL HEADSPACE VAPOR
- GROUND SURFACE IS APPROXIMATE
- FT AMSL – FEET ABOVE MEAN SEA LEVEL

TITLE	
CROSS-SECTION A-A'	
PROJECT	
HAMNER #9 EL PASO CORPORATION	
	FIGURE
A-1	



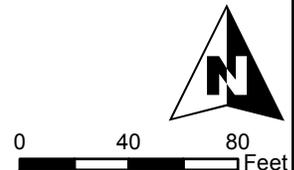
NMWQCC Groundwater Standards

B	10 (ug/L)
T	750 (ug/L)
E	750 (ug/L)
X	620 (ug/L)

LEGEND

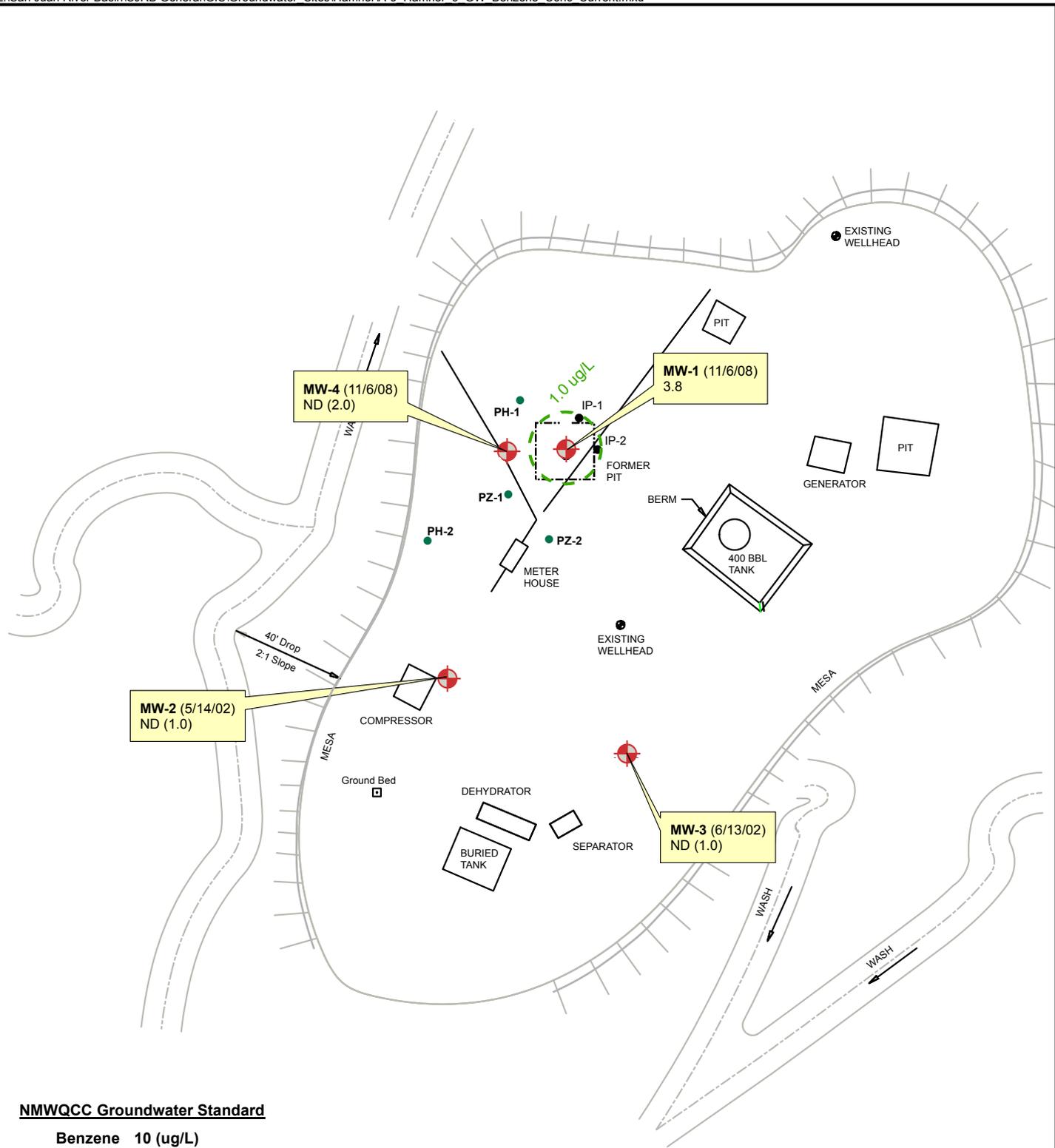
MW-1	Existing Monitoring / Observation Well
PZ-1	Approx. Location of 1996 Piezometer/ Probehole
IP-1	ORC Injection Point (Nov. 2002)
	Groundwater Flow Direction
	Potentiometric Surface Contour (Inferred Where Dashed)
ND	Not Detected; Reporting Limit Shown In Parenthesis

B	Benzene (ug/L)
T	Toluene (ug/L)
E	Ethylbenzene (ug/L)
X	Total Xylenes (ug/L)
TOC	Top of Casing (ft. AMSL)
GWEL	Groundwater Elevation (ft. AMSL)



PROJECT: **HAMNER #9**
 TITLE: **Groundwater Potentiometric Surface Map, and BTEX Concentrations - November 6, 2008**

FIGURE:
A-2

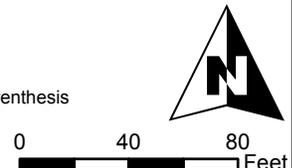


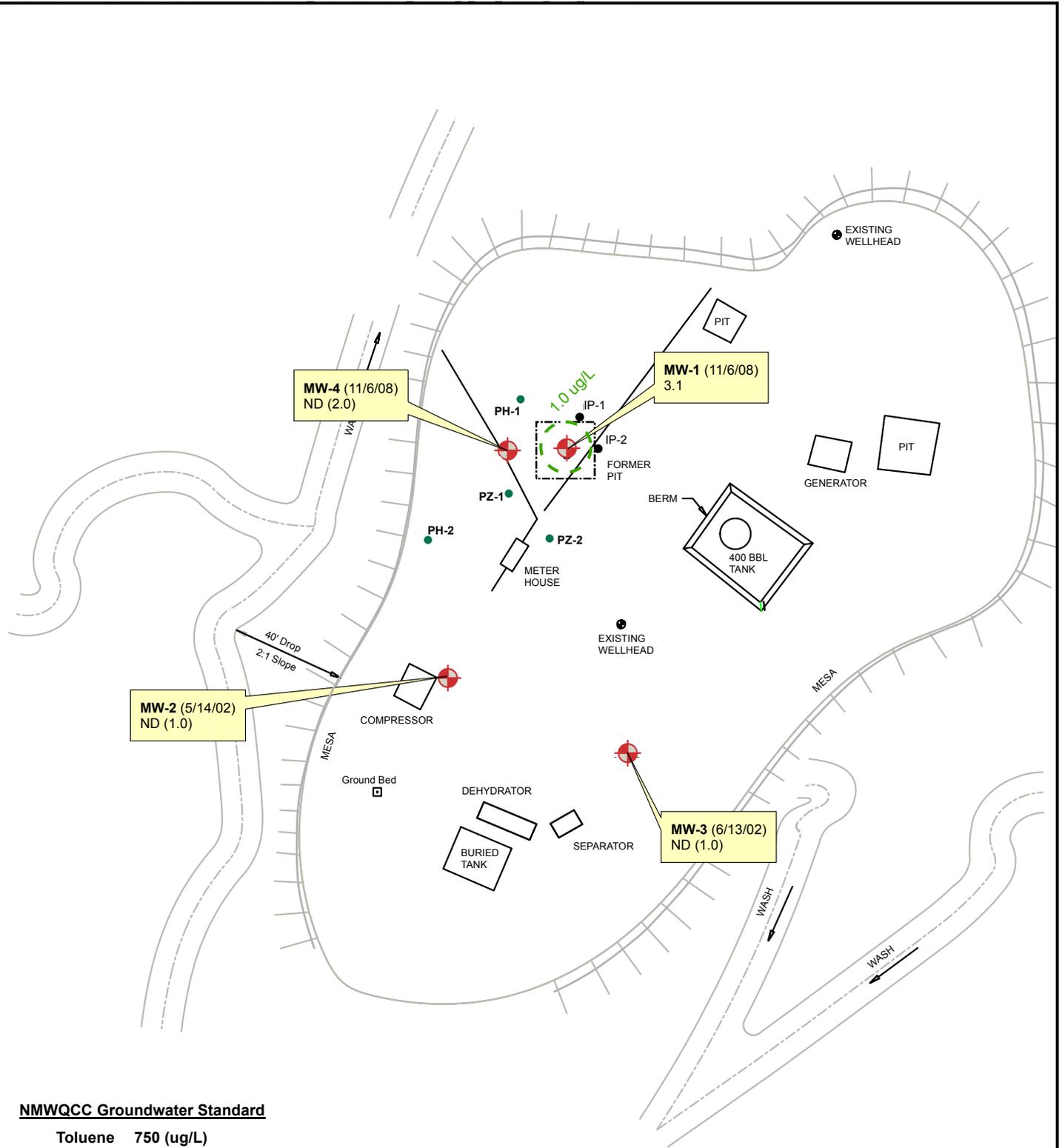
LEGEND

- MW-1 Existing Monitoring / Observation Well
- PZ-1 Approx. Location of 1996 Piezometer/ Probehole
- IP-1 ORC Injection Point (Nov. 2002)
- 1.0 ug/L Concentration Isopleth (Inferred When Dashed)

3.8 Benzene (ug/L)

ND Not Detected; Reporting Limit Shown In Parenthesis





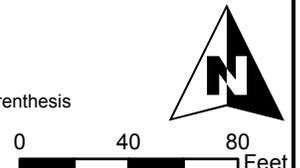
NMWQCC Groundwater Standard

Toluene 750 (ug/L)

LEGEND

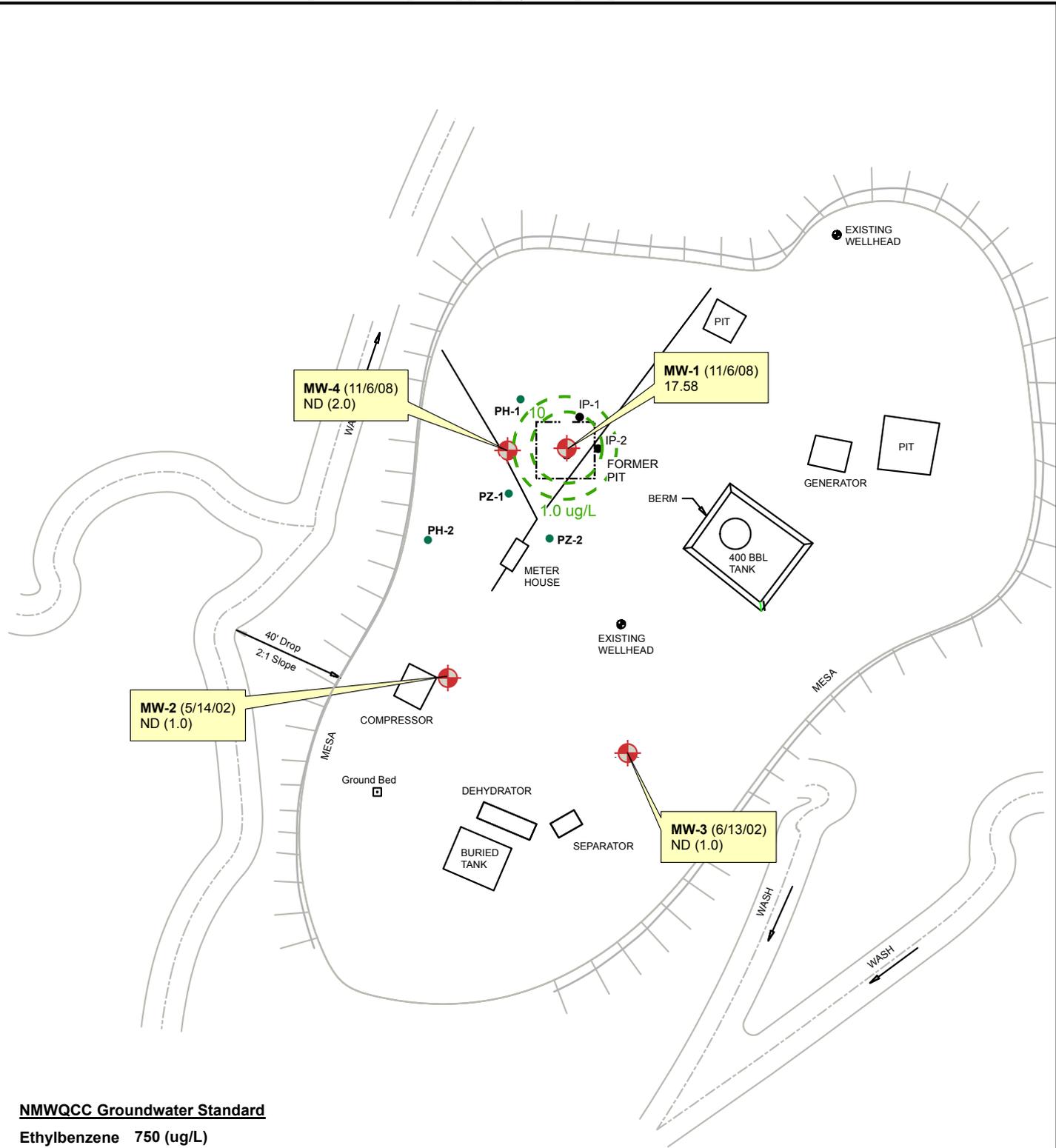
- MW-1 Existing Monitoring / Observation Well
- PZ-1 Approx. Location of 1996 Piezometer/ Probehole
- IP-1 ORC Injection Point (Nov. 2002)
- 1.0 ug/L Concentration Isopleth (Inferred When Dashed)

- 3.1 Toluene (ug/L)
- ND Not Detected; Reporting Limit Shown In Parenthesis



PROJECT: HAMNER #9
 TITLE: Groundwater Toluene Concentration Isopleth Map 2002-2008

FIGURE:
A-4

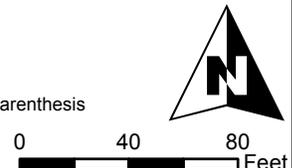


NMWQCC Groundwater Standard
Ethylbenzene 750 (ug/L)

LEGEND

- MW-1 Existing Monitoring / Observation Well
- PZ-1 Approx. Location of 1996 Piezometer/ Probehole
- IP-1 ORC Injection Point (Nov. 2002)
- 1.0 ug/L Concentration Isopleth (Inferred When Dashed)

- 17.58 Ethylbenzene (ug/L)
- ND Not Detected; Reporting Limit Shown In Parenthesis

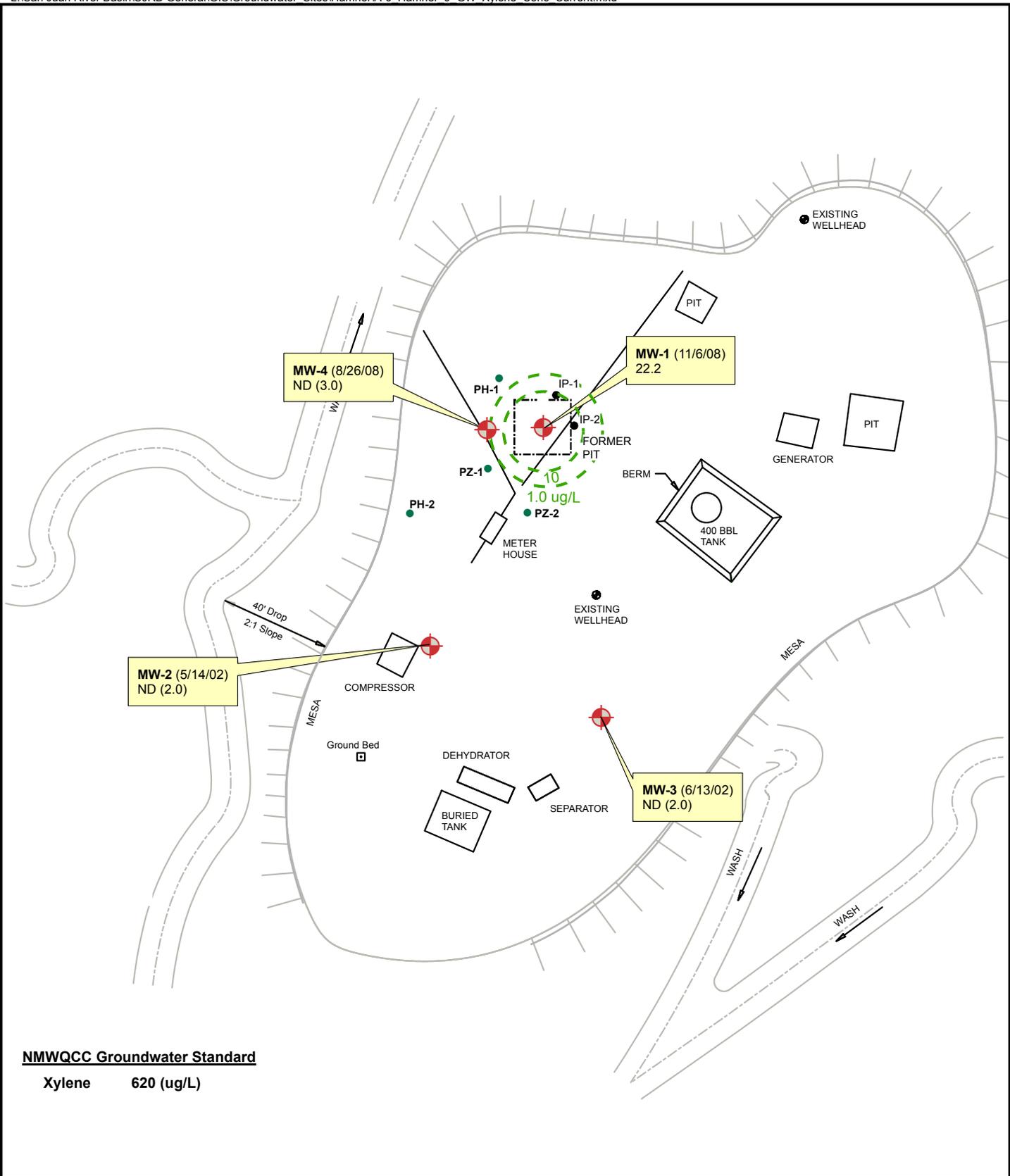


MWH



PROJECT: HAMNER #9
 TITLE: Groundwater Ethylbenzene Concentration Isopleth Map 2002-2008

FIGURE:
A-5

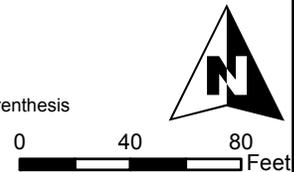


NMWQCC Groundwater Standard

Xylene 620 (ug/L)

- LEGEND**
- MW-1 Existing Monitoring / Observation Well
 - PZ-1 Approx. Location of 1996 Piezometer/ Probehole
 - IP-1 ORC Injection Point (Nov. 2002)
 - 1.0 ug/L Concentration Isopleth (Inferred When Dashed)

- 22.2 Xylene (ug/L)
- ND Not Detected; Reporting Limit Shown In Parenthesis



MWH

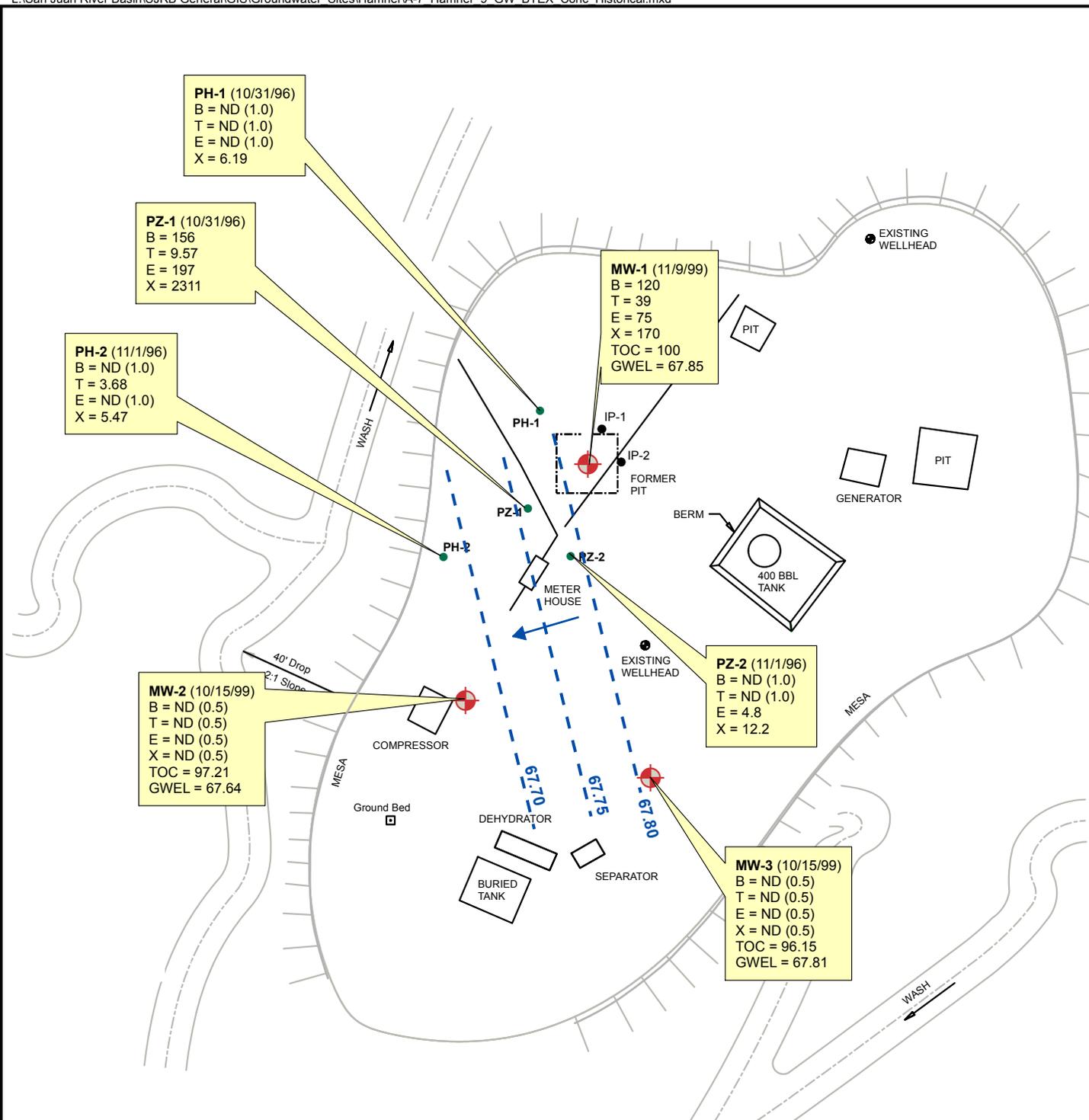


PROJECT: HAMNER #9

TITLE: Groundwater Xylene Concentration Isopleth Map 2002-2008

FIGURE:

A-6



PH-1 (10/31/96)
 B = ND (1.0)
 T = ND (1.0)
 E = ND (1.0)
 X = 6.19

PZ-1 (10/31/96)
 B = 156
 T = 9.57
 E = 197
 X = 2311

PH-2 (11/1/96)
 B = ND (1.0)
 T = 3.68
 E = ND (1.0)
 X = 5.47

MW-1 (11/9/99)
 B = 120
 T = 39
 E = 75
 X = 170
 TOC = 100
 GWEL = 67.85

MW-2 (10/15/99)
 B = ND (0.5)
 T = ND (0.5)
 E = ND (0.5)
 X = ND (0.5)
 TOC = 97.21
 GWEL = 67.64

PZ-2 (11/1/96)
 B = ND (1.0)
 T = ND (1.0)
 E = 4.8
 X = 12.2

MW-3 (10/15/99)
 B = ND (0.5)
 T = ND (0.5)
 E = ND (0.5)
 X = ND (0.5)
 TOC = 96.15
 GWEL = 67.81

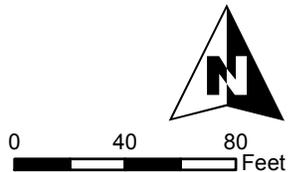
NMWQCC Groundwater Standards

- B** 10 (ug/L)
- T** 750 (ug/L)
- E** 750 (ug/L)
- X** 620 (ug/L)

LEGEND

- MW-1** Existing Monitoring / Observation Well
- PZ-1** Approx. Location of 1996 Piezometer/ Probehole
- IP-2** ORC Injection Point (Nov. 2002)
- Groundwater Flow Direction
- Potentiometric Surface Contour (Inferred Where Dashed)
- ND** Not Detected; Reporting Limit Shown In Parenthesis

- B** Benzene (ug/L)
- T** Toluene (ug/L)
- E** Ethylbenzene (ug/L)
- X** Total Xylenes (ug/L)
- TOC** Top of Casing (ft. AMSL)
- GWEL** Groundwater Elevation (ft. AMSL)



MWH

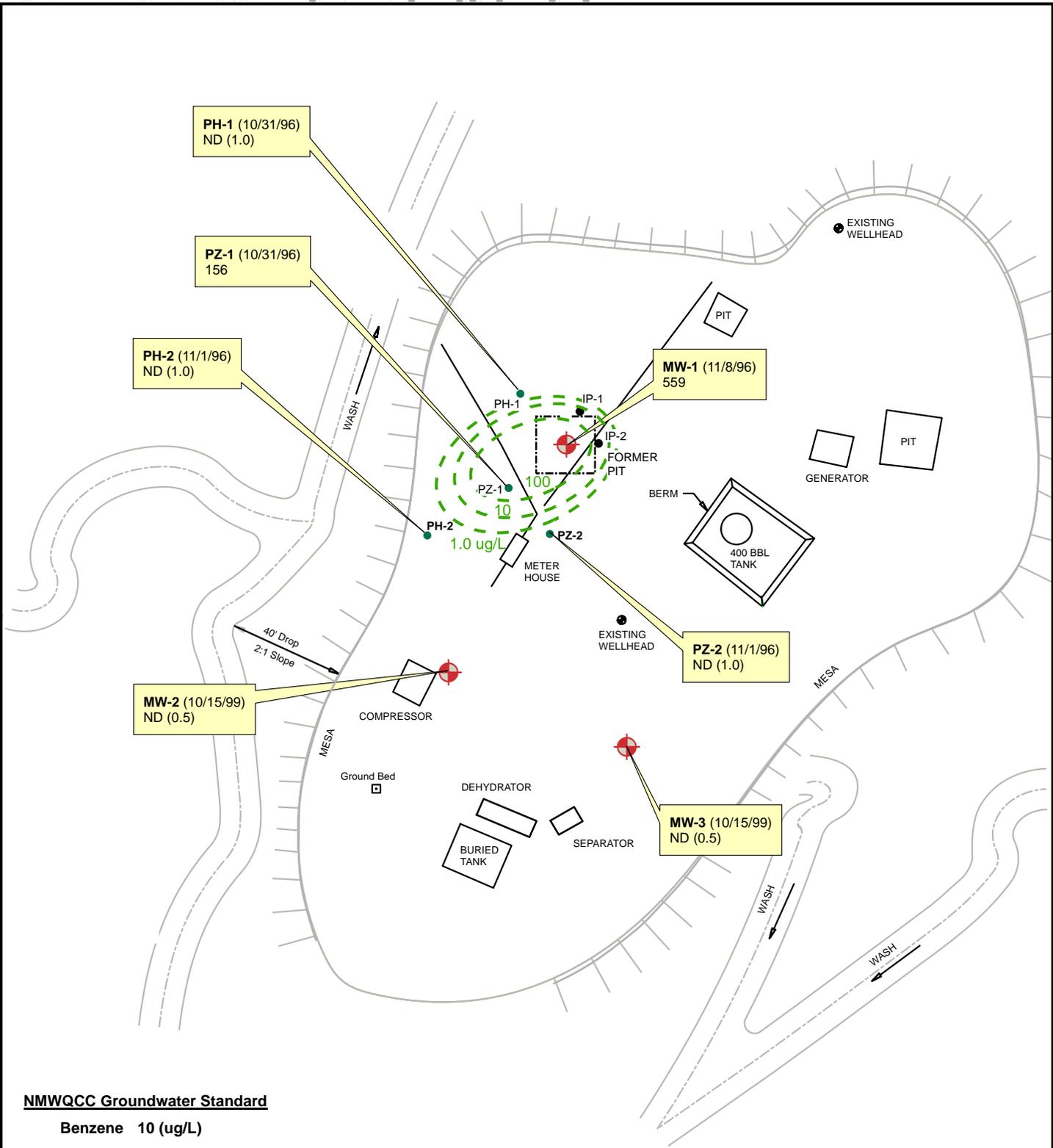


PROJECT: **HAMNER #9**

TITLE: **Groundwater Potentiometric Surface Map, and BTEX Concentrations 1996-1999**

FIGURE:

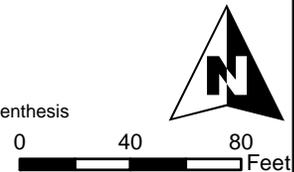
A-7



NMWQCC Groundwater Standard
Benzene 10 (ug/L)

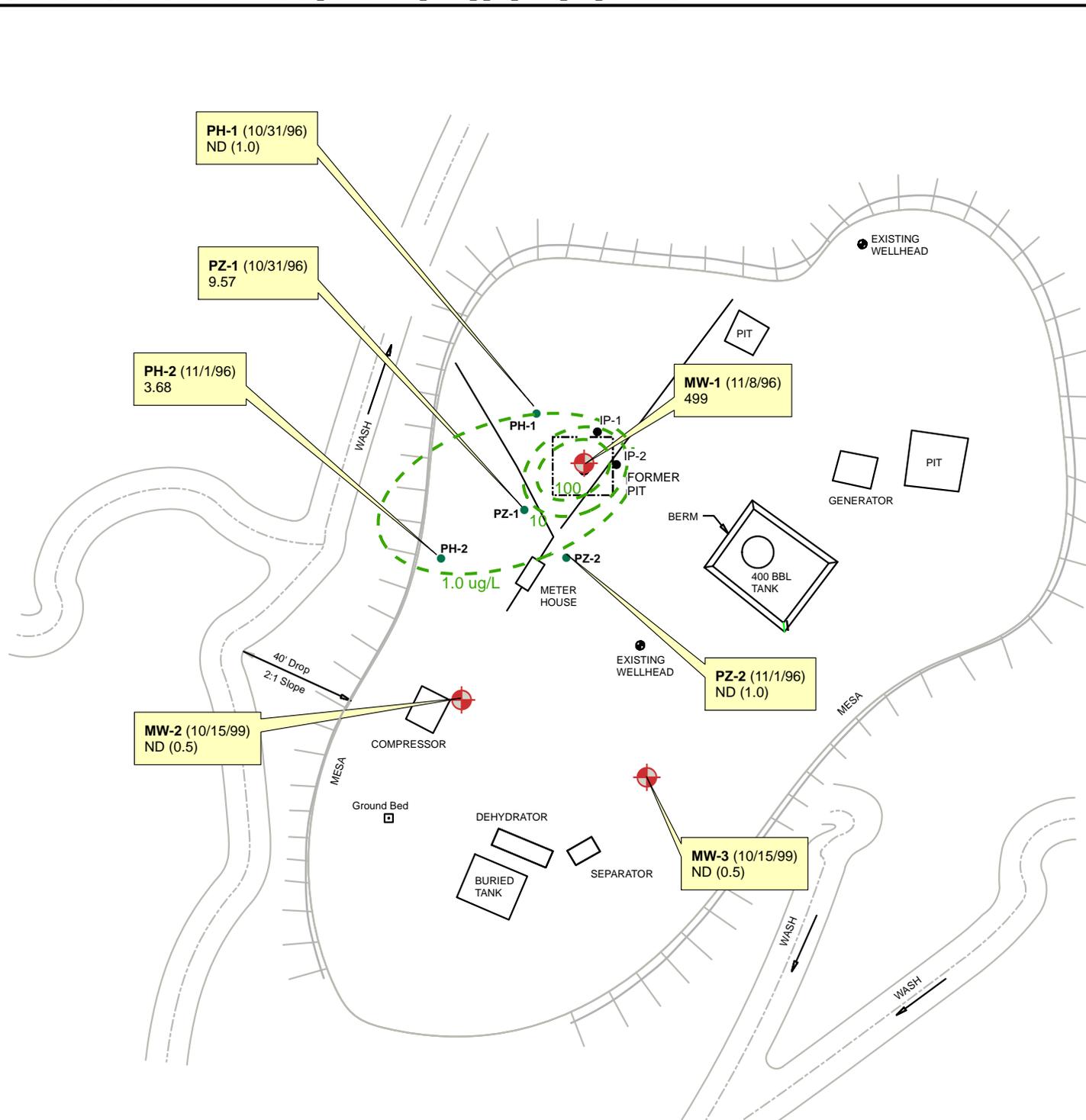
LEGEND
 MW-1 Existing Monitoring / Observation Well
 PZ-1 Approx. Location of 1996 Piezometer/ Probehole
 IP-1 ORC Injection Point (Nov. 2002)
 1.0 ug/L Concentration Isopleth (Inferred When Dashed)

559 Benzene (ug/L)
 ND Not Detected; Reporting Limit Shown In Parenthesis



PROJECT: HAMNER #9
 TITLE: Groundwater Benzene Concentration Isopleth Map 1996-1999

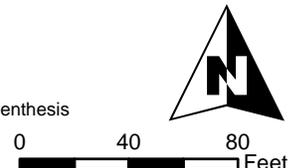
FIGURE:
A-8



NMWQCC Groundwater Standard
Toluene 750 (ug/L)

LEGEND
 MW-1 Existing Monitoring / Observation Well
 PZ-1 Approx. Location of 1996 Piezometer/ Probehole
 IP-1 ORC Injection Point (Nov. 2002)
 1.0 ug/L Concentration Isopleth (Inferred When Dashed)

499 Toluene (ug/L)
 ND Not Detected; Reporting Limit Shown In Parenthesis

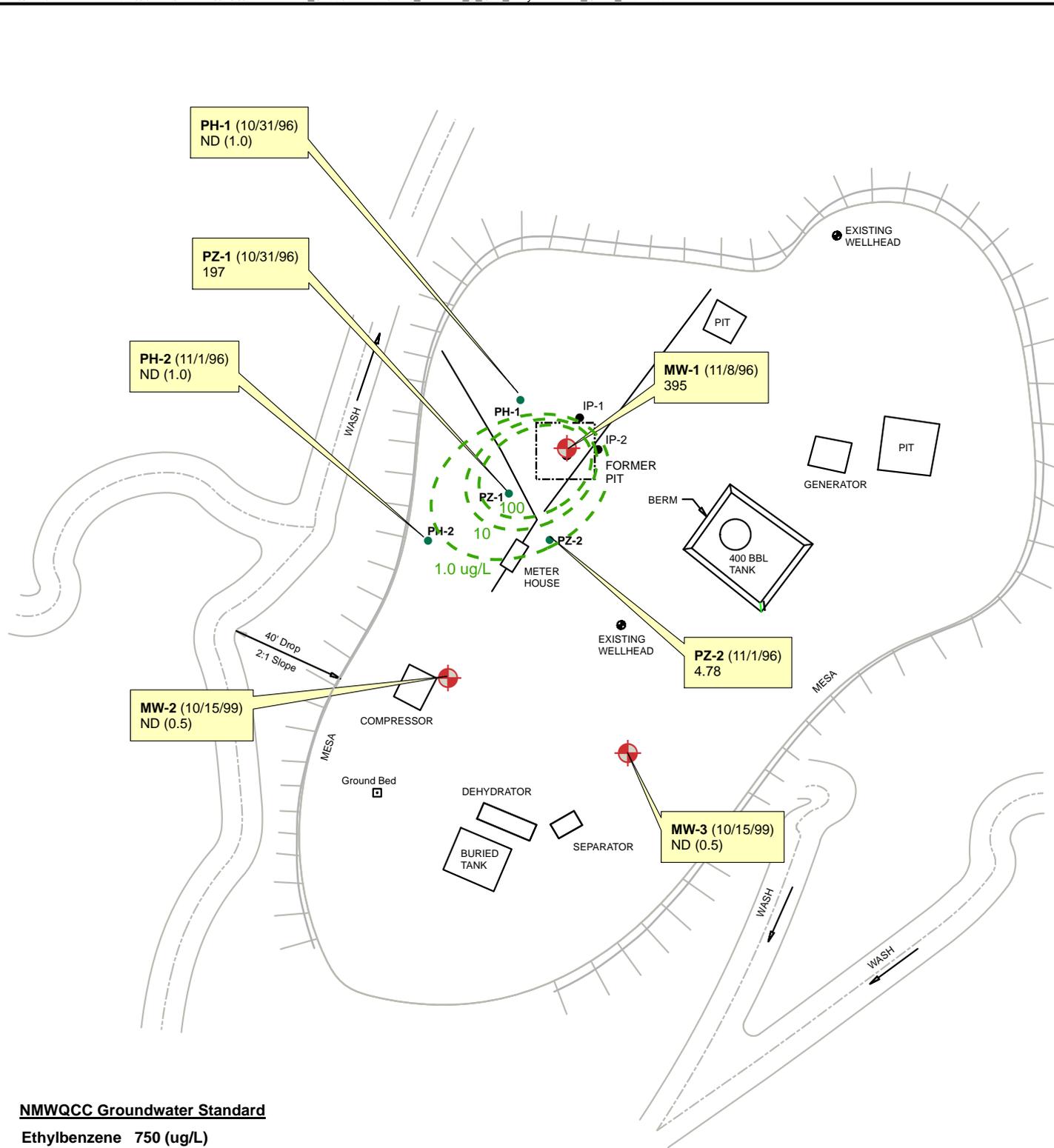


MWH

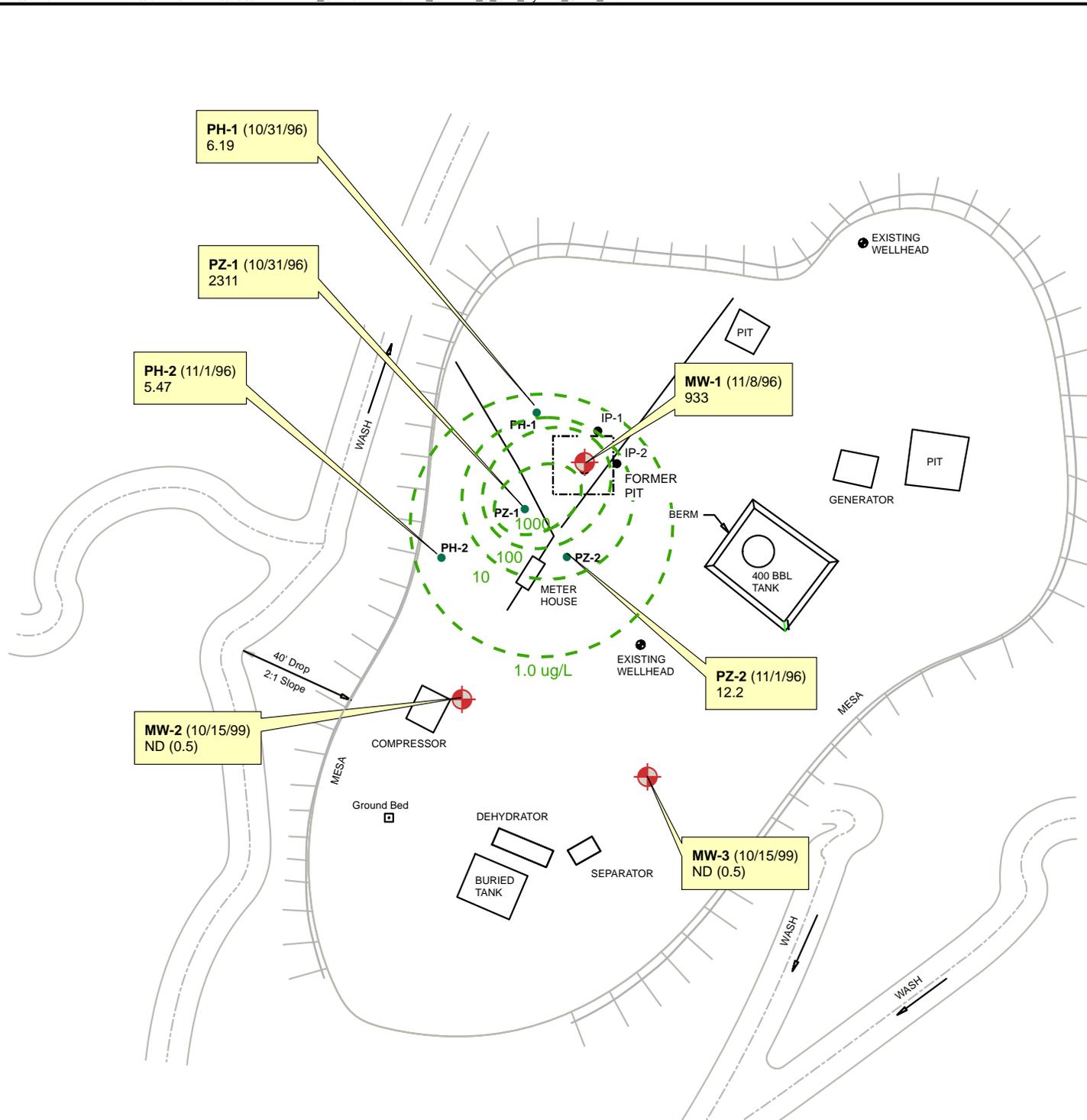


PROJECT: **HAMNER #9**
 TITLE: **Groundwater Toluene Concentration Isopleth Map 1996-1999**

FIGURE:
A-9



<p>LEGEND</p> <p>MW-1 Existing Monitoring / Observation Well</p> <p>PZ-1 Approx. Location of 1996 Piezometer/ Probehole</p> <p>IP-1 ORC Injection Point (Nov. 2002)</p> <p> 1.0 ug/L Concentration Isopleth (Inferred When Dashed)</p>		<p> 395 Ethylbenzene (ug/L)</p> <p>ND Not Detected; Reporting Limit Shown In Parenthesis</p>	
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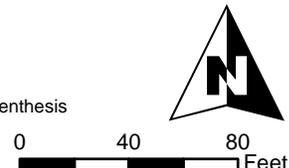


NMQCC Groundwater Standard

Xylene 620 (ug/L)

- LEGEND**
- MW-1 Existing Monitoring / Observation Well
 - PZ-1 Approx. Location of 1996 Piezometer/ Probehole
 - IP-1 ORC Injection Point (Nov. 2002)
 - 1.0 ug/L Concentration Isopleth (Inferred When Dashed)

- 933 Xylene (ug/L)
- ND Not Detected; Reporting Limit Shown In Parenthesis



PROJECT: HAMNER #9
 TITLE: Groundwater Xylene Concentration Isopleth Map 1996-1999

FIGURE:
A-11



Via FedEx

January 9, 2009

Mr. Glenn von Gonten
Senior Hydrologist
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

**RE: Closure Request for Hamner #9 Site
NMOCD Case No. 3RP-190**

Dear Mr. von Gonten:

El Paso Tennessee Pipeline Company (EPTPC), formerly El Paso Field Services (EPFS), hereby requests regulatory closure of the Hamner #9 site (NMOCD Case No. 3R-190). This correspondence documents the analytical results from site monitoring activities that have been ongoing for several years in accordance with the Remediation Plan approved by the New Mexico Oil Conservation Division (OCD) on November 30, 1995. EPTPC formally requests closure of Hamner #9 site based on the data obtained and documented herein.

Summary of Project History

The Hamner #9 site was assessed in 1994 and given an NMOCD Hazard Ranking of 30. 70 cubic yards of impacted soil were excavated from the former pit in May 1994, and the first monitoring well (MW-1) was installed in August 1995, in the location of the former pit. The groundwater in MW-1 exceeded the NMWQCC groundwater standards for benzene (198 ug/L), toluene (1,480 ug/L), and total xylenes (2,250 ug/L).

In October 1996, additional site characterization work was conducted. Two piezometers were installed southwest and south of MW-1, along with 2 additional probeholes that were used for one-time gauging and groundwater sampling. As reported in the 1997 Groundwater Annual Report (EPFS, March 1998), the characterization effort indicated that the groundwater gradient was toward the south-southwest and groundwater impacts above the applicable standards were only present southwest of MW-1. The 1998 report also suggested that nutrient injection be utilized to facilitate degradation of the residual site impacts.

In correspondence dated July 8, 1998, the NMOCD required that EPFS install additional permanent groundwater monitoring wells at several sites, including the Hamner #9 site. In response, EPFS installed new wells MW-2 and MW-3 in September 1999 (permanent surface completions installed subsequently in July 2000). MW-2 and MW-3 were

El Paso Tennessee Pipeline Company
1001 Louisiana Street
Houston, Texas 77002



sampled annually from October 1999 through May 2002, with no detections of BTEX encountered. These results suggested that the remaining impacts were located in the more immediate vicinity of the former pit and monitoring well MW-1. Therefore, in November 2002, per previous recommendations made to the NMOCD regarding this site, EPFS injected approximately 92 pounds of oxygen releasing compound into direct push boreholes advanced on the north and east sides of the former pit. This effort was intended to help accelerate the natural attenuation of the remaining hydrocarbon impacts.

In a letter dated April 3, 2003, the NMOCD requested that additional plume delineation be conducted at several EPC sites, including Hamner #9. In response, EPC first re-surveyed the 3 monitoring wells at Hamner #9, finding that the groundwater gradient was directed toward the west, rather than to the south-southwest as originally understood. Following several meetings and project management transitions, EPC installed a new downgradient monitoring well (MW-4) in November 2006. This well was sampled four times between November 2006 and February 2008. The only detections occurred in November 2006, with toluene and total xylenes each being detected at estimated concentrations of less than 1 ug/L.

Monitoring Data

Figure 1 depicts the site layout and the most recent groundwater analytical results (November 2008). For reference, the approximate locations of the 1996 direct push piezometers and probeholes are also shown. Figure 2 is a trend graph of the historical BTEX concentration trends in monitoring well MW-1. Table 1, attached, summarizes the historic monitoring data for the site. As of November 2008, the groundwater quality at the site has now met the applicable New Mexico Water Quality Control Commission standards for 5 consecutive quarters, fulfilling the closure criteria specified in Section 5 of the approved Remediation Plan. Attachment 1 contains the laboratory analytical reports for these 5 quarterly sampling events.

If you have any comments or questions concerning the attached correspondence, please contact me at (713) 420-5150.

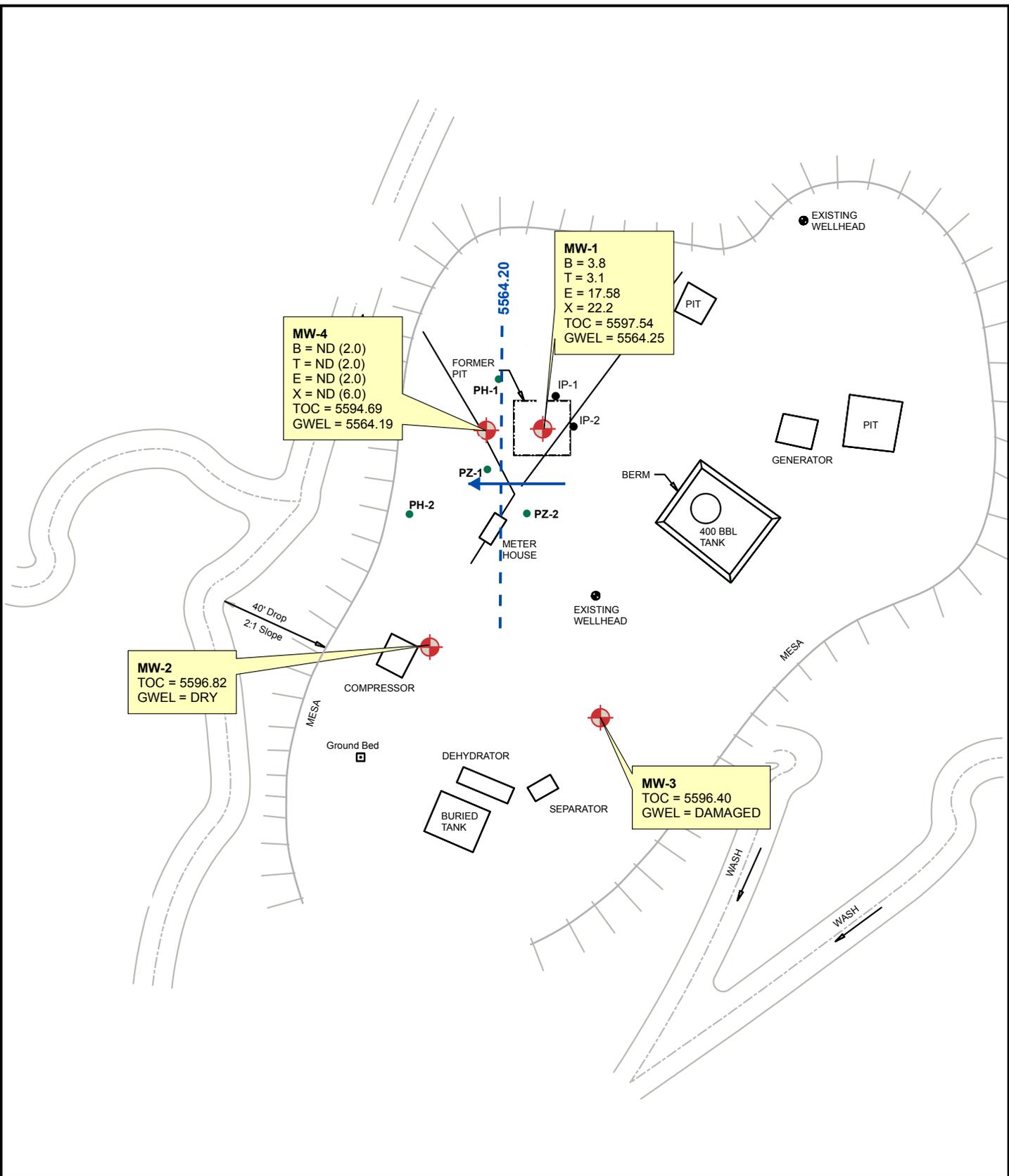
Sincerely,

A handwritten signature in blue ink, appearing to read "D. Stavinoha".

Doug Stavinoha
Project Manager for El Paso Tennessee Pipeline Co.

cc: Jed Smith – MWH, w / o enclosures
Pit Groundwater Remediation – General File, w / enclosures

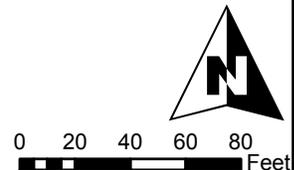
El Paso Tennessee Pipeline Company
1001 Louisiana Street
Houston, Texas 77002



LEGEND

- MW-4** Existing Monitoring / Observation Well
- Approx. Location of 1996 Piezometer/ Probehole
- ORC Injection Point (Nov. 2002)
- Groundwater Flow Direction
- Potentiometric Surface Contour (Inferred Where Dashed)
- ND** Not Detected; Reporting Limit Shown In Parenthesis

- B** Benzene (ug/L)
- T** Toluene (ug/L)
- E** Ethylbenzene (ug/L)
- X** Total Xylenes (ug/L)
- TOC** Top of Casing (ft. AMSL)
- GWEL** Groundwater Elevation (ft. AMSL)



PROJECT: HAMNER #9
 TITLE: Groundwater Potentiometric Surface Map,
 and BTEX Concentrations - November 6, 2008

FIGURE:
1

FIGURE 2
SUMMARY OF BTEX COMPOUNDS IN GROUNDWATER SAMPLES
HAMNER #9 (METER #97213)
MW01

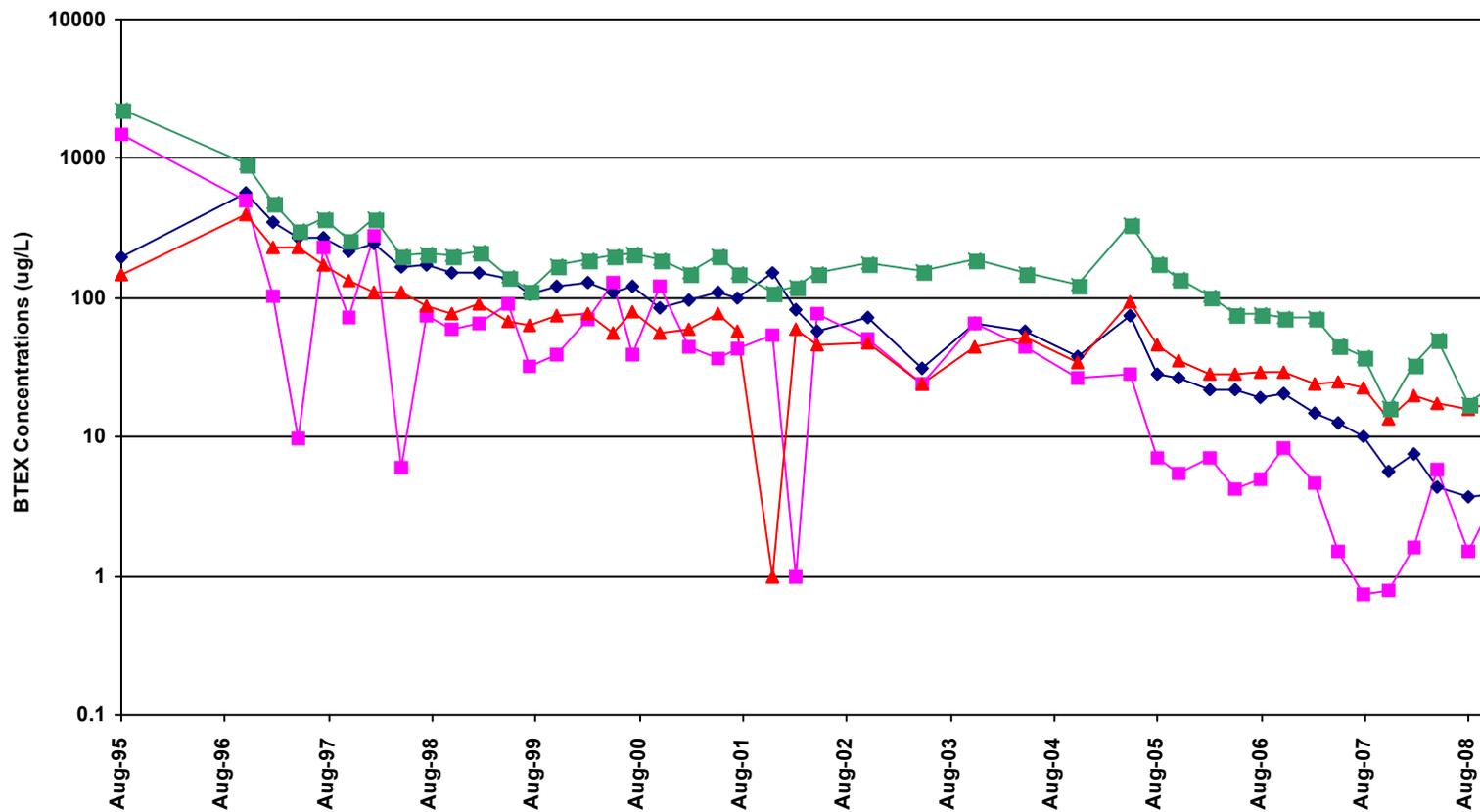


TABLE 1
SUMMARY OF BTEX COMPOUNDS IN GROUNDWATER SAMPLES
HAMNER #9 (METER #97213)

Monitoring Well	Sample Date	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	Depth to Water (ft BTOC)
MW01	8/25/1995	198	1480	146	2250	29.53
	11/8/1996	559	499	395	933	30.30
	2/10/1997	350	101	233	476	30.07
	5/8/1997	266	9.75	230	308	29.99
	8/5/1997	272	228	172	370	30.16
	11/4/1997	216	72.1	133	260	30.21
	2/3/1998	245	276	109	375	32.48
	5/7/1998	166	6.02	110	202	32.38
	8/4/1998	171	74.4	86.1	209	32.54
	11/3/1998	151	58.7	76.4	204	32.62
	2/2/1999	153	64.8	89.7	217	32.42
	5/19/1999	137	89.4	67.3	141	32.28
	8/4/1999	105	32.6	63	113	32.28
	11/9/1999	120	39	75	170	32.19
	2/25/2000	130	70	78	190	32.05
	5/24/2000	110	130	56	200	31.96
	8/1/2000	120	39	80	210	32.08
	11/6/2000	84	120	56	190	32.19
	2/12/2001	95	44	60	150	32.12
	5/30/2001	110	36	78	200	32.06
	8/7/2001	99	43	58	150	32.28
	12/4/2001	150	53	1	110	32.40
	2/25/2002	83	1	59	120	32.39
	5/14/2002	57	78	46	150	32.37
	11/4/2002	72.5	50	47	178.6	32.67
	5/19/2003	31.1	24.4	23.9	158	32.45
	11/15/2003	65.5	65	44.5	190	32.76
	5/11/2004	57.6	44.5	52.1	153	32.61
	11/16/2004	38	26.4	34.7	126	32.88
	5/18/2005	74	27.9	93.1	340	32.67
	8/23/2005	28.6	7	46.3	175	33.05
	11/8/2005	26.2	5.5	35.5	137	32.93
	2/23/2006	22.1	7.1	28.2	102	32.81
5/23/2006	21.6	4.2	28.3	76.6	32.83	
8/23/2006	18.9	5	29.1	76.7	33.06	

Note: Non Detects are represented by a value of 1.

TABLE 1
SUMMARY OF BTEX COMPOUNDS IN GROUNDWATER SAMPLES
HAMNER #9 (METER #97213)

Monitoring Well	Sample Date	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	Depth to Water (ft BTOC)
MW01	11/8/2006	20.4	8.2	28.8	71.9	33.09
	2/26/2007	14.8	4.7	23.7	72.1	32.94
	5/24/2007	12.5	1.5	24.6	45.1	32.86
	8/21/2007	10.1	0.75	22.2	38	33.13
	11/13/2007	5.7	0.79	13.3	16.5	33.21
	2/12/2008	7.5	1.6	19.6	32.9	33.10
	5/8/2008	4.3	5.8	17.4	51	32.98
	8/26/2008	3.7	1.5	15.6	17.2	33.25
	11/6/2008	3.8	3.1	17.5	22.2	33.29
MW02	10/15/1999	1	1	1	1	29.57
	8/28/2000	1	1	1	1	31.65
	5/30/2001	1	1	1	1	31.57
	5/14/2002	1	1	1	1	31.85
MW03	10/15/1999	1	1	1	1	28.34
	8/28/2000	1	1	1	1	30.96
	5/30/2001	1	1	1	1	30.87
	6/13/2002	1	1	1	1	31.33
MW04	11/8/2006	1	0.28	1	0.36	30.32
	8/21/2007	1	1	1	1	30.31
	11/13/2007	1	1	1	1	30.41
	2/12/2008	1	1	1	1	30.31
	8/26/2008	1	1	1	1	30.42

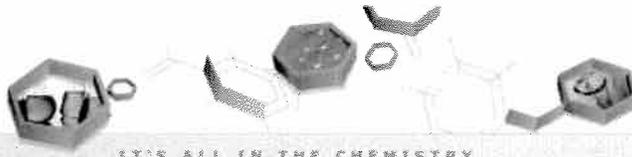
Note: Non Detects are represented by a value of 1.

ATTACHMENT A

Analytical Laboratory Reports



MWH



IT'S ALL IN THE CHEMISTRY

11/28/07



Technical Report for

Montgomery Watson

EPFS San Juan Basin Groundwater Site

DALAB-GROUNDREM005

Accutest Job Number: T19743

Sampling Date: 11/13/07

Report to:

Danielwade@mwhglobal.com

ATTN: Daniel Wade

Total number of pages in report: 18



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.

Ron Martino
Laboratory Manager

Client Service contact: Agnes Vicknair 713-271-4700

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Test results relate only to samples analyzed.

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Sample Summary

Montgomery Watson

Job No: T19743

EPFS San Juan Basin Groundwater Site
Project No: DALAB-GROUNDREM005

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
T19743-1	11/13/07	11:25 MN	11/15/07	AQ	Ground Water	HAMNER MW-1
T19743-2	11/13/07	12:39 MN	11/15/07	AQ	Ground Water	HAMNER MW-4
T19743-3	11/13/07	07:00 MN	11/15/07	AQ	Trip Blank Water	131107TB01 TRIP BLANK



SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Montgomery Watson

Job No T19743

Site: EPFS San Juan Basin Groundwater Site

Report Date 11/28/2007 3:56:09 PM

2 Samples and 1 Trip Blank were collected on 11/13/2007 and were received at Accutest on 11/15/2007 properly preserved, at 1.4 Deg. C and intact. These Samples received an Accutest job number of T19743. 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: VZ1839
------------------	-------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T19770-18MS, T19770-18MSD were used as the QC samples indicated.
- T19743-3 for Toluene: Confirmed by reanalysis.

Matrix AQ	Batch ID: VZ1841
------------------	-------------------------

- All method blanks for this batch meet method specific criteria.
- Sample(s) T19743-IMS, T19743-IMSD 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



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: HAMNER MW-1	Date Sampled: 11/13/07
Lab Sample ID: T19743-1	Date Received: 11/15/07
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: EPFS San Juan Basin Groundwater Site	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z0036259.D	1	11/27/07	LJ	n/a	n/a	VZ1841
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	5.7	2.0	0.23	ug/l	
108-88-3	Toluene	0.79	2.0	0.54	ug/l	J
100-41-4	Ethylbenzene	13.3	2.0	0.48	ug/l	
1330-20-7	Xylene (total)	16.5	6.0	1.1	ug/l	
95-47-6	o-Xylene	0.95	2.0	0.48	ug/l	J
	m,p-Xylene	15.5	4.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		76-125%
17060-07-0	1,2-Dichloroethane-D4	104%		69-128%
2037-26-5	Toluene-D8	112%		80-121%
460-00-4	4-Bromofluorobenzene	104%		69-142%

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: 131107TB01 TRIP BLANK	Date Sampled: 11/13/07
Lab Sample ID: T19743-3	Date Received: 11/15/07
Matrix: AQ - Trip Blank Water	Percent Solids: n/a
Method: SW846 8260B	
Project: EPFS San Juan Basin Groundwater Site	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z0036235.D	1	11/26/07	LJ	n/a	n/a	VZ1839
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

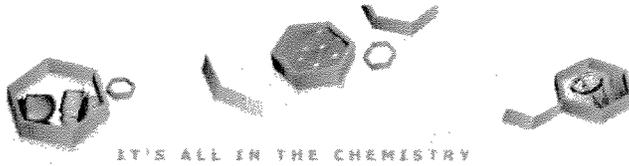
Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.0	0.23	ug/l	
108-88-3	Toluene ^a	1.6	2.0	0.54	ug/l	J
100-41-4	Ethylbenzene	ND	2.0	0.48	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.1	ug/l	
95-47-6	o-Xylene	ND	2.0	0.48	ug/l	
	m,p-Xylene	ND	4.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		76-125%
17060-07-0	1,2-Dichloroethane-D4	89%		69-128%
2037-26-5	Toluene-D8	115%		80-121%
460-00-4	4-Bromofluorobenzene	111%		69-142%

(a) 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



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY

10165 Harwin Drive, Ste. 150, Houston, TX 77036
 TEL: 713-271-4700 FAX: 713-271-4770
 www.accutest.com

Fed-Ex Tracking # **861094410282** Bottle Order Control #
 Accutest Quote # _____ Accutest Job # **T19743**

Client / Reporting Information		Project Information		Requested Analysis										Matrix Codes							
Company Name MWH AMERICAS		Project Name SAN JUAN BASIN GROUND WATER												DW - Drinking Water							
Address 1801 CALIFORNIA ST STE 200		Street												DW - Ground Water							
City State Zip DENVER CO 80202		City State												WW - Water							
Project Contact TED SMITH		Project #												SW - Surface Water							
Phone # 303 291 2276		Fax #												SO - Soil							
Sampler's Name MNEE		Client Purchase Order # DALAB-CAFOUNDREM 005												SL - Sludge							
Field ID / Point of Collection		SUMMA #												OI - Oil							
MECH Vial #		Collection												LIO - Other Liquid							
														AIR - Air							
														SOL - Other Solid							
														WP - Wipe							
														LAB USE ONLY							
Accutest Sample #	Field ID / Point of Collection	SUMMA #	MECH Vial #	DATE	TIME	SAMPLED BY	MATRIX	# OF BOTTLES	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	
1	Hammer MW-1			11/30/07	1125	MN	WG	3	3												
2	Hammer MW-4			11/30/07	1231	MN	WG	3	3												
3	131107TB01 TRIP			11/30/07	0700	MN	WG	2	2												

1202
1203
1204

4.1
4

Turnaround Time (Business Days)		Data Deliverable Information		Comments / Remarks	
<input checked="" type="checkbox"/> 10 Day STANDARD	Approved By / Date	<input type="checkbox"/> Commercial 'A'	<input type="checkbox"/> EDD Format		
<input type="checkbox"/> 5 Day RUSH	_____	<input type="checkbox"/> Commercial 'B'			
<input type="checkbox"/> 3 Day EMERGENCY	_____	<input type="checkbox"/> Reduced Tier 1			
<input type="checkbox"/> 2 Day EMERGENCY	_____	<input type="checkbox"/> Full Tier 1			
<input type="checkbox"/> 1 Day EMERGENCY	_____	<input type="checkbox"/> TRRP13			
<input type="checkbox"/> Other	_____	Commercial 'A' = Results Only			

Emergency & Rush T/A data available VIA LabLink

Sample Custody must be documented below each time samples change possession including courier delivery

Relinquished by / Sampler	Date Time	Received by	Date Time	Relinquished by	Date Time	Received by	Date Time
AC	11/4/07		1600		11-15-07	A. Franco	

Cover Temp: **1.4 C**

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T19743
 Account: MWHSLCUT Montgomery Watson
 Project: EPFS San Juan Basin Groundwater Site

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T19770-18MS	Z0036246.D	50	11/26/07	LJ	n/a	n/a	VZ1839
T19770-18MSD	Z0036247.D	50	11/26/07	LJ	n/a	n/a	VZ1839
T19770-18	Z0036245.D	50	11/26/07	LJ	n/a	n/a	VZ1839

The QC reported here applies to the following samples:

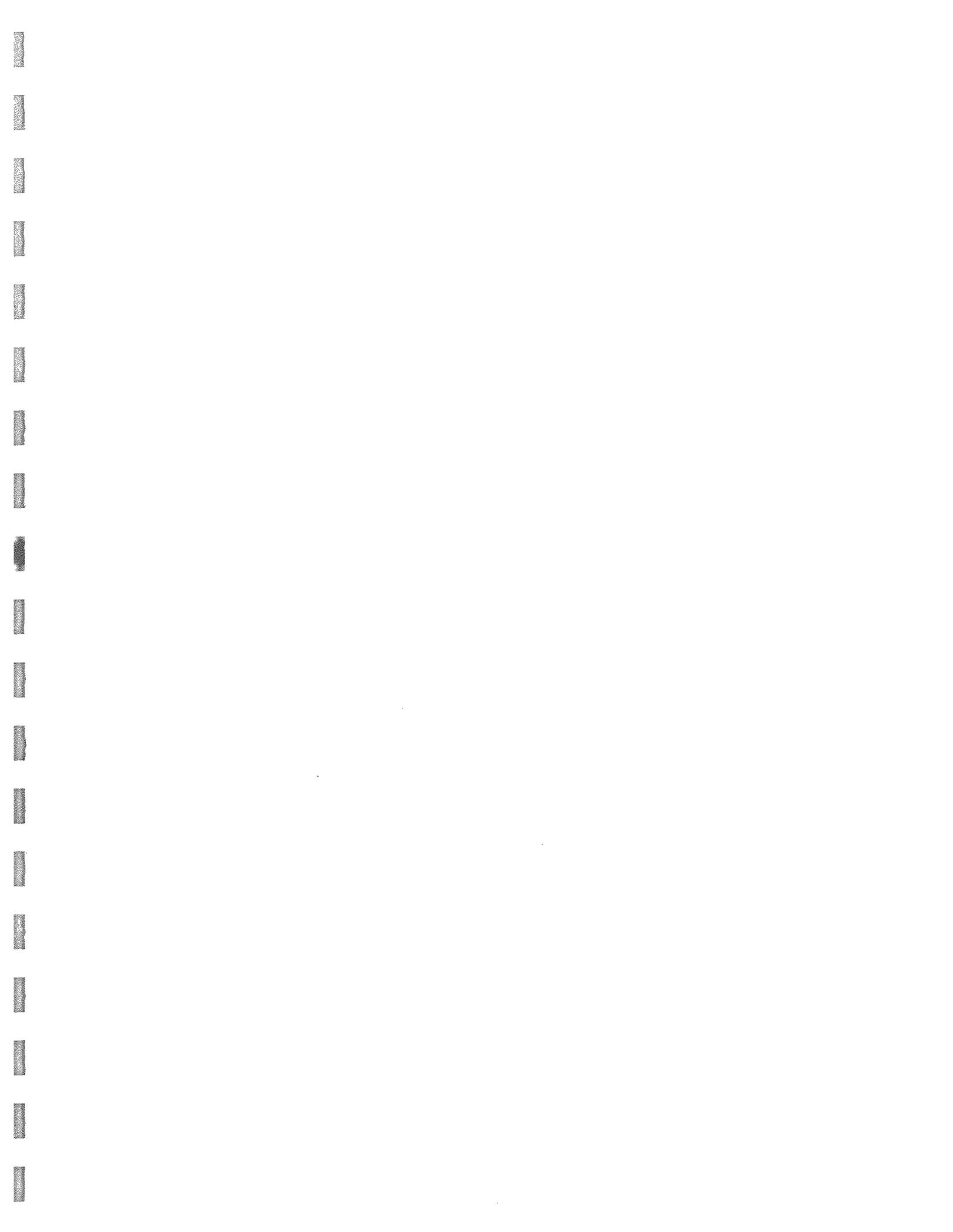
Method: SW846 8260B

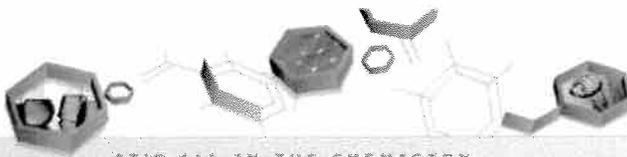
T19743-3

CAS No.	Compound	T19770-18 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	4550	1250	5640	87	5570	82	1	74-125/18
100-41-4	Ethylbenzene	2140	1250	3330	95	3240	88	3	77-119/20
108-88-3	Toluene	8180	1250	9340	93	9100	74* a	3	79-119/21
1330-20-7	Xylene (total)	16900	3750	20400	93	19600	72* a	4	78-119/20
	m,p-Xylene	11900	2500	14300	96	13700	72* a	4	79-119/20
95-47-6	o-Xylene	4930	1250	6120	95	5890	77	4	76-118/21

CAS No.	Surrogate Recoveries	MS	MSD	T19770-18	Limits
1868-53-7	Dibromofluoromethane	97%	98%	97%	76-125%
17060-07-0	1,2-Dichloroethane-D4	91%	95%	95%	69-128%
2037-26-5	Toluene-D8	114%	113%	117%	80-121%
460-00-4	4-Bromofluorobenzene	104%	106%	115%	69-142%

(a) Outside control limits due to high level in sample relative to spike amount.





Technical Report for

Montgomery Watson

EPFS San Juan Basin Groundwater Site

D-ALAM-GROUNDREM006

Accutest Job Number: T20864

Sampling Date: 02/12/08

Report to:

Danielwade@mwhglobal.com

ATTN: Daniel Wade

Total number of pages in report: 16



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.

Ron Martino
Laboratory Manager

Client Service contact: Agnes Vicknair 713-271-4700

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Test results relate only to samples analyzed.

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Sample Summary

Montgomery Watson

Job No: T20864

EPFS San Juan Basin Groundwater Site
Project No: D-ALAM-GROUNDREM006

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T20864-1	02/12/08	12:50 TU	02/14/08	AQ	Ground Water	HAMNER MW-1
T20864-2	02/12/08	12:24 TU	02/14/08	AQ	Ground Water	HAMNER MW-4
T20864-3	02/12/08	07:00 TU	02/14/08	AQ	Trip Blank Water	120208TB01



SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Montgomery Watson

Job No T20864

Site: EPFS San Juan Basin Groundwater Site

Report Date 2/19/2008 4:36:23 PM

2 Samples and 1 Trip Blank were collected on 02/12/2008 and were received at Accutest on 02/14/2008 properly preserved, at 5.9 Deg. C and intact. These Samples received an Accutest job number of T20864. 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: VF2876
------------------	-------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T20862-1MS, T20862-1MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Benzene are outside control limits. Probable cause due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Benzene are outside control limits. Probable cause due to matrix interference.

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: HAMNER MW-1	Date Sampled: 02/12/08
Lab Sample ID: T20864-1	Date Received: 02/14/08
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: EPFS San Juan Basin Groundwater Site	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0090212.D	1	02/18/08	LJ	n/a	n/a	VF2876
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	7.5	2.0	0.46	ug/l	
108-88-3	Toluene	1.6	2.0	0.48	ug/l	J
100-41-4	Ethylbenzene	19.6	2.0	0.45	ug/l	
1330-20-7	Xylene (total)	32.9	6.0	1.4	ug/l	
95-47-6	o-Xylene	4.6	2.0	0.42	ug/l	
	m,p-Xylene	28.3	4.0	0.94	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		76-125%
17060-07-0	1,2-Dichloroethane-D4	100%		69-128%
2037-26-5	Toluene-D8	99%		80-121%
460-00-4	4-Bromofluorobenzene	104%		69-142%

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: HAMNER MW-4	Date Sampled: 02/12/08
Lab Sample ID: T20864-2	Date Received: 02/14/08
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: EPFS San Juan Basin Groundwater Site	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0090211.D	1	02/18/08	LJ	n/a	n/a	VF2876
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	0.46	ug/l	
108-88-3	Toluene	ND	2.0	0.48	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.45	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.4	ug/l	
95-47-6	o-Xylene	ND	2.0	0.42	ug/l	
	m,p-Xylene	ND	4.0	0.94	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		76-125%
17060-07-0	1,2-Dichloroethane-D4	98%		69-128%
2037-26-5	Toluene-D8	101%		80-121%
460-00-4	4-Bromofluorobenzene	107%		69-142%

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: 120208TB01	
Lab Sample ID: T20864-3	Date Sampled: 02/12/08
Matrix: AQ - Trip Blank Water	Date Received: 02/14/08
Method: SW846 8260B	Percent Solids: n/a
Project: EPFS San Juan Basin Groundwater Site	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0090205.D	1	02/18/08	LJ	n/a	n/a	VF2876
Run #2							

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

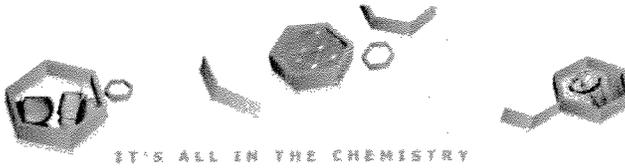
Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.0	0.46	ug/l	
108-88-3	Toluene	1.5	2.0	0.48	ug/l	J
100-41-4	Ethylbenzene	ND	2.0	0.45	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.4	ug/l	
95-47-6	o-Xylene	ND	2.0	0.42	ug/l	
	m,p-Xylene	ND	4.0	0.94	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		76-125%
17060-07-0	1,2-Dichloroethane-D4	99%		69-128%
2037-26-5	Toluene-D8	101%		80-121%
460-00-4	4-Bromofluorobenzene	105%		69-142%

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



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY

10165 Harwin Drive, Ste. 150, Houston, TX 77036
 TEL: 713-271-4700 FAX: 713-271-4770
 www.accutest.com

FED-EX Tracking # 864158317222	Bottle Order Control #
Accutest Quote #	Accutest Job # T20864

Client / Reporting Information		Project Information		Requested Analysis										Matrix Codes																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Company Name MWH AMERICAS, INC		Project Name SAN JUAN BASIN GW SITES Project												DW - Drinking Water																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Address 1801 California St. Ste. 2900		Street												GW - Ground Water																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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Project Contact Jed Smith		Project #												SW - Surface Water																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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Accutest Sample #	MECH Vis #	Date	Time	Sampled By	Matrix	# of bottles	IC	MR	MR3	MR6	MR8	MR10	MR12	MR15	MR18	MR20	MR25	MR30	MR35	MR40	MR45	MR50	MR55	MR60	MR65	MR70	MR75	MR80	MR85	MR90	MR95	MR100	MR105	MR110	MR115	MR120	MR125	MR130	MR135	MR140	MR145	MR150	MR155	MR160	MR165	MR170	MR175	MR180	MR185	MR190	MR195	MR200	MR205	MR210	MR215	MR220	MR225	MR230	MR235	MR240	MR245	MR250	MR255	MR260	MR265	MR270	MR275	MR280	MR285	MR290	MR295	MR300	MR305	MR310	MR315	MR320	MR325	MR330	MR335	MR340	MR345	MR350	MR355	MR360	MR365	MR370	MR375	MR380	MR385	MR390	MR395	MR400	MR405	MR410	MR415	MR420	MR425	MR430	MR435	MR440	MR445	MR450	MR455	MR460	MR465	MR470	MR475	MR480	MR485	MR490	MR495	MR500	MR505	MR510	MR515	MR520	MR525	MR530	MR535	MR540	MR545	MR550	MR555	MR560	MR565	MR570	MR575	MR580	MR585	MR590	MR595	MR600	MR605	MR610	MR615	MR620	MR625	MR630	MR635	MR640	MR645	MR650	MR655	MR660	MR665	MR670	MR675	MR680	MR685	MR690	MR695	MR700	MR705	MR710	MR715	MR720	MR725	MR730	MR735	MR740	MR745	MR750	MR755	MR760	MR765	MR770	MR775	MR780	MR785	MR790	MR795	MR800	MR805	MR810	MR815	MR820	MR825	MR830	MR835	MR840	MR845	MR850	MR855	MR860	MR865	MR870	MR875	MR880	MR885	MR890	MR895	MR900	MR905	MR910	MR915	MR920	MR925	MR930	MR935	MR940	MR945	MR950	MR955	MR960	MR965	MR970	MR975	MR980	MR985	MR990	MR995	MR1000	MR1005	MR1010	MR1015	MR1020	MR1025	MR1030	MR1035	MR1040	MR1045	MR1050	MR1055	MR1060	MR1065	MR1070	MR1075	MR1080	MR1085	MR1090	MR1095	MR1100	MR1105	MR1110	MR1115	MR1120	MR1125	MR1130	MR1135	MR1140	MR1145	MR1150	MR1155	MR1160	MR1165	MR1170	MR1175	MR1180	MR1185	MR1190	MR1195	MR1200	MR1205	MR1210	MR1215	MR1220	MR1225	MR1230	MR1235	MR1240	MR1245	MR1250	MR1255	MR1260	MR1265	MR1270	MR1275	MR1280	MR1285	MR1290	MR1295	MR1300	MR1305	MR1310	MR1315	MR1320	MR1325	MR1330	MR1335	MR1340	MR1345	MR1350	MR1355	MR1360	MR1365	MR1370	MR1375	MR1380	MR1385	MR1390	MR1395	MR1400	MR1405	MR1410	MR1415	MR1420	MR1425	MR1430	MR1435	MR1440	MR1445	MR1450	MR1455	MR1460	MR1465	MR1470	MR1475	MR1480	MR1485	MR1490	MR1495	MR1500	MR1505	MR1510	MR1515	MR1520	MR1525	MR1530	MR1535	MR1540	MR1545	MR1550	MR1555	MR1560	MR1565	MR1570	MR1575	MR1580	MR1585	MR1590	MR1595	MR1600	MR1605	MR1610	MR1615	MR1620	MR1625	MR1630	MR1635	MR1640	MR1645	MR1650	MR1655	MR1660	MR1665	MR1670	MR1675	MR1680	MR1685	MR1690	MR1695	MR1700	MR1705	MR1710	MR1715	MR1720	MR1725	MR1730	MR1735	MR1740	MR1745	MR1750	MR1755	MR1760	MR1765	MR1770	MR1775	MR1780	MR1785	MR1790	MR1795	MR1800	MR1805	MR1810	MR1815	MR1820	MR1825	MR1830	MR1835	MR1840	MR1845	MR1850	MR1855	MR1860	MR1865	MR1870	MR1875	MR1880	MR1885	MR1890	MR1895	MR1900	MR1905	MR1910	MR1915	MR1920	MR1925	MR1930	MR1935	MR1940	MR1945	MR1950	MR1955	MR1960	MR1965	MR1970	MR1975	MR1980	MR1985	MR1990	MR1995	MR2000	MR2005	MR2010	MR2015	MR2020	MR2025	MR2030	MR2035	MR2040	MR2045	MR2050	MR2055	MR2060	MR2065	MR2070	MR2075	MR2080	MR2085	MR2090	MR2095	MR2100	MR2105	MR2110	MR2115	MR2120	MR2125	MR2130	MR2135	MR2140	MR2145	MR2150	MR2155	MR2160	MR2165	MR2170	MR2175	MR2180	MR2185	MR2190	MR2195	MR2200	MR2205	MR2210	MR2215	MR2220	MR2225	MR2230	MR2235	MR2240	MR2245	MR2250	MR2255	MR2260	MR2265	MR2270	MR2275	MR2280	MR2285	MR2290	MR2295	MR2300	MR2305	MR2310	MR2315	MR2320	MR2325	MR2330	MR2335	MR2340	MR2345	MR2350	MR2355	MR2360	MR2365	MR2370	MR2375	MR2380	MR2385	MR2390	MR2395	MR2400	MR2405	MR2410	MR2415	MR2420	MR2425	MR2430	MR2435	MR2440	MR2445	MR2450	MR2455	MR2460	MR2465	MR2470	MR2475	MR2480	MR2485	MR2490	MR2495	MR2500	MR2505	MR2510	MR2515	MR2520	MR2525	MR2530	MR2535	MR2540	MR2545	MR2550	MR2555	MR2560	MR2565	MR2570	MR2575	MR2580	MR2585	MR2590	MR2595	MR2600	MR2605	MR2610	MR2615	MR2620	MR2625	MR2630	MR2635	MR2640	MR2645	MR2650	MR2655	MR2660	MR2665	MR2670	MR2675	MR2680	MR2685	MR2690	MR2695	MR2700	MR2705	MR2710	MR2715	MR2720	MR2725	MR2730	MR2735	MR2740	MR2745	MR2750	MR2755	MR2760	MR2765	MR2770	MR2775	MR2780	MR2785	MR2790	MR2795	MR2800	MR2805	MR2810	MR2815	MR2820	MR2825	MR2830	MR2835	MR2840	MR2845	MR2850	MR2855	MR2860	MR2865	MR2870	MR2875	MR2880	MR2885	MR2890	MR2895	MR2900	MR2905	MR2910	MR2915	MR2920	MR2925	MR2930	MR2935	MR2940	MR2945	MR2950	MR2955	MR2960	MR2965	MR2970	MR2975	MR2980	MR2985	MR2990	MR2995	MR3000	MR3005	MR3010	MR3015	MR3020	MR3025	MR3030	MR3035	MR3040	MR3045	MR3050	MR3055	MR3060	MR3065	MR3070	MR3075	MR3080	MR3085	MR3090	MR3095	MR3100	MR3105	MR3110	MR3115	MR3120	MR3125	MR3130	MR3135	MR3140	MR3145	MR3150	MR3155	MR3160	MR3165	MR3170	MR3175	MR3180	MR3185	MR3190	MR3195	MR3200	MR3205	MR3210	MR3215	MR3220	MR3225	MR3230	MR3235	MR3240	MR3245	MR3250	MR3255	MR3260	MR3265	MR3270	MR3275	MR3280	MR3285	MR3290	MR3295	MR3300	MR3305	MR3310	MR3315	MR3320	MR3325	MR3330	MR3335	MR3340	MR3345	MR3350	MR3355	MR3360	MR3365	MR3370	MR3375	MR3380	MR3385	MR3390	MR3395	MR3400	MR3405	MR3410	MR3415	MR3420	MR3425	MR3430	MR3435	MR3440	MR3445	MR3450	MR3455	MR3460	MR3465	MR3470	MR3475	MR3480	MR3485	MR3490	MR3495	MR3500	MR3505	MR3510	MR3515	MR3520	MR3525	MR3530	MR3535	MR3540	MR3545	MR3550	MR3555	MR3560	MR3565	MR3570	MR3575	MR3580	MR3585	MR3590	MR3595	MR3600	MR3605	MR3610	MR3615	MR3620	MR3625	MR3630	MR3635	MR3640	MR3645	MR3650	MR3655	MR3660	MR3665	MR3670	MR3675	MR3680	MR3685	MR3690	MR3695	MR3700	MR3705	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ACCUTEST

**VARIANCE MEMO
SAMPLE LOG-IN**

SAMPLE(S) 3 DATE 2/14/08
PROJECT SAN JUAN BASIN GW STUDY PROJECT
FILED BY AV LAB NO. T20864

VARIANCE - Check applicable items(s):

- insufficient sample sent for proper analysis; _____ received approx. _____
- Sample bottle received broken and/or cap not intact.
- Samples received without paperwork; paperwork received without samples.
- Samples received without proper refrigeration, when it has been _____
- deemed necessary. Temperature at receipt: _____
- illegible sample number or label missing from bottle.
- Numbers on sample not the same as numbers on paper work.
- Incomplete instructions received with sample(s) i.e., no request _____
- for analysis, no chain of custody, incomplete billing instructions, _____
- no due date, etc. Temperature at receipt: _____
- Samples received in improper container or lacking proper preservation.
- Physical characteristics different than those on sampling sheets;

Describe:

Rush samples on hold because of incomplete paperwork.

Other (specify) SAMPLE 3'S HEAD SPACE IS POSSIBLY TOO LARGE.

CORRECTIVE ACTION TAKEN

- Person Contacted _____ By phone. _____
- Client informed verbally. _____ Samples processed for information only and noted on report.
- Client informed by memo/letter. _____ Samples processed with higher detection limits accepted.
- Samples processed as is. _____ Samples rejected.
- Samples preserved by lab.
- Client will resample and resubmit.

Notes:

ROUTING

TITLE	DATE	INITIALS	CORRECTED?
Sample Manager:			
Login:	<u>2/14/08</u>	<u>AV</u>	
Project Manager:			
Comments:	<u>None</u>		

Form SMO25



IT'S ALL IN THE CHEMISTRY

GC/MS Volatiles

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QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: T20864
Account: MWHSLCUT Montgomery Watson
Project: EPFS San Juan Basin Groundwater Site

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2876-MB	F0090204.D	1	02/18/08	LJ	n/a	n/a	VF2876

The QC reported here applies to the following samples:

Method: SW846 8260B

T20864-1, T20864-2, T20864-3

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.0	0.46	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.45	ug/l	
108-88-3	Toluene	ND	2.0	0.48	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.4	ug/l	
	m,p-Xylene	ND	4.0	0.94	ug/l	
95-47-6	o-Xylene	ND	2.0	0.42	ug/l	

CAS No.	Surrogate Recoveries	Result	Limits
1868-53-7	Dibromofluoromethane	98%	76-125%
17060-07-0	1,2-Dichloroethane-D4	98%	69-128%
2037-26-5	Toluene-D8	100%	80-121%
460-00-4	4-Bromofluorobenzene	106%	69-142%

51
5

Blank Spike Summary

Job Number: T20864
 Account: MWHSLCUT Montgomery Watson
 Project: EPFS San Juan Basin Groundwater Site

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2876-BS	F0090202.D	1	02/18/08	LJ	n/a	n/a	VF2876

The QC reported here applies to the following samples:

Method: SW846 8260B

T20864-1, T20864-2, T20864-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	25	22.3	89	73-121
100-41-4	Ethylbenzene	25	22.6	90	75-117
108-88-3	Toluene	25	22.4	90	75-119
1330-20-7	Xylene (total)	75	66.3	88	75-118
	m,p-Xylene	50	44.6	89	75-119
95-47-6	o-Xylene	25	21.7	87	74-117

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	76-125%
17060-07-0	1,2-Dichloroethane-D4	102%	69-128%
2037-26-5	Toluene-D8	101%	80-121%
460-00-4	4-Bromofluorobenzene	100%	69-142%

52
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T20864
 Account: MWHSLCUT Montgomery Watson
 Project: EPFS San Juan Basin Groundwater Site

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T20862-1MS	F0090214.D	1	02/18/08	LJ	n/a	n/a	VF2876
T20862-1MSD	F0090215.D	1	02/18/08	LJ	n/a	n/a	VF2876
T20862-1	F0090208.D	1	02/18/08	LJ	n/a	n/a	VF2876

The QC reported here applies to the following samples:

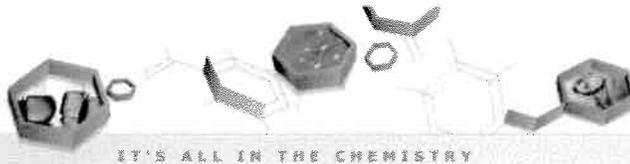
Method: SW846 8260B

T20864-1, T20864-2, T20864-3

CAS No.	Compound	T20862-1 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	6.0		25	50.7	179*	49.1	172*	3	74-125/18
100-41-4	Ethylbenzene	0.71	J	25	24.8	96	23.8	92	4	77-119/20
108-88-3	Toluene	ND		25	23.6	94	22.8	91	3	79-119/21
1330-20-7	Xylene (total)	ND		75	71.8	96	69.3	92	4	78-119/20
	m,p-Xylene	ND		50	48.0	96	46.3	93	4	79-119/20
95-47-6	o-Xylene	ND		25	23.8	95	23.0	92	3	76-118/21

CAS No.	Surrogate Recoveries	MS	MSD	T20862-1	Limits
1868-53-7	Dibromofluoromethane	99%	99%	95%	76-125%
17060-07-0	1,2-Dichloroethane-D4	103%	102%	101%	69-128%
2037-26-5	Toluene-D8	101%	102%	102%	80-121%
460-00-4	4-Bromofluorobenzene	99%	100%	106%	69-142%





Technical Report for

Montgomery Watson

EPFS San Juan Basin Groundwater Site

Accutest Job Number: T22128

Sampling Date: 05/08/08

Report to:

Danielwade@mwhglobal.com

ATTN: Daniel Wade

Total number of pages in report: 16



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: Agnes Vicknair 713-271-4700

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

Montgomery Watson

Job No: T22128

EPFS San Juan Basin Groundwater Site

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
T22128-1	05/08/08	08:24 TU	05/09/08	AQ	Ground Water	HAMNER 9 MW-1
T22128-2	05/08/08	08:30 TU	05/09/08	AQ	Ground Water	HAMNER 9 MW-59



SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Montgomery Watson

Job No T22128

Site: EPFS San Juan Basin Groundwater Site

Report Date 5/19/2008 4:16:56 PM

2 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were collected on 05/08/2008 and were received at Accutest on 05/09/2008 without proper refrigeration, at 8.2 Deg. C and intact. These Samples received an Accutest job number of T22128. 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 GC By Method SW846 8021B

Matrix AQ	Batch ID: GKK1301
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- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T22119-6MS, T22119-6MSD 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



IT'S ALL IN THE CHEMISTRY.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: HAMNER 9 MW-1	Date Sampled: 05/08/08
Lab Sample ID: T22128-1	Date Received: 05/09/08
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8021B	
Project: EPFS San Juan Basin Groundwater Site	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK025753.D	1	05/14/08	JH	n/a	n/a	GKK1301
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	4.3	1.0	0.21	ug/l	
108-88-3	Toluene	5.8	1.0	0.23	ug/l	
100-41-4	Ethylbenzene	17.4	1.0	0.35	ug/l	
1330-20-7	Xylenes (total)	51.0	2.0	0.55	ug/l	
95-47-6	o-Xylene	12.1	1.0	0.55	ug/l	
	m,p-Xylene	38.9	1.0	0.66	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%		35-148%
98-08-8	aaa-Trifluorotoluene	108%		46-160%

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: HAMNER 9 MW-59	Date Sampled: 05/08/08
Lab Sample ID: T22128-2	Date Received: 05/09/08
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8021B	
Project: EPFS San Juan Basin Groundwater Site	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK025754.D	1	05/14/08	JH	n/a	n/a	GKK1301
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	4.4	1.0	0.21	ug/l	
108-88-3	Toluene	5.8	1.0	0.23	ug/l	
100-41-4	Ethylbenzene	17.4	1.0	0.35	ug/l	
1330-20-7	Xylenes (total)	51.3	2.0	0.55	ug/l	
95-47-6	o-Xylene	12.1	1.0	0.55	ug/l	
	m,p Xylene	39.2	1.0	0.66	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		35-148%
98-08-8	aaa-Trifluorotoluene	106%		46-160%

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



**VARIANCE MEMO
SAMPLE LOG-IN**

SAMPLE(S) Ball DATE 5/9/08
 PROJECT San Juan-Pueblo Civil Sites Project
 FILED BY CNE LAB NO. TRH78

VARIANCE - Check applicable items(s):

- insufficient sample sent for proper analysis; _____ received approx. _____
- Sample bottle received broken and/or cap not intact. _____
- Samples received without paperwork; paperwork received without samples. _____
- Samples received without proper refrigeration, when it has been deemed necessary. Temperature at receipt: 8.2°
- illegible sample number or label missing from bottle. _____
- Numbers on sample not the same as numbers on paper work. _____
- Incomplete instructions received with sample(s) i.e., no request for analysis, no chain of custody, incomplete billing instructions, no due date, etc. Temperature at receipt: _____
- Samples received in improper container or lacking proper preservation. _____
- Physical characteristics different than those on sampling sheets; Describe: _____

Rush samples on hold because of incomplete paperwork.
 Other (specify) Samples received with very little ice and not of temp range @ temp. 8.2°C

CORRECTIVE ACTION TAKEN

- JED SMITH Person Contacted By phone. _____
- Client informed verbally 4/11/08 Samples processed for information only and noted on report. _____
- Client informed by memo/letter. _____ Samples processed with higher detection limits accepted. _____
- Samples processed as is. _____ Samples rejected. _____
- Samples preserved by lab. _____
- Client will resample and resubmit. _____

Notes:

Per - JED Analyze 4/5

ROUTING

TITLE	DATE	INITIALS	CORRECTED?
Sample Manager:			
Login:	<u>5/13/08</u>	<u>[Signature]</u>	
Project Manager:			
Comments:			

Form SMO25

This portion can be removed for Recipient's records
 FedEx Tracking # 865202078690

Date: 10/1/08
 Sender's Name: Ashley Aycock
 Company: Laidlaw
 Address: 1588 CR 259
 City: Birmingham
 State: AL
 ZIP: 35202
 Phone: 770
 Our FedEx Account #
 Our Internal Billing Reference

T22128

4.1
4

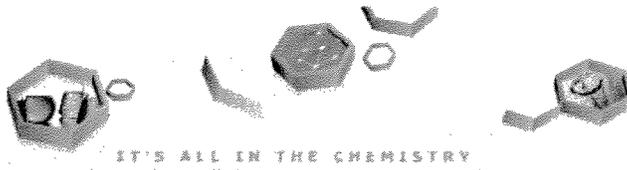
ACCUTEST LABORATORIES
 CUSTODY SEAL CUSTODY SEAL

DATE / TIME SEALED: 5/8/08

ACCUTEST LABORATORIES
 CUSTODY SEAL CUSTODY SEAL

315 INITIALS: TA





IT'S ALL IN THE CHEMISTRY

GC 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: T22128
Account: MWHSLCUT Montgomery Watson
Project: EPFS San Juan Basin Groundwater Site

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1301-MB	KK025727.D1		05/14/08	JH	n/a	n/a	GKK1301

The QC reported here applies to the following samples:

Method: SW846 8021B

T22128-1, T22128-2

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.35	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	0.55	ug/l	
95-47-6	o-Xylene	ND	1.0	0.55	ug/l	
	m,p-Xylene	ND	1.0	0.66	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	89%	35-148%
98-08-8	aaa-Trifluorotoluene	96%	46-160%

5.1
5

Blank Spike Summary

Job Number: T22128
Account: MWHSLCUT Montgomery Watson
Project: EPFS San Juan Basin Groundwater Site

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1301-BS	KK025728.D1		05/14/08	JH	n/a	n/a	GKK1301

The QC reported here applies to the following samples:

Method: SW846 8021B

T22128-1, T22128-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	19.6	98	73-126
100-41-4	Ethylbenzene	20	20.6	103	74-120
108-88-3	Toluene	20	20.3	102	77-124
1330-20-7	Xylenes (total)	60	61.9	103	78-123
95-47-6	o-Xylene	20	20.6	103	78-120
	m,p-Xylene	40	41.3	103	75-122

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	93%	35-148%
98-08-8	aaa-Trifluorotoluene	98%	46-160%

5.2
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T22128
 Account: MWHSLCUT Montgomery Watson
 Project: EPFS San Juan Basin Groundwater Site

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T22119-6MS	KK025734.D	5	05/14/08	JH	n/a	n/a	GKK1301
T22119-6MSD	KK025735.D	5	05/14/08	JH	n/a	n/a	GKK1301
T22119-6	KK025733.D	5	05/14/08	JH	n/a	n/a	GKK1301

The QC reported here applies to the following samples:

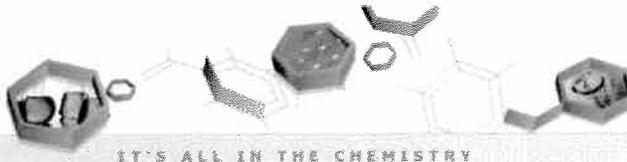
Method: SW846 8021B

T22128-1, T22128-2

CAS No.	Compound	T22119-6 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	183	100	273	90	264	81	3	52-152/19
100-41-4	Ethylbenzene	21.6	100	127	105	121	99	5	54-147/19
108-88-3	Toluene	13.5	100	116	103	111	98	4	43-169/24
1330-20-7	Xylenes (total)	37.5	300	360	108	345	103	4	69-139/12
95-47-6	o-Xylene	5.4	100	112	107	107	102	5	60-145/19
	m,p-Xylene	32.0	200	248	108	238	103	4	61-144/17

CAS No.	Surrogate Recoveries	MS	MSD	T22119-6	Limits
460-00-4	4-Bromofluorobenzene	97%	97%	94%	35-148%
98-08-8	aaa-Trifluorotoluene	130%	137%	141%	46-160%





09/09/08

Technical Report for

Montgomery Watson

EPFS San Juan Basin Groundwater Site

D-ALAB-Ground REM-006

Accutest Job Number: T23612

Sampling Date: 08/26/08



Report to:

Danielwade@mwhglobal.com

ATTN: Daniel Wade

Total number of pages in report: 20



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: Agnes Vicknair 713-271-4700

Certifications: TX (T104704220-06-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

Montgomery Watson

Job No: T23612

EPFS San Juan Basin Groundwater Site
Project No: D-ALAB-Ground REM-006

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
T23612-1	08/26/08	10:52 TU	08/27/08	AQ	Ground Water	HAMMER #9 MW-4
T23612-2	08/26/08	11:24 TU	08/27/08	AQ	Ground Water	HAMMER #9 MW-1



SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Montgomery Watson

Job No T23612

Site: EPFS San Juan Basin Groundwater Site

Report Date 9/9/2008 6:36:17 PM

2 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were collected on 08/26/2008 and were received at Accutest on 08/27/2008 properly preserved, at 3.4 Deg. C and intact. These Samples received an Accutest job number of T23612. 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 GC By Method SW846 8021B

Matrix AQ	Batch ID: F:GQQ1469
------------------	----------------------------

- T23612-2: All hits confirmed by dual column analysis. Analysis performed at Accutest Laboratories, Orlando, FL.
- T23612-1: Analysis performed at Accutest Laboratories, Orlando, FL.

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 DELIVERY GROUP CASE NARRATIVE

Client: Accutest Laboratories Gulf Coast, Inc.

Job No: T23612

Site: MWHSLCUT: EPFS San Juan Basin Groundwater Site

Report Date 9/9/2008 10:50:30 AM

2 Samples were collected on 08/26/2008 and received at Accutest on 08/27/2008 properly preserved, at 1.4 Deg. C and intact. These Samples received an Accutest job number of T23612. 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 GC By Method SW846 8021B

Matrix: AQ

Batch ID: GQQ1469

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) T23659-4MS, T23659-4MSD were used as the QC samples indicated.

RPD(s) for MSD for Benzene, Ethylbenzene, Toluene, Xylenes (total) are outside control limits for sample T23659-4MSD. Probable cause due to sample homogeneity.

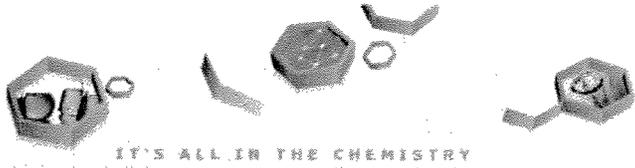
T23612-2: All hits confirmed by dual column analysis.

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

Narrative prepared by:

Svetlana Izosimova, QAO (signature on file)

Date: September 09, 2008



Sample Results

Report of Analysis

Report of Analysis

3.1
3

Client Sample ID: HAMMER #9 MW-4	Date Sampled: 08/26/08
Lab Sample ID: T23612-1	Date Received: 08/27/08
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8021B	
Project: EPFS San Juan Basin Groundwater Site	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	QQ038870.D	1	09/05/08	AFL	n/a	n/a	F:GQQ1469
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	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		70-120%
98-08-8	aaa-Trifluorotoluene	99%		73-118%

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

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: HAMMER #9 MW-1	Date Sampled: 08/26/08
Lab Sample ID: T23612-2	Date Received: 08/27/08
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8021B	
Project: EPFS San Juan Basin Groundwater Site	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	QQ038871.D	1	09/05/08	AFL	n/a	n/a	F:GQQ1469
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	3.7	1.0	0.50	ug/l	
108-88-3	Toluene	1.5	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	15.6	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	17.2	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	104%		70-120%
98-08-8	aaa-Trifluorotoluene	100%		73-118%

(a) All hits confirmed by dual column analysis. Analysis performed at Accutest Laboratories, Orlando, FL.

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



CHAIN OF CUSTODY

10165 Harwin Drive, Ste. 150, Houston, TX 77036
 TEL: 713-271-4700 FAX: 713-271-4770
 www.accutest.com

FED-EX Tracking # 8658 49963570	Bottle Order Control #
Accutest Quote #	Accutest Job # T23612

Client / Reporting Information		Project Information		Requested Analysis										Matrix Codes	
Company Name MWH Americas		Project Name San Juan Basin GWSite Project												DW - Drinking Water	
Address 1801 California St. ste 2900		Street												GW - Ground Water	
City Denver CO		City												WW - Water	
State CO		State												SW - Surface Water	
Zip 80202		Zip												SO - Soil	
Project Contact Matthew Rhodes		Project #												OI - Oil	
E-mail		Fax #												LIQ - Other Liquid	
Phone # 303-291-2118		Client Purchase Order # D-ALAB- Ground REM-006												AIR - Air	
Sampler's Name TROY URBAN		Collection												SOL - Other Solid	
Field ID / Point of Collection		SUMMA #												WP - Wipe	
MECH Val #		Date		Time		Sampled By		Matrix		# of bottles		#		LAB USE ONLY	
3 Hammond 41A MW-1		082608		1305		TU		GW		3		3			
4 Hammond 41A MW-4		082608		1325		TU		GW		3		3			
IBAR 2608 TU															
5 082608 TB 01		082608		0900		TU		GW		2		2			

BTEX (8021)

4.1
4

Turnaround Time (Business Days)		Data Deliverable Information		Comments / Remarks	
<input checked="" type="checkbox"/> 10 Day STANDARD <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input type="checkbox"/> Other		<input type="checkbox"/> Commercial "A" <input type="checkbox"/> Commercial "B" <input type="checkbox"/> Reduced Tier 1 <input type="checkbox"/> Full Tier 1 <input type="checkbox"/> TRRP13 Commercial "A" = Results Only		<input type="checkbox"/> EDO Format	

Emergency & Rush TIA data available VIA LabLink

Sample Custody must be documented below each time samples change possession including courier delivery

Relinquished by Sampler	Date Time	Received by	Relinquished by	Date Time	Received by	
1 Taylor	8/26/08 1515	1	2			
Relinquished by	Date Time	Received by	Relinquished by	Date Time	Received by	
3		3	4			
Relinquished by	Date Time	Received by	Custody Seal #	Preserved where applicable	On Ice	Cooler Temp.
4	8 27 08	5 Van AL		<input type="checkbox"/>	<input type="checkbox"/>	3.4



SAMPLE VERIFICATION

Accutest Job Number: T23612 Client: MWH Americas Project: San Juan on site project

Date/Time Received: 9.27.06 # of Coolers Received: 1

Cooler Temps: #1: 3.8 #2: 4.3 #3: 4.3 #4: 4.3 #5: 4.3 #6: 4.3

Method of Delivery: FEDEX UPS Accutest Courier Greyhound Delivery Other

Airbill Numbers: 8658-5336-1570

COOLER INFORMATION

<input type="checkbox"/>	Custody seal missing or not intact
<input type="checkbox"/>	Chain of Custody not received
<input type="checkbox"/>	Temperature criteria not met
<input type="checkbox"/>	Wet ice received in cooler

CHAIN OF CUSTODY

<input type="checkbox"/>	Sample D/T unclear or missing
<input type="checkbox"/>	Analyses unclear or missing
<input type="checkbox"/>	COC not properly executed

SAMPLE INFORMATION

<input type="checkbox"/>	Sample containers rvd broken
<input type="checkbox"/>	VOC vials have headspace
<input type="checkbox"/>	Sample labels missing or illegible
<input type="checkbox"/>	ID on COC does not match label(s)
<input type="checkbox"/>	D/T on COC does not match label(s)
<input type="checkbox"/>	Bottles rvd but no analysis on COC
<input type="checkbox"/>	Bottles missing for requested analysis
<input type="checkbox"/>	Insufficient volume for analysis
<input type="checkbox"/>	Sample rvd improperly preserved

TRIP BLANK INFORMATION

<input type="checkbox"/>	Trip Blank on COC but not received
<input type="checkbox"/>	Trip Blank received but not on COC
<input type="checkbox"/>	Trip Blank not intact
<input checked="" type="checkbox"/>	Received Water Trip Blank
<input type="checkbox"/>	Received Soil TB

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

Summary of Discrepancies: _____

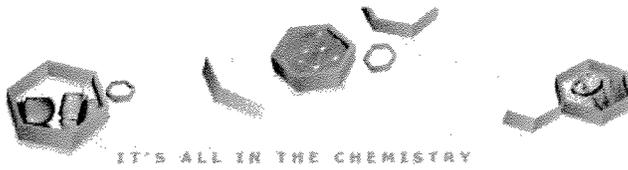
TECHNICIAN SIGNATURE/DATE: [Signature] 9.27.06 VERIFIED BY: [Signature]

♦ ♦ ♦ ♦ ♦ **CORRECTIVE ACTIONS** ♦ ♦ ♦ ♦ ♦

Client Representative Notified: _____ Date: _____

By Accutest Representative: _____ Via: _____ Phone _____ Email _____

Client Instructions: _____



Misc. Forms

5

Custody Documents and Other Forms

(Accutest Laboratories Southeast, Inc.)

Includes the following where applicable:

- Chain of Custody

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: T23612 CLIENT: AIGC PROJECT: T23612
 DATE/TIME RECEIVED: 9.3.08 09:00 # OF COOLERS RECEIVED: 1 COOLER TEMPS: 1-4
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER
 AIRBILL NUMBERS: 7998 9895 8602

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 RECEIVED IN COOLER

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 OF LAB FILTERED METALS ? 0

SAMPLE INFORMATION

- SAMPLE LABELS NOT PRESENT ON ALL BOTTLES
 - CORRECT NUMBER OF CONTAINERS USED
 - SAMPLE RECEIVED IMPROPERLY PRESERVED
 - INSUFFICIENT VOLUME FOR ANALYSIS
 - TIMES ON COC DOES NOT MATCH LABEL(S)
 - ID'S ON COC DOES NOT MATCH LABEL(S)
 - VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
 - BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
 - NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
 - UNCLEAR FILTERING INSTRUCTIONS
 - UNCLEAR COMPOSITING INSTRUCTIONS
 - SAMPLE CONTAINER(S) RECEIVED BROKEN
 - % SOLIDS JAR NOT RECEIVED
 - 5035 FIELD KIT NOT FROZEN WITHIN 48 HOUR'S
 - RESIDUAL CHLORINE PRESENT
- (APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

SUMMARY OF COMMENTS: _____

TECHNICIAN SIGNATURE/DATE E.T. 9.3.08 TECHNICIAN SIGNATURE/DATE je 9.3.08 ASBD 12/17/07

5.1
5



GC Volatiles

6

QC Data Summaries

(Accutest Laboratories Southeast, Inc.)

Includes the following where applicable:

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

Method Blank Summary

Job Number: T23612
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: MWHS LCUT: EPFS San Juan Basin Groundwater Site

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQQ1469-MB	QQ038869.D1		09/05/08	TD	n/a	n/a	GQQ1469

The QC reported here applies to the following samples:

Method: SW846 8021B

T23612-1, T23612-2

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	94%	70-120%
98-08-8	aaa-Trifluorotoluene	97%	73-118%

6.1
6

Blank Spike Summary

Job Number: T23612
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: MWHS LCUT: EPFS San Juan Basin Groundwater Site

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQQ1469-BS	QQ038868.D1		09/05/08	TD	n/a	n/a	GQQ1469

The QC reported here applies to the following samples:

Method: SW846 8021B

T23612-1, T23612-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	19.3	97	80-120
100-41-4	Ethylbenzene	20	19.8	99	79-121
108-88-3	Toluene	20	19.4	97	79-121
1330-20-7	Xylenes (total)	60	59.6	99	80-119

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	101%	70-120%
98-08-8	aaa-Trifluorotoluene	100%	73-118%

6.2

6

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T23612
 Account: ALGC Accutest Laboratories Gulf Coast, Inc.
 Project: MWHS LCUT: EPFS San Juan Basin Groundwater Site

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T23659-4MS	QQ038898.D1		09/06/08	TD	n/a	n/a	GQQ1469
T23659-4MSD	QQ038899.D1		09/06/08	TD	n/a	n/a	GQQ1469
T23659-4	QQ038893.D1		09/06/08	TD	n/a	n/a	GQQ1469

The QC reported here applies to the following samples:

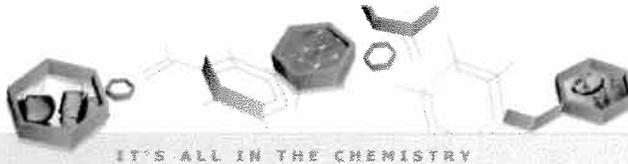
Method: SW846 8021B

T23612-1, T23612-2

CAS No.	Compound	T23659-4		MS	MS	MSD	MSD	RPD	Limits Rec/RPD	
		ug/l	Q	ug/l	%	ug/l	%			
71-43-2	Benzene	ND		20	16.5	83	19.0	95	14*	80-120/10
100-41-4	Ethylbenzene	ND		20	16.8	84	19.3	97	14*	79-121/9
108-88-3	Toluene	ND		20	16.5	83	19.0	95	14*	79-121/10
1330-20-7	Xylenes (total)	ND		60	50.4	84	57.9	97	14*	80-119/8

CAS No.	Surrogate Recoveries	MS	MSD	T23659-4	Limits
460-00-4	4-Bromofluorobenzene	101%	102%	93%	70-120%
98-08-8	aaa-Trifluorotoluene	99%	99%	96%	73-118%





11/20/08

Technical Report for

Montgomery Watson

San Juan Basin GW Sites Project

Accutest Job Number: T24558

Sampling Date: 11/06/08



Report to:

daniel.a.wade@mwhglobal.com

Total number of pages in report: 15



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: Paul Canevaro 713-271-4700

Certifications: TX (T104704220-06-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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1

2

3

4

5

Sample Summary

Montgomery Watson

Job No: T24558

San Juan Basin GW Sites Project

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
T24558-1	11/06/08	12:54 TU	11/07/08	AQ	Ground Water	HAMNER 9 MW-1
T24558-2	11/06/08	07:00 TU	11/07/08	AQ	Trip Blank Water	110608TB02



SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Montgomery Watson

Job No T24558

Site: EPFS San Juan Basin Groundwater Site

Report Date 11/17/2008 9:11:54 AM

1 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were collected on 11/06/2008 and were received at Accutest on 11/07/2008 properly preserved, at 1 Deg. C and intact. These Samples received an Accutest job number of T24558. 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:	VF3197
--------	----	-----------	--------

- 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

Client Sample ID: HAMNER 9 MW-1	Date Sampled: 11/06/08
Lab Sample ID: T24558-1	Date Received: 11/07/08
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: San Juan Basin GW Sites Project	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F012005.D	1	11/16/08	RR	n/a	n/a	VF3197
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	3.8	2.0	0.46	ug/l	
108-88-3	Toluene	3.1	2.0	0.48	ug/l	
100-41-4	Ethylbenzene	17.5	2.0	0.45	ug/l	
1330-20-7	Xylene (total)	22.2	6.0	1.4	ug/l	
95-47-6	o-Xylene	2.9	2.0	0.42	ug/l	
	m,p-Xylene	19.3	4.0	0.94	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		79-122%
17060-07-0	1,2-Dichloroethane-D4	102%		75-121%
2037-26-5	Toluene-D8	111%		87-119%
460-00-4	4-Bromofluorobenzene	111%		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

32
3

Client Sample ID: 110608TB02	Date Sampled: 11/06/08
Lab Sample ID: T24558-2	Date Received: 11/07/08
Matrix: AQ - Trip Blank Water	Percent Solids: n/a
Method: SW846 8260B	
Project: San Juan Basin GW Sites Project	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F012004.D	1	11/16/08	RR	n/a	n/a	VF3197
Run #2							

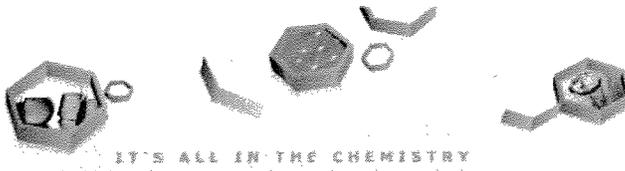
Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.0	0.46	ug/l	
108-88-3	Toluene	ND	2.0	0.48	ug/l	
100-41-4	Ethylbenzene	0.81	2.0	0.45	ug/l	J
1330-20-7	Xylene (total)	ND	6.0	1.4	ug/l	
95-47-6	o-Xylene	ND	2.0	0.42	ug/l	
	m,p-Xylene	ND	4.0	0.94	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	93%		75-121%
2037-26-5	Toluene-D8	111%		87-119%
460-00-4	4-Bromofluorobenzene	105%		80-133%

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: T24558 Client: MWH AMERICAS Project: SAN JUAN BASIN G-W SITES
 Date/Time Received: 11.07.08 0900 # of Coolers Received: 1 Thermometer # 110
 Cooler Temps: #1: 1.0 #2: _____ #3: _____ #4: _____ #5: _____ #6: _____ #7: _____ #8: _____
 Method of Delivery: FEDEX UPS Accutest Courier Greyhound Delivery Other
 Airbill Numbers: 8670 4797 9009

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 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

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

Summary of Discrepancies:

TECHNICIAN SIGNATURE/DATE: [Signature] 11.07.08
 INFORMATION AND SAMPLE LABELING VERIFIED BY: Susan Hail 11.7.08

* * * * * **CORRECTIVE ACTIONS** * * * * *

Client Representative Notified: _____ Date: _____
 By Accutest Representative: _____ Via: Phone Email
 Client Instructions:

4.1
4



IT'S ALL IN THE CHEMISTRY

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: T24558
 Account: MWHCODE Montgomery Watson
 Project: San Juan Basin GW Sites Project

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF3197-MB	F011990.D	1	11/15/08	RR	n/a	n/a	VF3197

The QC reported here applies to the following samples:

Method: SW846 8260B

T24558-1, T24558-2

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.0	0.46	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.45	ug/l	
108-88-3	Toluene	ND	2.0	0.48	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.4	ug/l	
	m,p-Xylene	ND	4.0	0.94	ug/l	
95-47-6	o-Xylene	ND	2.0	0.42	ug/l	

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	111%	79-122%
17060-07-0	1,2-Dichloroethane-D4	112%	75-121%
2037-26-5	Toluene-D8	105%	87-119%
460-00-4	4-Bromofluorobenzene	107%	80-133%

5.1
5

Blank Spike Summary

Job Number: T24558
Account: MWHCODE Montgomery Watson
Project: San Juan Basin GW Sites Project

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF3197-BS	F011986.D	1	11/15/08	RR	n/a	n/a	VF3197

The QC reported here applies to the following samples:

Method: SW846 8260B

T24558-1, T24558-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	25	24.9	100	76-118
100-41-4	Ethylbenzene	25	22.4	90	75-112
108-88-3	Toluene	25	22.2	89	77-114
1330-20-7	Xylene (total)	75	68.0	91	75-111
	m,p-Xylene	50	45.1	90	75-112
95-47-6	o-Xylene	25	22.8	91	74-110

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	107%	79-122%
17060-07-0	1,2-Dichloroethane-D4	116%	75-121%
2037-26-5	Toluene-D8	102%	87-119%
460-00-4	4-Bromofluorobenzene	100%	80-133%

5.2
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T24558
 Account: MWHCODE Montgomery Watson
 Project: San Juan Basin GW Sites Project

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T24527-3MS	F012007.D	1	11/16/08	RR	n/a	n/a	VF3197
T24527-3MSD	F012008.D	1	11/16/08	RR	n/a	n/a	VF3197
T24527-3	F012003.D	1	11/16/08	RR	n/a	n/a	VF3197

The QC reported here applies to the following samples:

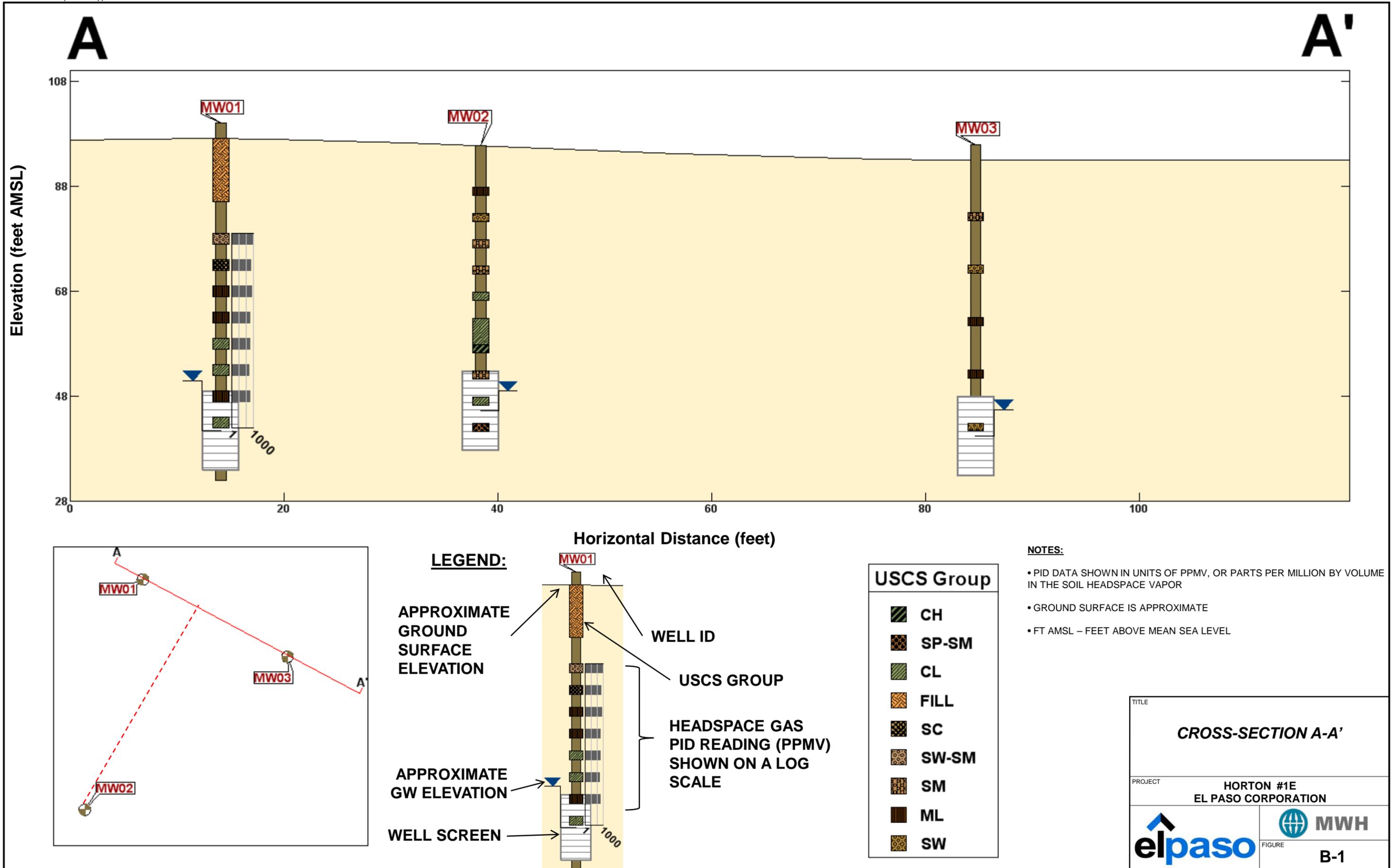
Method: SW846 8260B

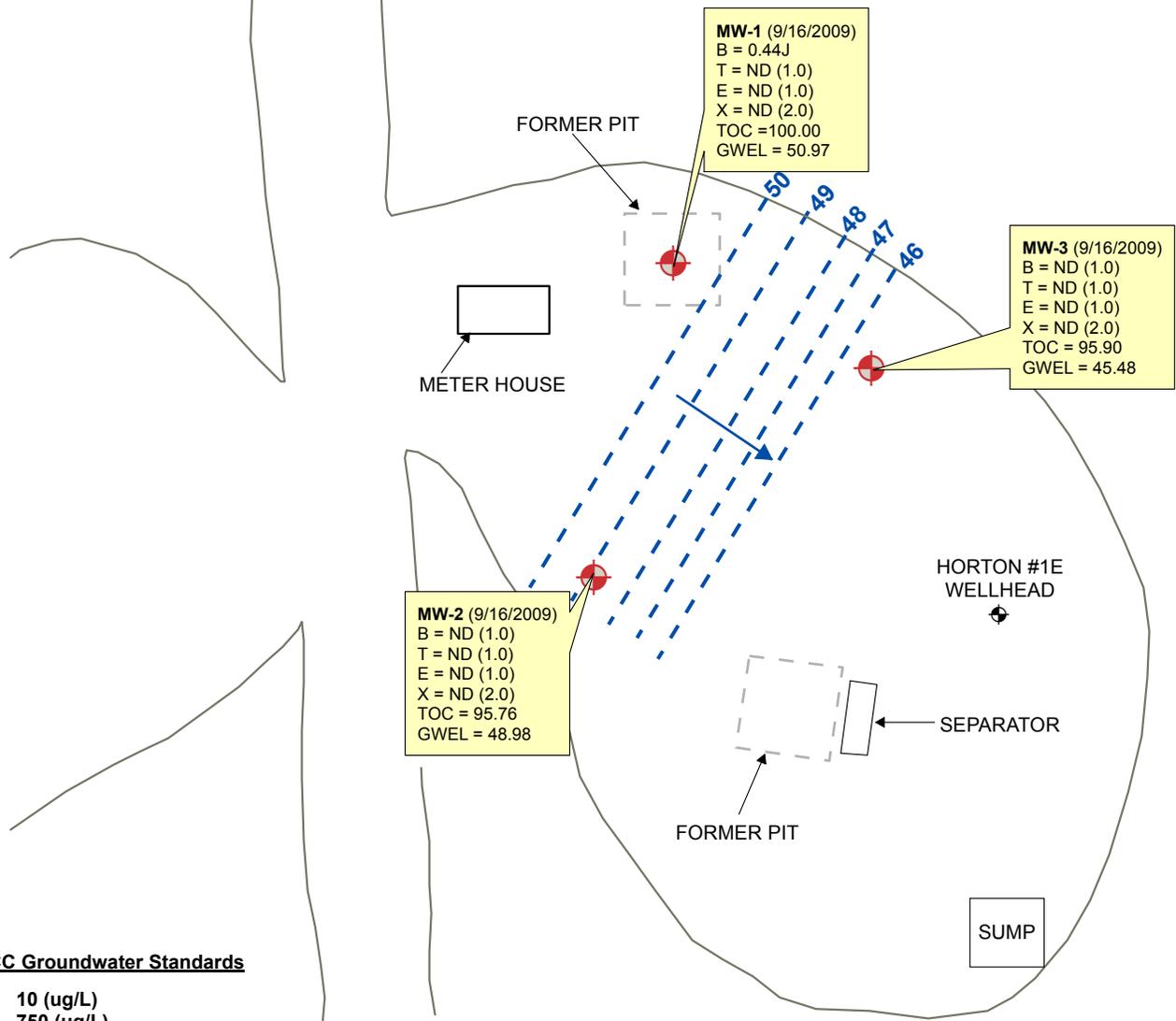
T24558-1, T24558-2

CAS No.	Compound	T24527-3 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	0.98	J	25	23.6	90	23.8	91	1	76-118/16
100-41-4	Ethylbenzene	1.9	J	25	22.9	84	22.7	83	1	75-112/12
108-88-3	Toluene	ND		25	22.8	91	22.7	91	0	77-114/12
1330-20-7	Xylene (total)	ND		75	67.9	91	67.9	91	0	75-111/12
	m,p-Xylene	1.0	J	50	45.1	88	45.3	89	0	75-112/12
95-47-6	o-Xylene	ND		25	22.8	91	22.6	90	1	74-110/11

CAS No.	Surrogate Recoveries	MS	MSD	T24527-3	Limits
1868-53-7	Dibromofluoromethane	110%	110%	102%	79-122%
17060-07-0	1,2-Dichloroethane-D4	104%	105%	86%	75-121%
2037-26-5	Toluene-D8	110%	109%	111%	87-119%
460-00-4	4-Bromofluorobenzene	108%	108%	105%	80-133%

5.3
5





NMWQCC Groundwater Standards

- B 10 (ug/L)
- T 750 (ug/L)
- E 750 (ug/L)
- X 620 (ug/L)

LEGEND

- MW-1 Existing Monitoring / Observation Well
- Groundwater Flow Direction
- -49- - Potentiometric Surface Contour (Inferred Where Dashed)
- ND Result Flagged as Estimated
- * = Elevations in feet relative to a 100 ft benchmark.

- B Benzene (ug/L)
- T Toluene (ug/L)
- E Ethylbenzene (ug/L)
- X Total Xylenes (ug/L)
- TOC Top of Casing (ft. *)
- GWEL Groundwater Elevation (ft. *)
- J Result Flagged as Estimated

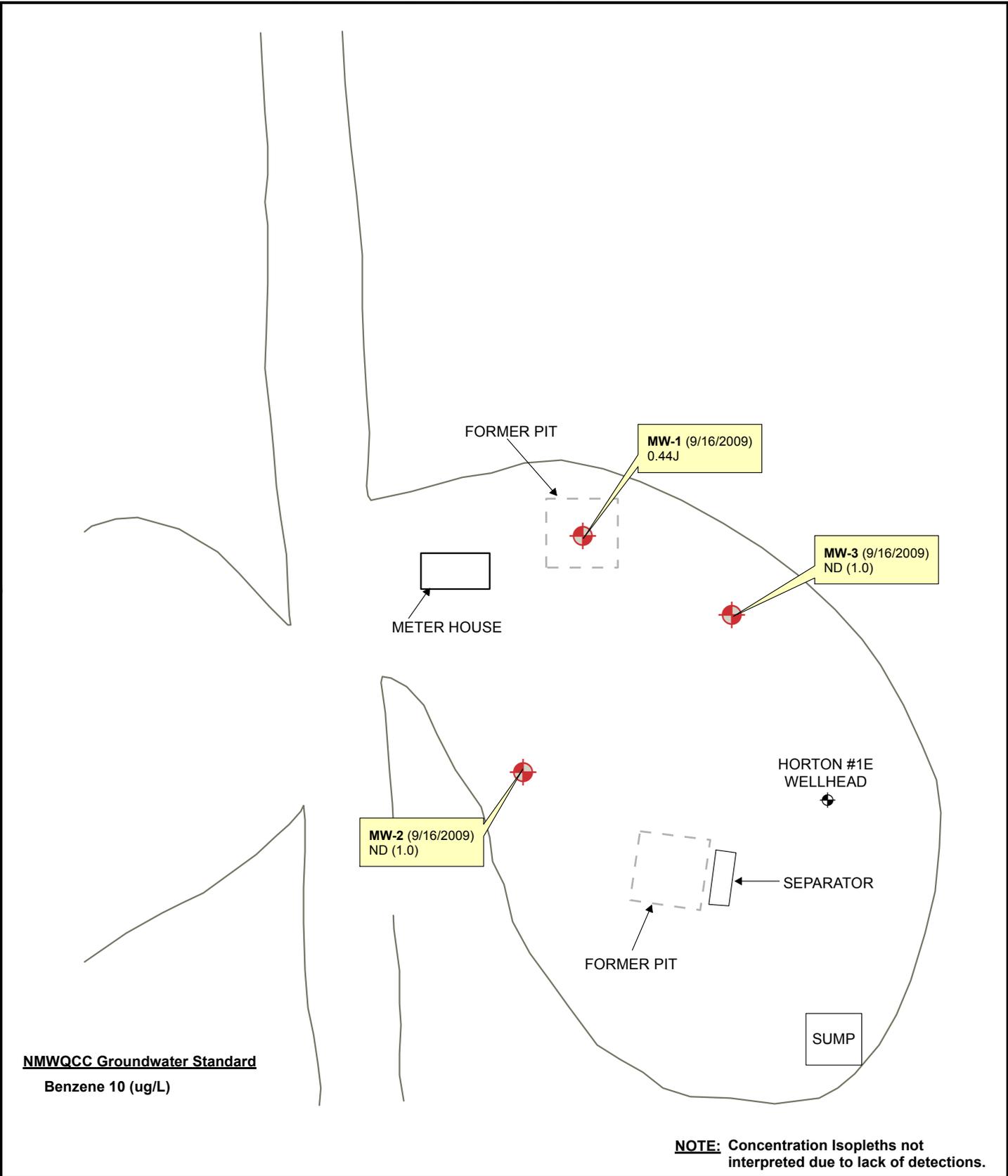


Not To Scale



PROJECT: HORTON #1E
 TITLE: Groundwater Potentiometric Surface Map, and BTEX Concentration Map 2009

FIGURE:
B-2



LEGEND

MW-1 Existing Monitoring / Observation Well

0.44J

Benzene (ug/L)

ND
J

Not Detected; Reporting Limit Shown in Parenthesis
Result Flagged as Estimated



Not To Scale



PROJECT:

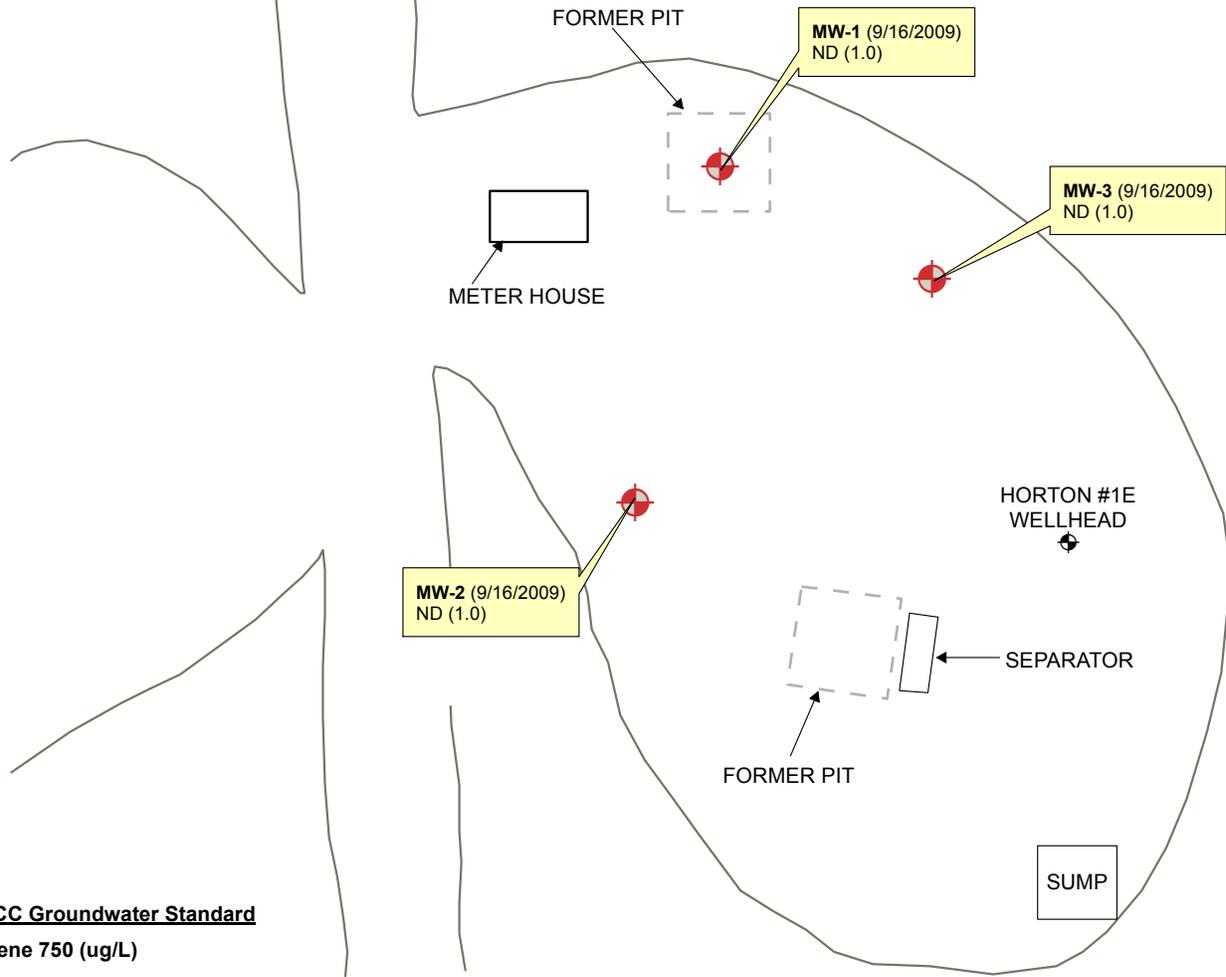
HORTON #1E

TITLE:

Groundwater Benzene Concentration Map 2009

FIGURE:

B-3



NOTE: Concentration Isoleths not interpreted due to lack of detections.

LEGEND

MW-1  Existing Monitoring / Observation Well

 Toluene (ug/L)

ND Not Detected; Reporting Limit Shown in Parenthesis



Not To Scale

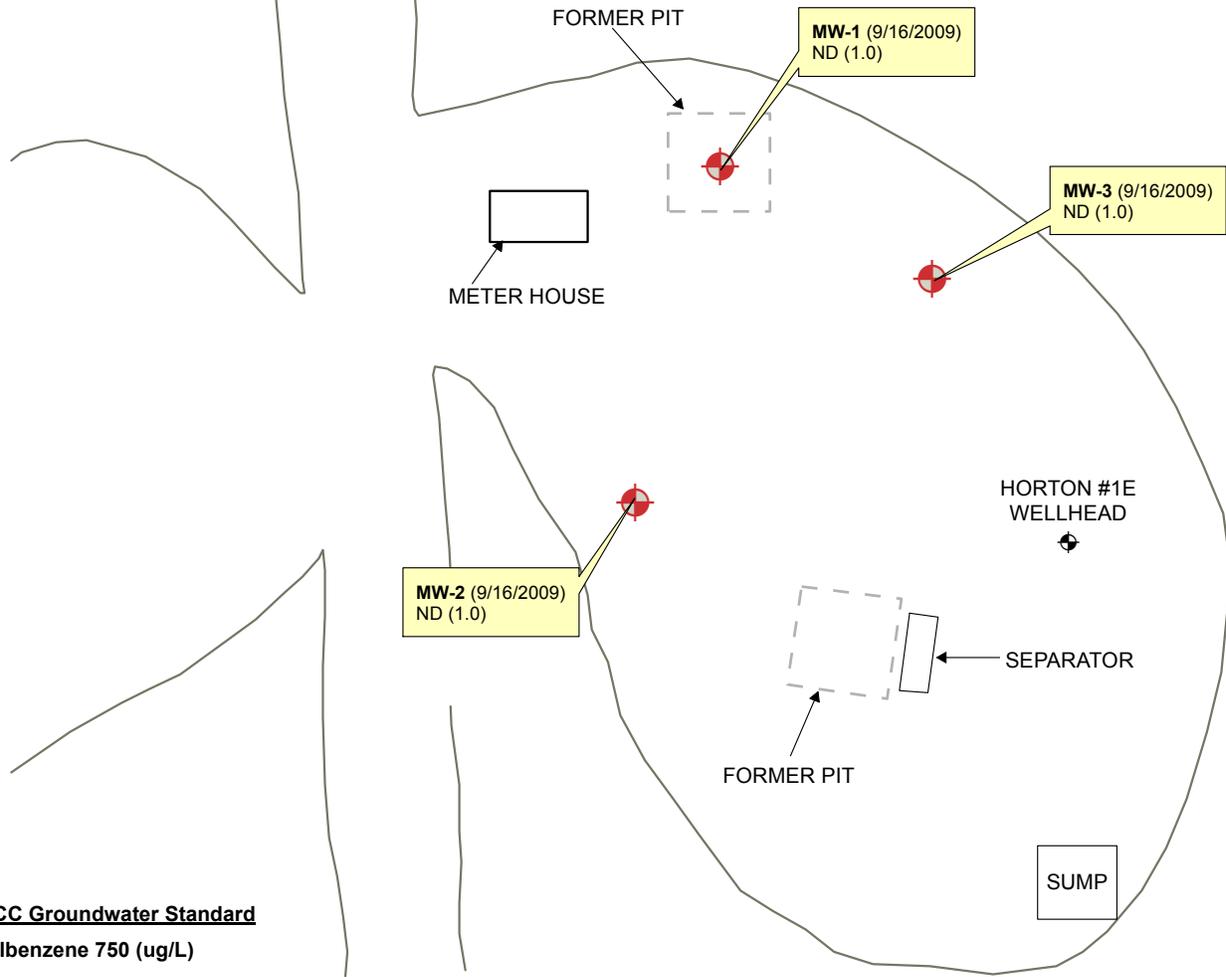


PROJECT: HORTON #1E

TITLE: Groundwater Toluene Concentration Map 2009

FIGURE:

B-4



NMWQCC Groundwater Standard
Ethylbenzene 750 (ug/L)

NOTE: Concentration Isoleths not interpreted due to lack of detections.

LEGEND

MW-1  Existing Monitoring / Observation Well

 Ethylbenzene (ug/L)

ND Not Detected; Reporting Limit Shown in Parenthesis

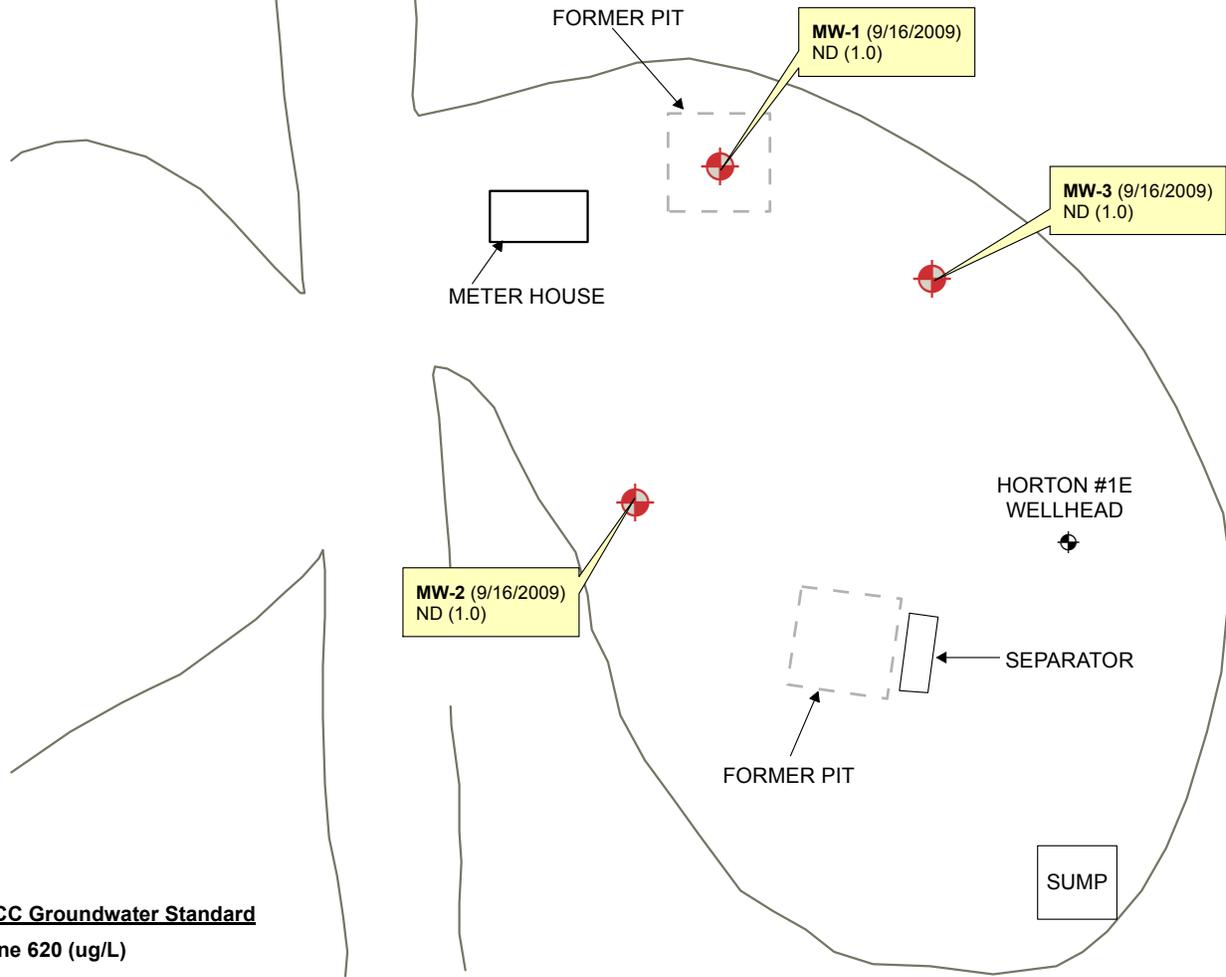


Not To Scale



PROJECT: HORTON #1E
TITLE: Groundwater Ethylebenzene Concentration Map 2009

FIGURE:
B-5



NMWQCC Groundwater Standard
Xylene 620 (ug/L)

NOTE: Concentration Isoleths not interpreted due to lack of detections.

LEGEND

MW-1  Existing Monitoring / Observation Well

 Xylene (ug/L)

ND Not Detected; Reporting Limit Shown in Parenthesis



Not To Scale

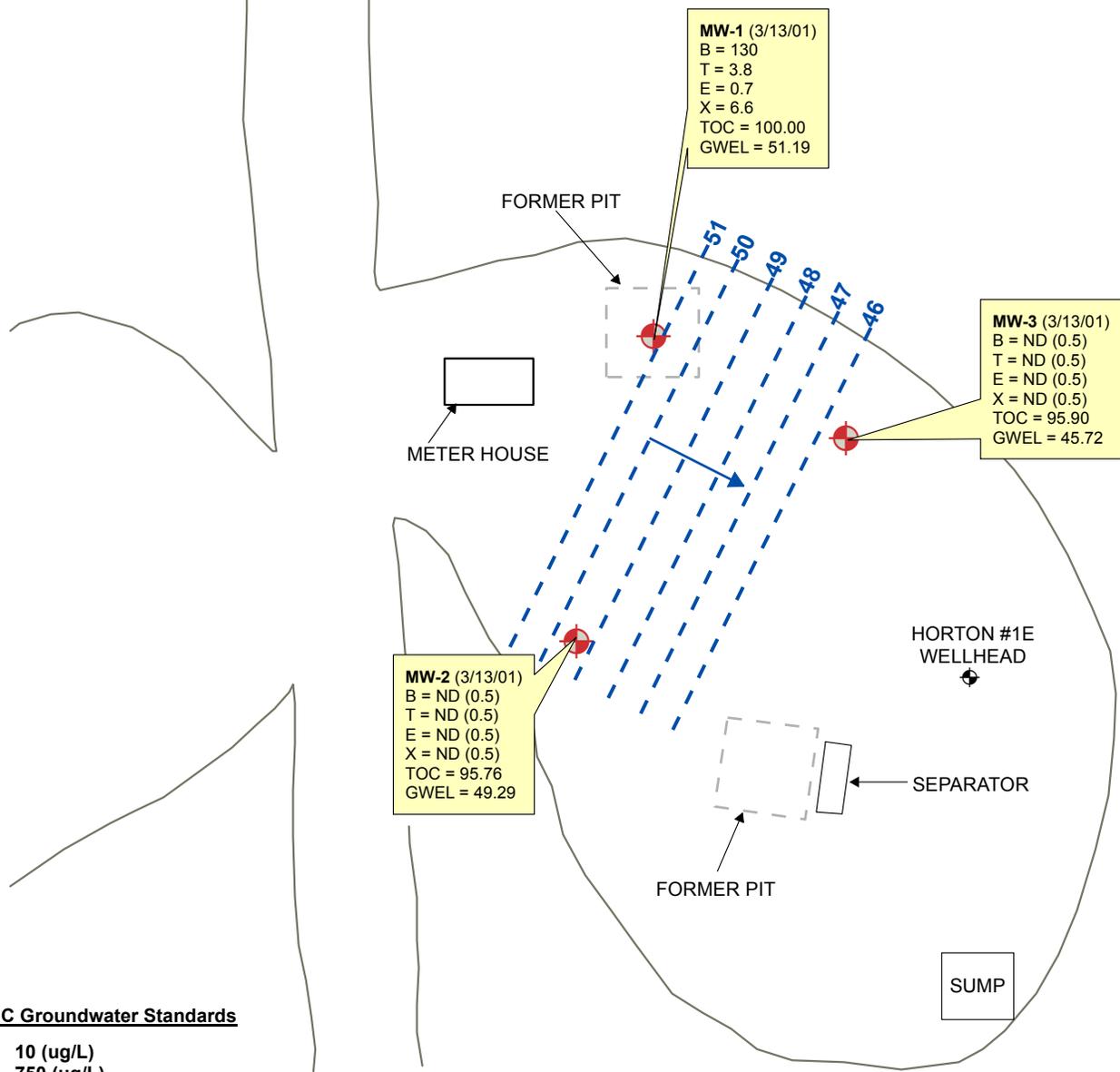


PROJECT: HORTON #1E

TITLE: Groundwater Xylene Concentration Map 2009

FIGURE:

B-6



NMQCC Groundwater Standards

B	10 (ug/L)
T	750 (ug/L)
E	750 (ug/L)
X	620 (ug/L)

LEGEND

- MW-1** Existing Monitoring / Observation Well
- Groundwater Flow Direction
- 50- Potentiometric Surface Contour (Inferred Where Dashed)
- ND** Not Detected; Reporting Limit Shown in Parenthesis

- B** Benzene (ug/L)
- T** Toluene (ug/L)
- E** Ethylbenzene (ug/L)
- X** Total Xylenes (ug/L)
- TOC** Top of Casing (ft. *)
- GWEL** Groundwater Elevation (ft. *)

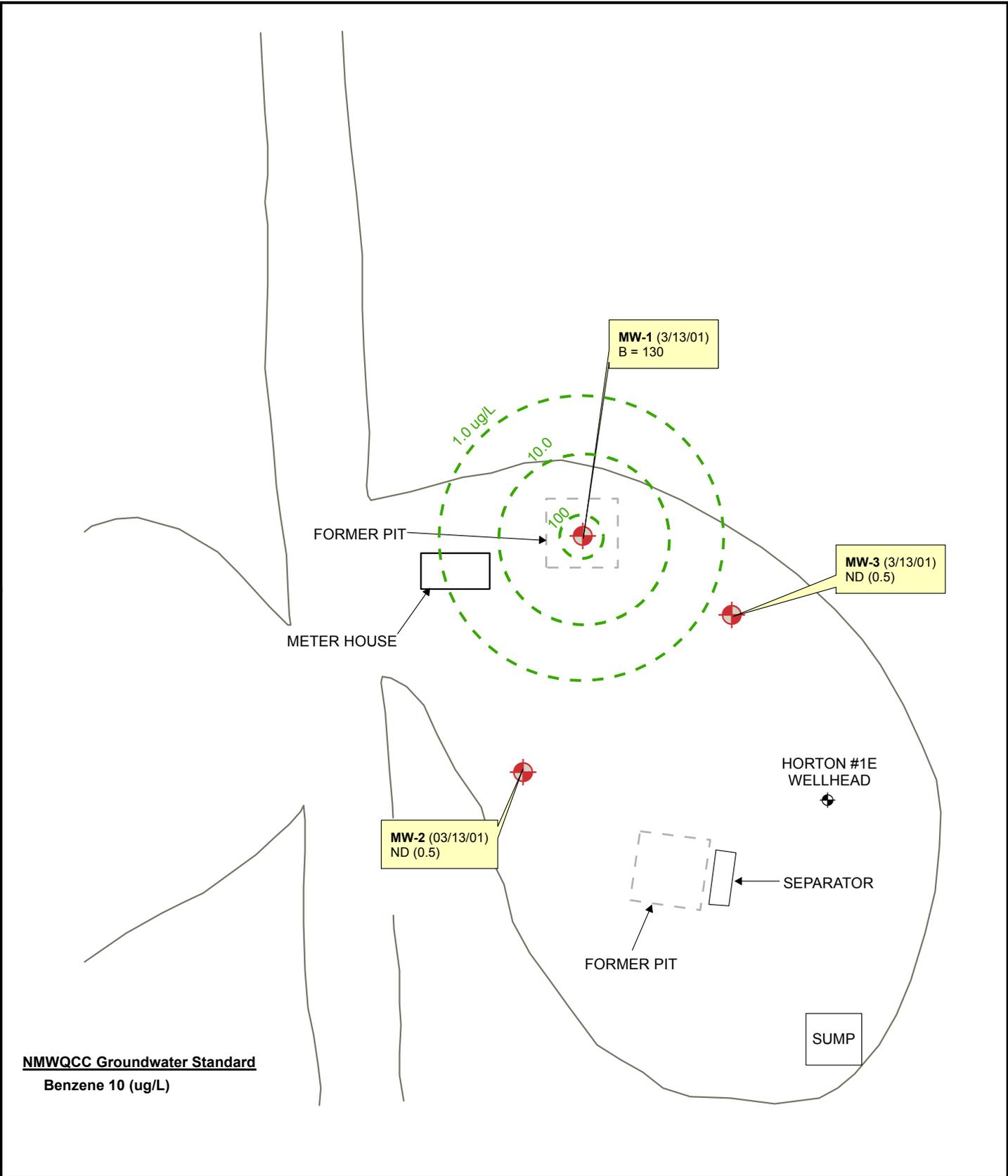


Not To Scale



PROJECT: HORTON #1E
 TITLE: Groundwater Potentiometric Surface Map, and BTEX Concentrations 2001

FIGURE:
B-7



LEGEND

MW-1  Existing Monitoring / Observation Well
 1.0 ug/L  Concentration Isopleth (Inferred When Dashed)

130  Benzene (ug/L)
 ND  Not Detected; Reporting Limit Shown in Parenthesis

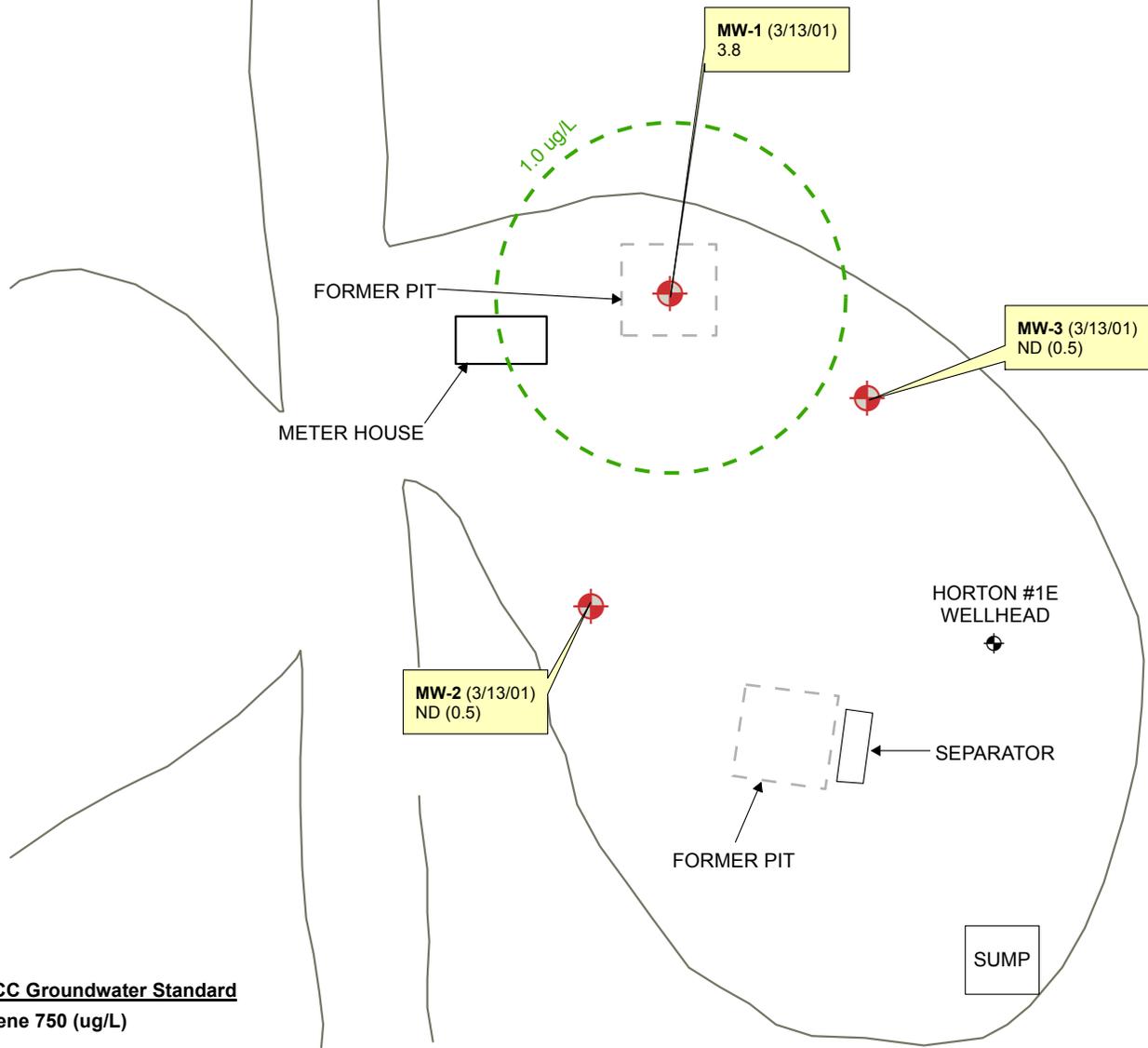


Not To Scale



PROJECT: HORTON #1E
 TITLE: Groundwater Benzene Concentration Isopleth Map 2001

FIGURE:
B-8



LEGEND

MW-1 Existing Monitoring / Observation Well
 1.0 ug/L Concentration Isopleth (Inferred When Dashed)

Toluene (ug/L)
 ND Not Detected; Reporting Limit Shown in Parenthesis

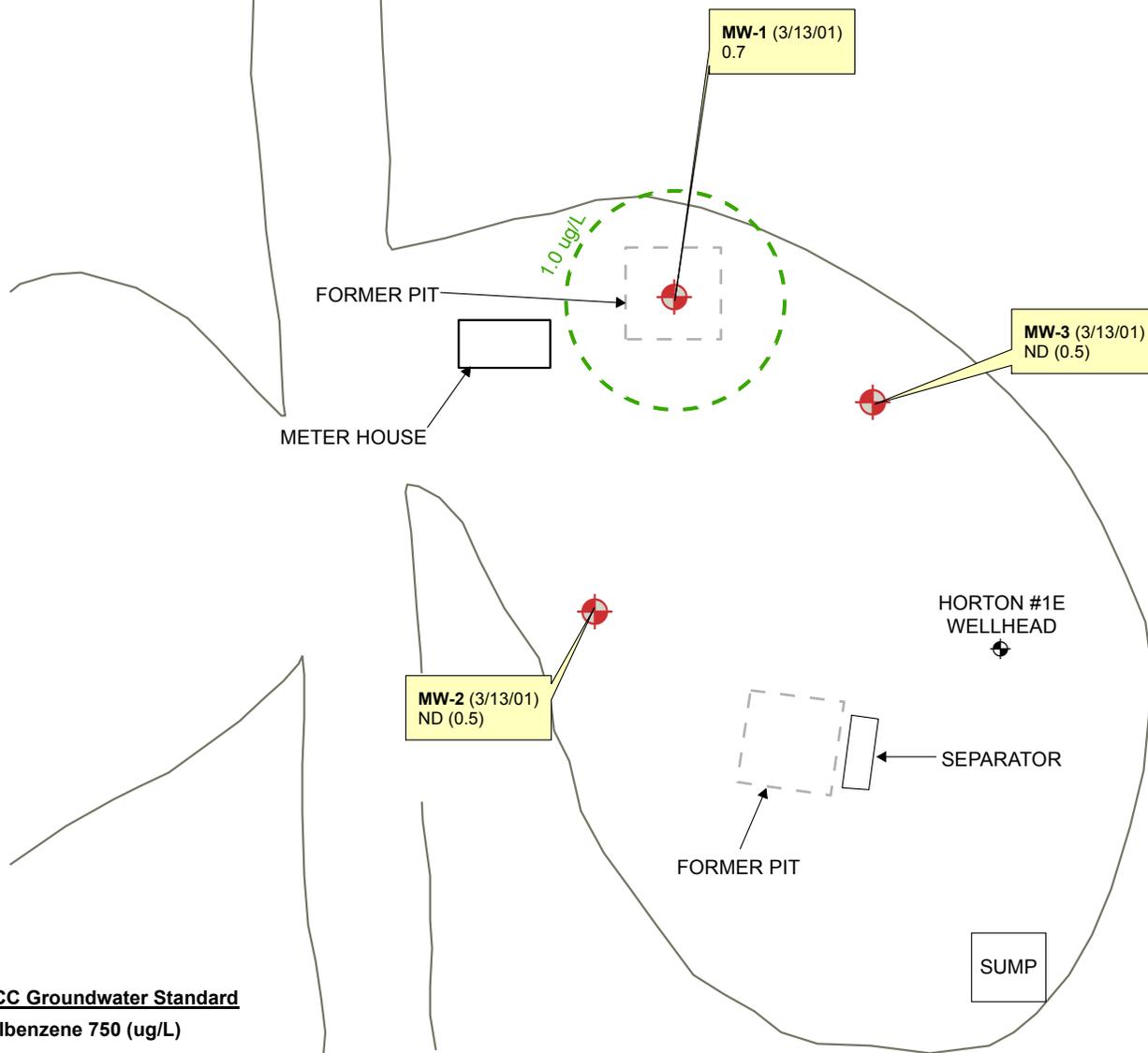


Not To Scale



PROJECT: HORTON #1E
 TITLE: Groundwater Toluene Concentration Isopleth Map 2001

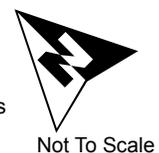
FIGURE:
B-9



LEGEND

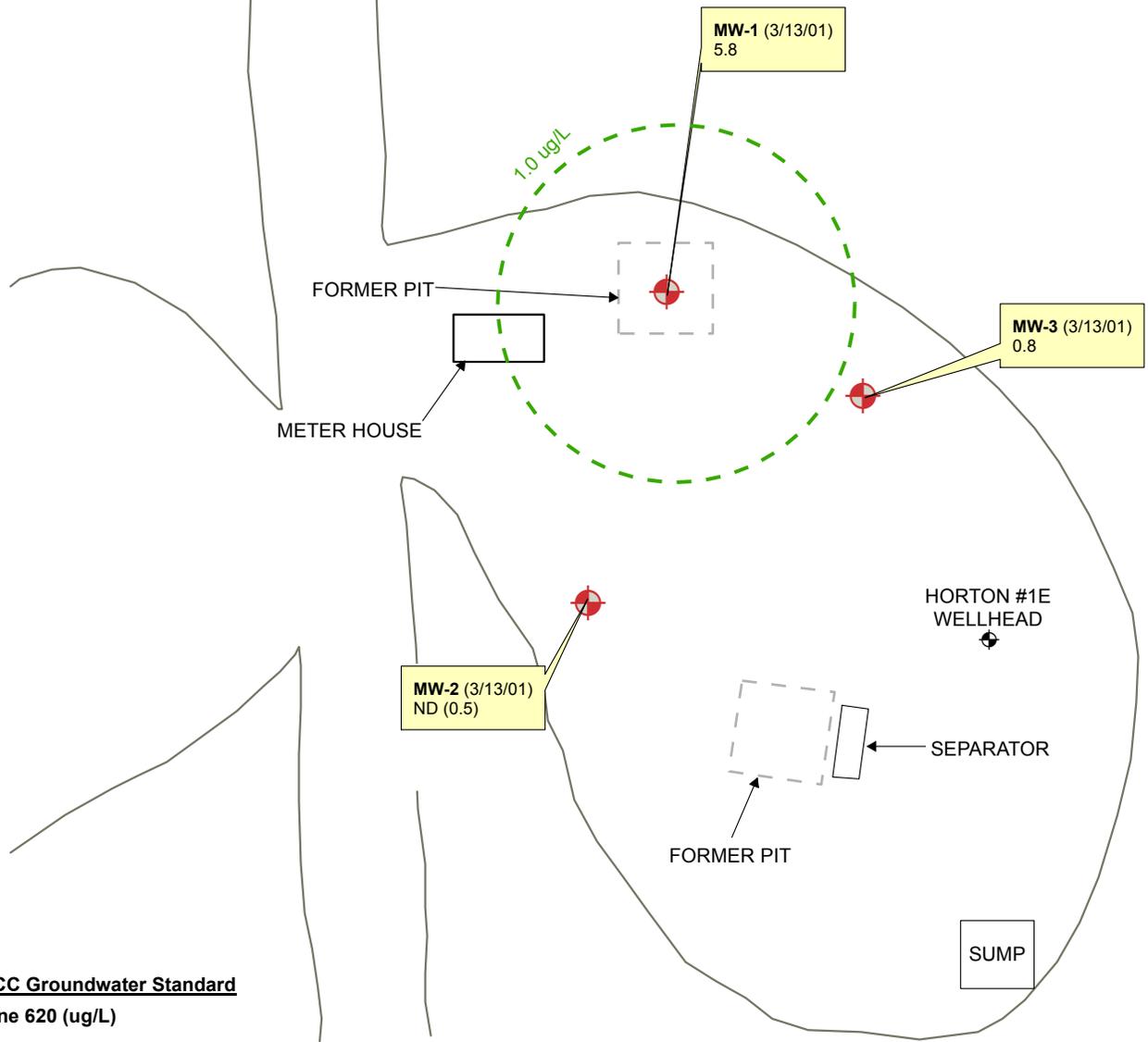
MW-1 Existing Monitoring / Observation Well
 1.0 ug/L Concentration Isopleth (Inferred When Dashed)

0.7 Ethylbenzene (ug/L)
ND Not Detected; Reporting Limit Shown in Parenthesis



PROJECT: HORTON #1E
 TITLE: Groundwater Ethylbenzene Concentration Isopleth Map 2001

FIGURE:
B-10



LEGEND

MW-1 Existing Monitoring / Observation Well
 1.0 ug/L Concentration Isopleth (Inferred When Dashed)

6.6 Xylene (ug/L)
ND Not Detected; Reporting Limit Shown in Parenthesis



PROJECT: HORTON #1E
 TITLE: Groundwater Xylene Concentration Isopleth Map 2001

FIGURE:
B-11



Via FedEx

October 29, 2009

Mr. Glenn von Gonten
Senior Hydrologist
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

**RE: Closure Request for Horton #1E Site
NMOCD Case No. 3RP-192**

Dear Mr. von Gonten:

El Paso Tennessee Pipeline Company (EPTPC), formerly El Paso Field Services (EPFS), hereby requests regulatory closure of the Horton #1E site (NMOCD Case No. 3R-192). This correspondence documents the analytical results from site monitoring activities that have been ongoing for several years in accordance with the Remediation Plan approved by the New Mexico Oil Conservation Division (OCD) on November 30, 1995. EPTPC is requesting closure of the Horton #1E site based on the data obtained and documented herein.

Summary of Project History

The Horton #1E pit site was assessed in 1994, and 50 cubic yards of impacted soil were excavated from the former pit in September 1994. The first monitoring well (MW-1) was installed in August 1995, in the location of the former pit. The groundwater in MW-1 exhibited benzene at a concentration of 308 µg/L, which exceeded the NMWQCC groundwater benzene standard of 10 µg/L.

In 1999, additional site characterization work was conducted in order to more fully delineate the hydrocarbon plume in groundwater. Two additional monitoring wells (MW-2 and MW-3) were installed south and east-southeast of MW-1. The hydraulic gradient was found to be toward the southeast; and subsequent sampling of MW-2 and MW-3 throughout the project life has indicated that these wells are unimpacted by BTEX constituents. The focus of the project has thus been to regularly monitor the natural attenuation of benzene concentrations in MW-1.

Monitoring Data

Figures 1 through 4 depict the site layout and the most recent four consecutive quarters of groundwater analytical results (November 2008). Figure 5 is a trend graph of the historical BTEX concentration trends in monitoring well MW-1. Table 1, attached, summarizes the historic monitoring data for the site. As of September 2009, the

El Paso Tennessee Pipeline Company
1001 Louisiana Street
Houston, Texas 77002



groundwater quality at the site has now met the applicable New Mexico Water Quality Control Commission standards for 4 consecutive quarters, fulfilling the closure criteria specified in Section 5 of the approved El Paso Remediation Plan. Attachment 1 contains the laboratory analytical reports for these 4 quarterly sampling events.

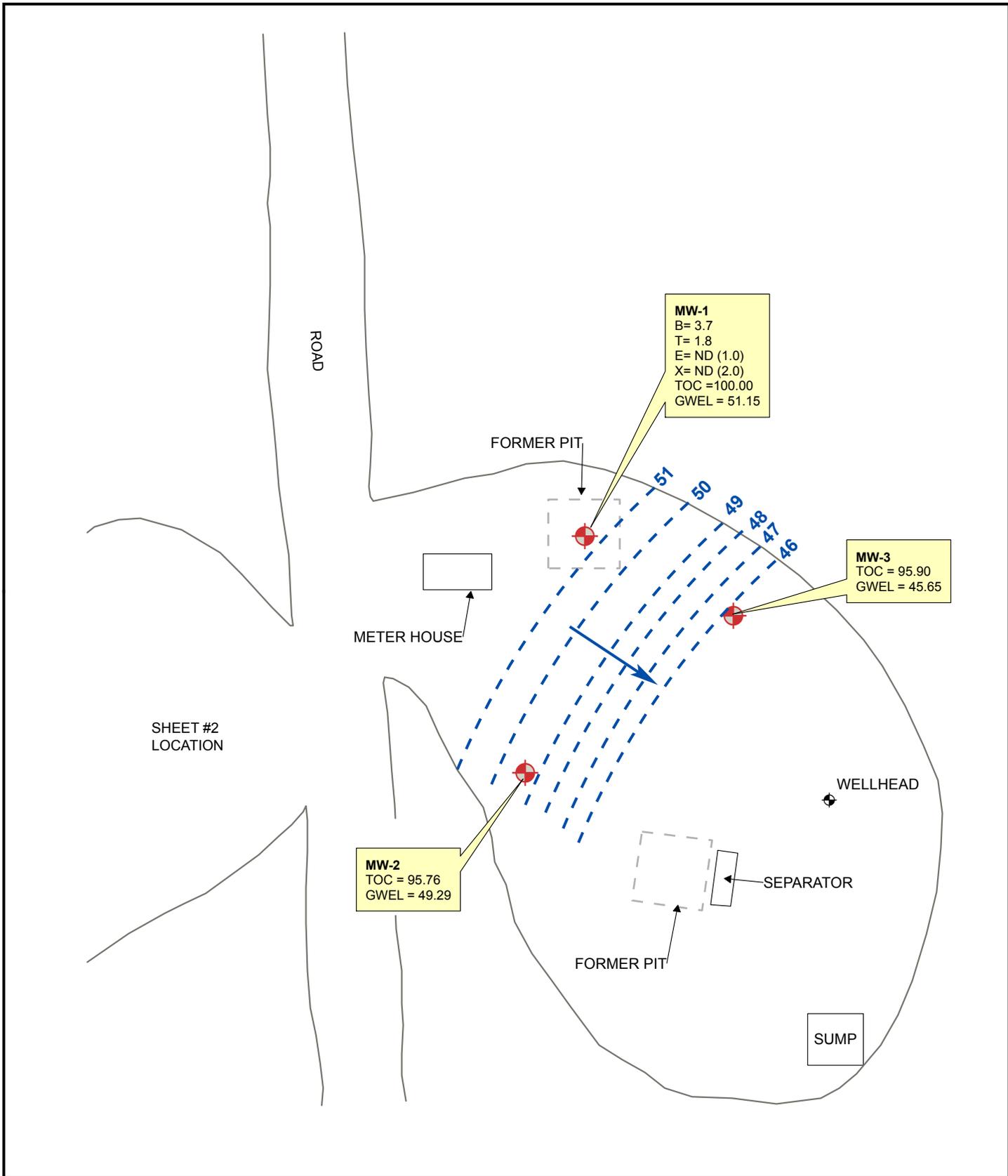
If you have any comments or questions concerning this correspondence, please contact me at (713) 420-5150.

Sincerely,

A handwritten signature in blue ink, appearing to read "D. Stavinoha". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Doug Stavinoha
Project Manager for El Paso Tennessee Pipeline Co.

cc: Jed Smith – MWH, w / o enclosures
Pit Groundwater Remediation – General File, w / enclosures



LEGEND

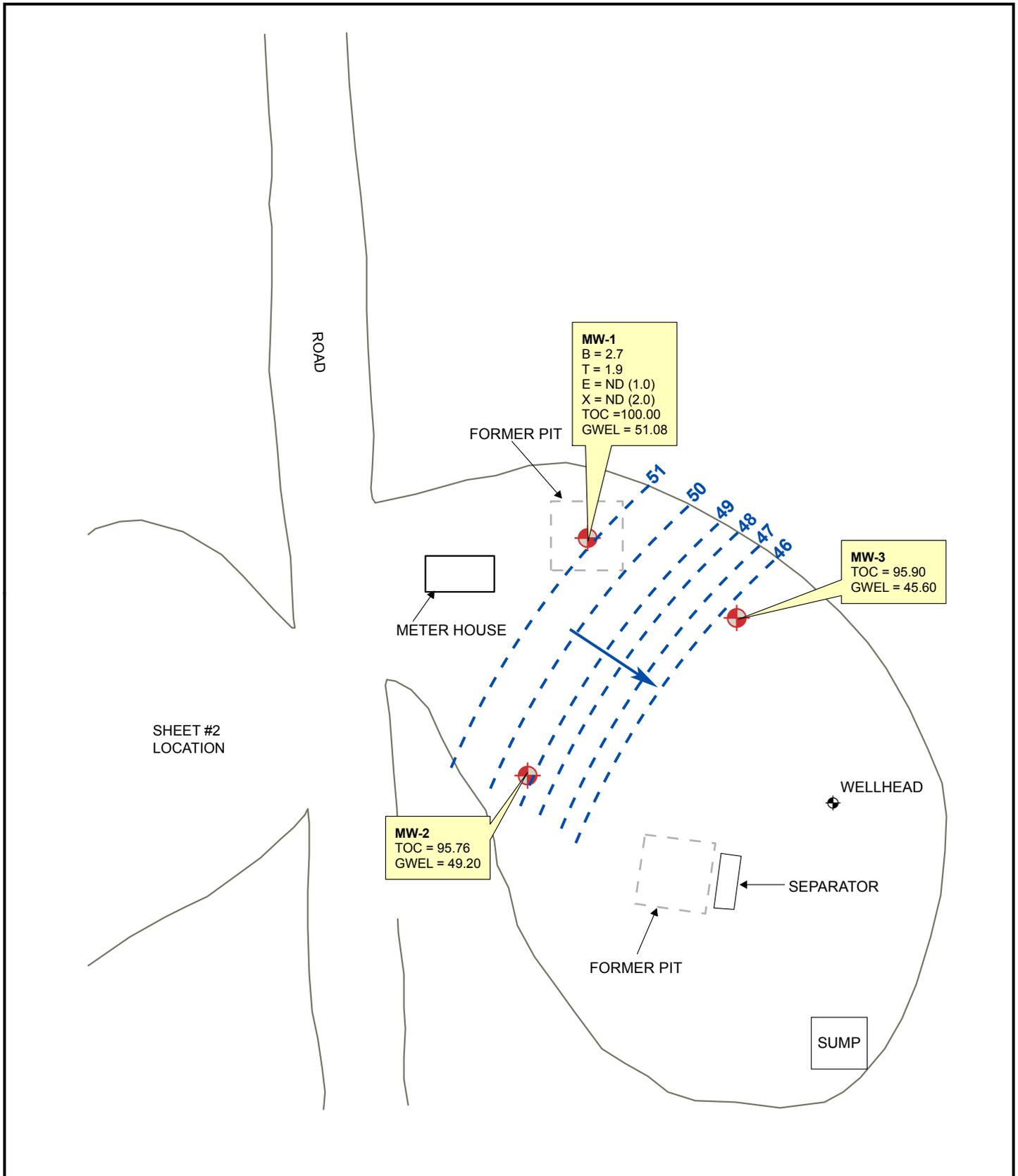
- MW-4** Existing Monitoring / Observation Well
- Groundwater Flow Direction
- Potentiometric Surface Contour (Inferred Where Dashed)

- B** Benzene (ug/L)
 - T** Toluene (ug/L)
 - E** Ethylbenzene (ug/L)
 - X** Total Xylenes (ug/L)
 - TOC** Top of Casing (ft. *)
 - GWEL** Groundwater Elevation (ft. *)
- * = Elevations in feet relative to a 100 ft benchmark.



PROJECT: HORTON #1E
 TITLE: Groundwater Potentiometric Surface Map, and BTEX Concentrations - December 2, 2008

FIGURE:
1



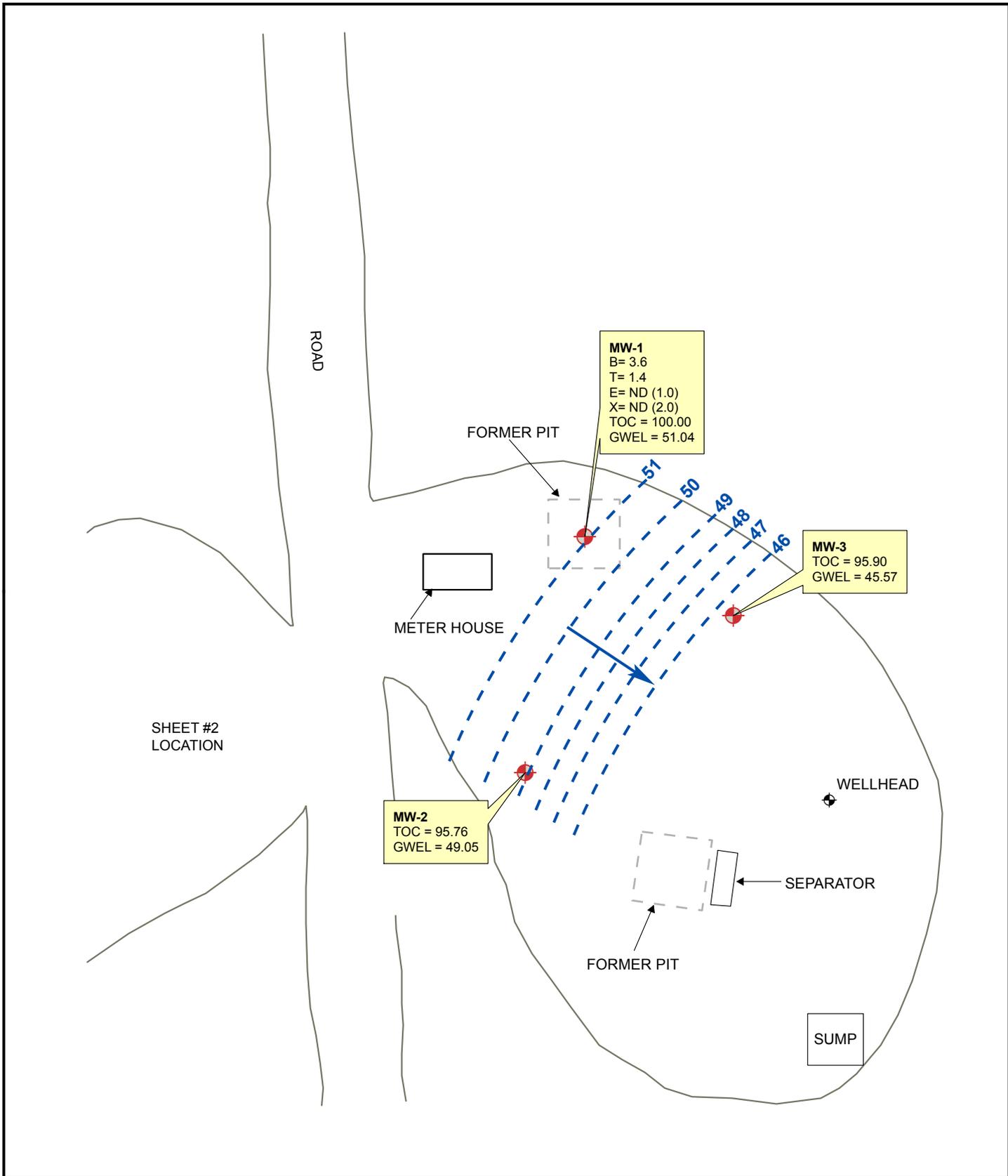
LEGEND

- MW-4** Existing Monitoring / Observation Well
- Groundwater Flow Direction
- Potentiometric Surface Contour (Inferred Where Dashed)

- B** Benzene (ug/L)
 - T** Toluene (ug/L)
 - E** Ethylbenzene (ug/L)
 - X** Total Xylenes (ug/L)
 - TOC** Top of Casing (ft. *)
 - GWEL** Groundwater Elevation (ft. *)
- * = Elevations in feet relative to a 100 ft benchmark.



Not To Scale



SHEET #2
LOCATION

LEGEND

- MW-4 Existing Monitoring / Observation Well
 - Groundwater Flow Direction
 - Potentiometric Surface Contour (Inferred Where Dashed)
- * = Elevations in feet relative to a 100 ft benchmark.

- B** Benzene (ug/L)
- T** Toluene (ug/L)
- E** Ethylbenzene (ug/L)
- X** Total Xylenes (ug/L)
- TOC** Top of Casing (ft. *)
- GWEL** Groundwater Elevation (ft. *)
- J** Result Flagged as Estimated

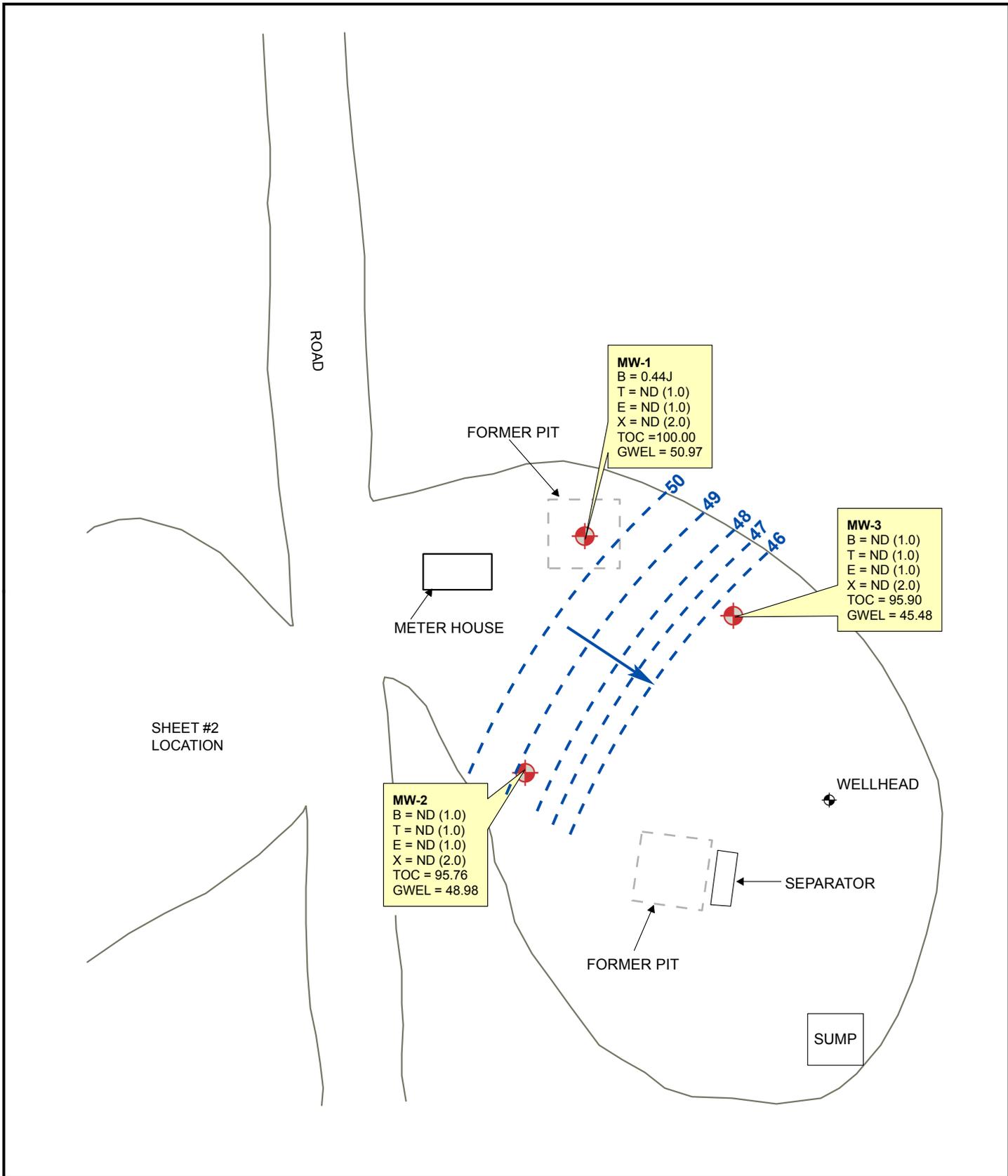


Not To Scale



PROJECT: HORTON #1E
TITLE: Groundwater Potentiometric Surface Map, and BTEX Concentrations - June 2, 2009

FIGURE:
3



LEGEND

- MW-4 Existing Monitoring / Observation Well
- Groundwater Flow Direction
- Potentiometric Surface Contour (Inferred Where Dashed)
- * = Elevations in feet relative to a 100 ft benchmark.

- B** Benzene (ug/L)
- T** Toluene (ug/L)
- E** Ethylbenzene (ug/L)
- X** Total Xylenes (ug/L)
- TOC** Top of Casing (ft. *)
- GWEL** Groundwater Elevation (ft. *)
- J** Result Flagged as Estimated



Not To Scale



PROJECT: HORTON #1E
 TITLE: Groundwater Potentiometric Surface Map,
 and BTEX Concentrations - September 16, 2009

FIGURE:

4

FIGURE 5
SUMMARY OF BTEX COMPOUNDS IN GROUNDWATER SAMPLES
HORTON #1E (METER #93388)
MW01

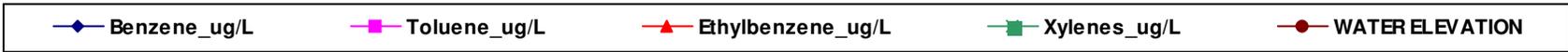
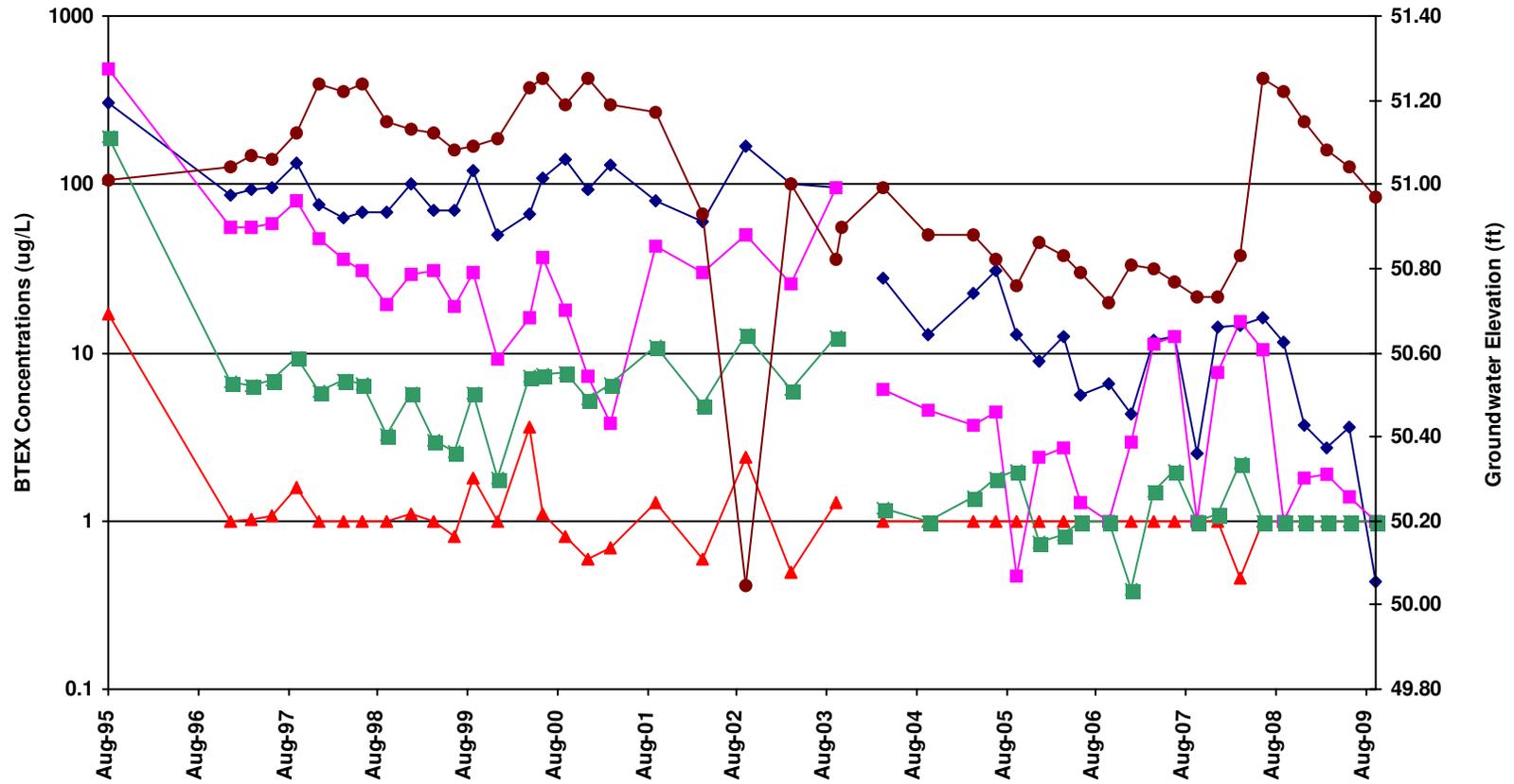


TABLE 1
SUMMARY OF BTEX COMPOUNDS IN GROUNDWATER SAMPLES
HORTON #1E (METER #93388)

Monitoring Well	Sample Date	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	Depth to Water (ft BTOC)
MW01	8/7/1995	308	483	16.9	190	48.99
	12/17/1996	86.8	55.5	1	6.66	48.96
	3/10/1997	93.3	55.3	1.02	6.34	48.93
	6/2/1997	96.1	58.8	1.07	6.82	48.94
	9/8/1997	132	80.7	1.59	9.46	48.88
	12/10/1997	74.9	47.1	1	5.94	48.76
	3/23/1998	63.6	35.9	1	6.93	48.78
	6/4/1998	68.1	30.6	1	6.6	48.76
	9/14/1998	67.7	19.4	1	3.26	48.85
	12/17/1998	100	29	1.1	5.8	48.87
	3/23/1999	70.1	30.6	1	3	48.88
	6/11/1999	71	19	0.8	2.6	48.92
	9/2/1999	120	30	1.8	5.8	48.91
	12/9/1999	50	9.1	1	1.8	48.89
	4/12/2000	67	16	3.6	7.2	48.77
	6/9/2000	110	37	1.1	7.4	48.75
	9/8/2000	140	18	0.8	7.6	48.81
	12/11/2000	93	7.2	0.6	5.3	48.75
	3/13/2001	130	3.8	0.7	6.6	48.81
	9/7/2001	80	43	1.3	11	48.83
	3/20/2002	60	30	0.6	4.9	49.07
	9/10/2002	167	49.9	2.4	12.7	49.96
	3/14/2003	100	25.5	0.5	6.1	49.00
	9/16/2003	95.5	95.8	1.3	12.5	49.18
	3/23/2004	27.8	6.1	1	1.2	49.01
	9/22/2004	12.8	4.5	1	1	49.12
	3/23/2005	22.8	3.7	1	1.4	49.12
	6/23/2005	30.6	4.4	1	1.8	49.18
	9/20/2005	12.8	0.47	1	2	49.24
	12/14/2005	8.8	2.4	1	0.74	49.14
	3/27/2006	12.5	2.7	1	0.82	49.17
	6/7/2006	5.6	1.3	1	1	49.21
	9/25/2006	6.5	1	1	1	49.28
	12/27/2006	4.3	2.9	1	0.39	49.19
	3/28/2007	11.9	11.3	1	1.5	49.20

Note: Non Detects are represented by a value of 1.

TABLE 1
SUMMARY OF BTEX COMPOUNDS IN GROUNDWATER SAMPLES
HORTON #1E (METER #93388)

Monitoring Well	Sample Date	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	Depth to Water (ft BTOC)
MW01	6/18/2007	12.6	12.5	1	2	49.23
	9/17/2007	2.5	1	1	1	49.27
	12/17/2007	14.2	7.6	1	1.1	49.27
	3/11/2008	14.7	15.5	0.46	2.2	49.17
	6/17/2008	16.2	10.3	1	0.99	48.75
	9/10/2008	11.6	1	1	1	48.78
	12/2/2008	3.7	1.8	1	1	48.85
	3/3/2009	2.7	1.9	1	1	48.92
	6/2/2009	3.6	1.4	1	1	48.96
	9/16/2009	0.44	1	1	1	49.03
MW02	10/20/1999	1	1	1	1	
	10/9/2000	1	0.7	1	1.1	46.41
	3/13/2001	1	1	1	1	46.47
	3/20/2002	1	1	1	1	46.75
	3/31/2007	1	1	1	1	46.89
	9/16/2009	1	1	1	1	46.78
MW03	10/20/1999	1	1	1	0.8	
	10/10/2000	1	1	1	2	50.12
	3/13/2001	1	1	1	1	50.18
	3/20/2002	1	1	1	1	50.40
	3/31/2007	1	1	1	1	50.52
	9/16/2009	1	1	1	1	50.42

Note: Non Detects are represented by a value of 1.

ATTACHMENT 1

Analytical Laboratory Reports





Technical Report for

Montgomery Watson

San Juan Basin Pit Groundwater Remediation

West-Alab-Ground Rem-007

Accutest Job Number: T24833

Sampling Date: 12/02/08

Report to:

Montgomery Watson

Jed.Smith@us.mwhglobal.com

ATTN: Jed Smith

Total number of pages in report: 15



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 Canevaro
Laboratory Director

Client Service contact: Georgia Jones 713-271-4700

Certifications: TX (T104704220-06-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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1

2

3

4

5



Sample Summary

Montgomery Watson

Job No: T24833

San Juan Basin Pit Groundwater Remediation
Project No: West-Alab-Ground Rem-007

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T24833-1	12/02/08	07:00 TU	12/03/08	AQ	Trip Blank Water	120208TB01
T24833-2	12/02/08	09:33 TU	12/03/08	AQ	Ground Water	HORTON #1E MW-1

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Montgomery Watson

Job No T24833

Site: San Juan Basin GW Sites Project

Report Date 12/10/2008 5:20:49 PM

1 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were collected on 12/02/2008 and were received at Accutest on 12/03/2008 properly preserved, at 5.2 Deg. C and intact. These Samples received an Accutest job number of T24833. 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 GC By Method SW846 8021B

Matrix AQ

Batch ID: GKK1389

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T24833-2MS, T24833-2MSD 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



Sample Results

Report of Analysis

Report of Analysis

3.1
3

Client Sample ID: 120208TB01		Date Sampled: 12/02/08
Lab Sample ID: T24833-1		Date Received: 12/03/08
Matrix: AQ - Trip Blank Water		Percent Solids: n/a
Method: SW846 8021B		
Project: San Juan Basin Pit Groundwater Remediation		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK028281.D	1	12/08/08	FI	n/a	n/a	GKK1389
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	0.0010	0.00021	mg/l	
108-88-3	Toluene	0.00092	0.0010	0.00023	mg/l	J
100-41-4	Ethylbenzene	ND	0.0010	0.00035	mg/l	
1330-20-7	Xylenes (total)	ND	0.0020	0.00055	mg/l	
95-47-6	o-Xylene	ND	0.0010	0.00055	mg/l	
	m,p-Xylene	ND	0.0010	0.00066	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	90%		58-125%
98-08-8	aaa-Trifluorotoluene	104%		73-139%

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: HORTON #1E MW-1	
Lab Sample ID: T24833-2	Date Sampled: 12/02/08
Matrix: AQ - Ground Water	Date Received: 12/03/08
Method: SW846 8021B	Percent Solids: n/a
Project: San Juan Basin Pit Groundwater Remediation	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK028282.D	1	12/08/08	FI	n/a	n/a	GKK1389
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	0.0037	0.0010	0.00021	mg/l	
108-88-3	Toluene	0.0018	0.0010	0.00023	mg/l	
100-41-4	Ethylbenzene	ND	0.0010	0.00035	mg/l	
1330-20-7	Xylenes (total)	ND	0.0020	0.00055	mg/l	
95-47-6	o-Xylene	ND	0.0010	0.00055	mg/l	
	m,p-Xylene	ND	0.0010	0.00066	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		58-125%
98-08-8	aaa-Trifluorotoluene	105%		73-139%

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



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SAMPLE INSPECTION FORM

Accutest Job Number: T24833 Client: MWH Americas Project: San Juan River Basin Groundwater
 Date/Time Received: 12-3-06 8:50 # of Coolers Received: 1 Thermometer #: 110
 Cooler Temps: #1: 5.2 #2: _____ #3: _____ #4: _____ #5: _____ #6: _____ #7: _____ #8: _____
 Method of Delivery: FEDEX UPS Accutest Courier Greyhound Delivery Other
 Airbill Numbers: 8577-877-2199

- 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: [Signature] 12-2-06
 INFORMATION AND SAMPLE LABELING VERIFIED BY: GVR 12-3-06

♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ **CORRECTIVE ACTIONS** ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦

Client Representative Notified: _____ Date: _____
 By Accutest Representative: _____ Via: Phone Email
 Client Instructions:

4.1
4



GC 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: T24833
Account: MWHCODE Montgomery Watson
Project: San Juan Basin Pit Groundwater Remediation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1389-MB	KK028278.D 1		12/08/08	FI	n/a	n/a	GKK1389

The QC reported here applies to the following samples:

Method: SW846 8021B

T24833-1, T24833-2

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.35	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	0.55	ug/l	
95-47-6	o-Xylene	ND	1.0	0.55	ug/l	
	m,p-Xylene	ND	1.0	0.66	ug/l	

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	93%	58-125%
98-08-8	aaa-Trifluorotoluene	111%	73-139%

Blank Spike Summary

Job Number: T24833
Account: MWHCODE Montgomery Watson
Project: San Juan Basin Pit Groundwater Remediation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1389-BS	KK028277.D 1		12/08/08	FI	n/a	n/a	GKK1389

The QC reported here applies to the following samples:

Method: SW846 8021B

T24833-1, T24833-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	20.2	101	86-121
100-41-4	Ethylbenzene	20	19.5	98	81-116
108-88-3	Toluene	20	19.5	98	87-117
1330-20-7	Xylenes (total)	60	57.8	96	85-115
95-47-6	o-Xylene	20	19.2	96	87-116
	m,p-Xylene	40	38.6	97	84-116

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	90%	58-125%
98-08-8	aaa-Trifluorotoluene	109%	73-139%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T24833
Account: MWHCODE Montgomery Watson
Project: San Juan Basin Pit Groundwater Remediation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T24833-2MS	KK028283.D 1		12/08/08	FI	n/a	n/a	GKK1389
T24833-2MSD	KK028284.D 1		12/08/08	FI	n/a	n/a	GKK1389
T24833-2	KK028282.D 1		12/08/08	FI	n/a	n/a	GKK1389

The QC reported here applies to the following samples:

Method: SW846 8021B

T24833-1, T24833-2

CAS No.	Compound	T24833-2 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	3.7	20	23.2	98	24.1	102	4	86-121/19
100-41-4	Ethylbenzene	ND	20	19.4	97	19.8	99	2	81-116/14
108-88-3	Toluene	1.8	20	20.6	94	21.3	98	3	87-117/16
1330-20-7	Xylenes (total)	ND	60	57.3	96	58.5	98	2	85-115/12
95-47-6	o-Xylene	ND	20	18.8	94	19.2	96	2	87-116/16
	m,p-Xylene	ND	40	38.4	96	39.3	98	2	84-116/13

CAS No.	Surrogate Recoveries	MS	MSD	T24833-2	Limits
460-00-4	4-Bromofluorobenzene	88%	92%	91%	58-125%
98-08-8	aaa-Trifluorotoluene	106%	109%	105%	73-139%

5.3.1
5



Technical Report for

Montgomery Watson

San Juan Basin Pit Groundwater Remediation 2008-2009

Accutest Job Number: T25892

Sampling Date: 03/03/09

Report to:

MWH Americas
1801 California St. Suite 2900
Denver, CO 80202
jed.smith@mwhglobal.com; daniel.a.wade@mwhglobal.com;
craig.moore@mwhglobal.com
ATTN: Jed Smith

Total number of pages in report: **15**



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 Canevaro
Laboratory Director

Client Service contact: William Reeves 713-271-4700

Certifications: TX (T104704220-06-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

Montgomery Watson

Job No: T25892

San Juan Basin Pit Groundwater Remediation 2008-2009

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T25892-1	03/03/09	09:39 TU	03/04/09	AQ	Ground Water	HORTON 1E MW-1
T25892-2	03/03/09	07:00 TU	03/04/09	AQ	Trip Blank Water	030309TB01

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Montgomery Watson

Job No T25892

Site: San Juan Basin Pit Groundwater Remediation 2008-2009

Report Date 3/9/2009 3:10:05 PM

1 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were collected on 03/03/2009 and were received at Accutest on 03/04/2009 properly preserved, at 4.4 Deg. C and intact. These Samples received an Accutest job number of T25892. 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 GC By Method SW846 8021B

Matrix AQ

Batch ID: GKK1444

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T25846-2MS, T25846-2MSD 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



Sample Results

Report of Analysis

Report of Analysis

3.1
3

Client Sample ID: HORTON 1E MW-1	
Lab Sample ID: T25892-1	Date Sampled: 03/03/09
Matrix: AQ - Ground Water	Date Received: 03/04/09
Method: SW846 8021B	Percent Solids: n/a
Project: San Juan Basin Pit Groundwater Remediation 2008-2009	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK029828.D	1	03/07/09	FI	n/a	n/a	GKK1444
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	2.7	1.0	0.21	ug/l	
108-88-3	Toluene	1.9	1.0	0.23	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.35	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	0.55	ug/l	
95-47-6	o-Xylene	ND	1.0	0.55	ug/l	
	m,p-Xylene	ND	1.0	0.66	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%		58-125%
98-08-8	aaa-Trifluorotoluene	84%		73-139%

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: 030309TB01	
Lab Sample ID: T25892-2	Date Sampled: 03/03/09
Matrix: AQ - Trip Blank Water	Date Received: 03/04/09
Method: SW846 8021B	Percent Solids: n/a
Project: San Juan Basin Pit Groundwater Remediation 2008-2009	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK029823.D	1	03/06/09	FI	n/a	n/a	GKK1444
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	1.0	0.21	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.35	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	0.55	ug/l	
95-47-6	o-Xylene	ND	1.0	0.55	ug/l	
	m,p-Xylene	ND	1.0	0.66	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		58-125%
98-08-8	aaa-Trifluorotoluene	83%		73-139%

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



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY

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

FED-EX Tracking # 8663 2309 4720	Bottle Order Control #
Accutest Quote #	Accutest Job # T25892

Client / Reporting Information		Project Information		Requested Analyses										Matrix Codes	
Company Name MWH		Project Name / No. EPTPC San Juan Basin Pit GW Remediation 2008-2009												DW - Drinking Water GW - Ground Water WW - Wastewater SO - Soil SL - Sludge OL - Oil LIQ - Liquid SOL - Other Solid	
Project Contact Jed Smith		Bill to El Paso Corp													
E-Mail jed.smith@mwhglobal.com		Invoice Attn. Norma Ramos													
Address 1801 California Street, Suite 2900		Address 1001 Louisiana Street, Rm S1904B													
City State Zip Denver CO 80202		City State Zip Houston TX 77002													
Phone No. Fax No. 303-291-2276		Phone No. Fax No.		BTEX (8021B)	LAB USE ONLY										
Sample Name Troy Urban		Client Purchase Order #													
Collection		Number of preserved bottles													
Field ID / Point of Collection	Date	Time	Matrix			# of bottles	NO	MECH	PHOS	TRRP	EMERG	PERC	MECH	NONE	
Horton 1E MW-1	030309	0939	GW			3	<input checked="" type="checkbox"/>								
030309 TBP1	030309	0700	GW			2	<input checked="" type="checkbox"/>								
Turnaround Time (Business days)		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		Approved By/ Date: _____ <input type="checkbox"/> Commercial "A" <input checked="" type="checkbox"/> Commercial "B" <input type="checkbox"/> Reduced Tier 1 <input type="checkbox"/> Full Data Package Commercial "A" = Results Only Commercial "B" = Results & Standard QC				<input type="checkbox"/> TRRP-13 <input type="checkbox"/> EDD Format <input type="checkbox"/> Other									
Real time analytical data available via Lablink															
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY															
Relinquished By Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:							Date Time:	Received By:		
Jed Smith	3/3/09 1545	1	2	3/4/09 9:00	2							3/4/09 9:00	[Signature]		
Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:							Date Time:	Received By:		
		3	4		4										
Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice	Cooler Temp.									
		5		<input type="checkbox"/>	<input type="checkbox"/>	4.4									

4.1
4

SAMPLE INSPECTION FORM

Accutest Job Number: T25892 Client: MWH Date/Time Received: 3-4-9 900
 # of Coolers Received: 1 Thermometer #: JR 1 Temperature Adjustment Factor: -0.4
 Cooler Temps: #1: 4.4 #2: _____ #3: _____ #4: _____ #5: _____ #6: _____ #7: _____ #8: _____
 Method of Delivery: FEDEX UPS Accutest Courier Greyhound Delivery Other
 Airbill Numbers: 8663-2309-4720

- 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 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

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

Summary of Discrepancies: _____

TECHNICIAN SIGNATURE/DATE: *[Signature]* 3/4/9
 INFORMATION AND SAMPLE LABELING VERIFIED BY: *[Signature]*

♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ **CORRECTIVE ACTIONS** ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦

Client Representative Notified: _____ Date: _____
 By Accutest Representative: _____ Via: Phone _____ Email _____
 Client Instructions: _____

l:\mwalker\forms\samplemanagement





GC Volatiles

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QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: T25892
Account: MWHCODE Montgomery Watson
Project: San Juan Basin Pit Groundwater Remediation 2008-2009

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1444-MB	KK029812.D	1	03/06/09	FI	n/a	n/a	GKK1444

The QC reported here applies to the following samples:

Method: SW846 8021B

T25892-1, T25892-2

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.35	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	0.55	ug/l	
95-47-6	o-Xylene	ND	1.0	0.55	ug/l	
	m,p-Xylene	ND	1.0	0.66	ug/l	

CAS No.	Surrogate Recoveries	Results	Limits
460-00-4	4-Bromofluorobenzene	96%	58-125%
98-08-8	aaa-Trifluorotoluene	84%	73-139%

Blank Spike Summary

Job Number: T25892
Account: MWHCODE Montgomery Watson
Project: San Juan Basin Pit Groundwater Remediation 2008-2009

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1444-BS	KK029808.D 1		03/06/09	FI	n/a	n/a	GKK1444

The QC reported here applies to the following samples:

Method: SW846 8021B

T25892-1, T25892-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	19.2	96	86-121
100-41-4	Ethylbenzene	20	19.5	98	81-116
108-88-3	Toluene	20	19.4	97	87-117
1330-20-7	Xylenes (total)	60	58.6	98	85-115
95-47-6	o-Xylene	20	19.6	98	87-116
	m,p-Xylene	40	39.0	98	84-116

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	98%	58-125%
98-08-8	aaa-Trifluorotoluene	85%	73-139%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T25892
Account: MWHCODE Montgomery Watson
Project: San Juan Basin Pit Groundwater Remediation 2008-2009

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T25846-2MS	KK029819.D	1	03/06/09	FI	n/a	n/a	GKK1444
T25846-2MSD	KK029820.D	1	03/06/09	FI	n/a	n/a	GKK1444
T25846-2	KK029816.D	1	03/06/09	FI	n/a	n/a	GKK1444

The QC reported here applies to the following samples:

Method: SW846 8021B

T25892-1, T25892-2

CAS No.	Compound	T25846-2 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	0.72	J	20	21.2	102	20.5	99	3	86-121/19
100-41-4	Ethylbenzene	ND		20	20.9	105	20.0	100	4	81-116/14
108-88-3	Toluene	ND		20	20.7	104	20.0	100	3	87-117/16
1330-20-7	Xylenes (total)	ND		60	61.7	103	59.4	99	4	85-115/12
95-47-6	o-Xylene	ND		20	20.6	103	19.8	99	4	87-116/16
	m,p-Xylene	ND		40	41.1	103	39.5	99	4	84-116/13

CAS No.	Surrogate Recoveries	MS	MSD	T25846-2	Limits
460-00-4	4-Bromofluorobenzene	100%	99%	98%	58-125%
98-08-8	aaa-Trifluorotoluene	85%	84%	84%	73-139%

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Technical Report for

Montgomery Watson

San Juan Basin Pit Groundwater Remediation 2008-2009

Horton

Accutest Job Number: T30414

Sampling Date: 06/02/09

Report to:

MWH Americas
1801 California St. Suite 2900
Denver, CO 80202
jed.smith@mwhglobal.com; daniel.a.wade@mwhglobal.com;
craig.moore@mwhglobal.com; ala@lodestarservices.com
ATTN: Jed Smith

Total number of pages in report: **15**



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 Canevaro
Laboratory Director

Client Service contact: Georgia Jones 713-271-4700

Certifications: TX (T104704220-06-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

Montgomery Watson

Job No: T30414

San Juan Basin Pit Groundwater Remediation 2008-2009

Project No: Horton

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T30414-1	06/02/09	06:55 TU	06/04/09	AQ	Trip Blank Water	020609TB02
T30414-2	06/02/09	08:52 TU	06/04/09	AQ	Ground Water	HORTON 1E MW-1

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Montgomery Watson

Job No T30414

Site: San Juan Basin Pit Groundwater Remediation 2008-2009

Report Date 6/8/2009 3:24:25 PM

1 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were collected on 06/02/2009 and were received at Accutest on 06/04/2009 properly preserved, at 4 Deg. C and intact. These Samples received an Accutest job number of T30414. 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 GC By Method SW846 8021B

Matrix AQ

Batch ID: GKK1498

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T30414-2MS, T30414-2MSD 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



Sample Results

Report of Analysis

Report of Analysis

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Client Sample ID: 020609TB02	
Lab Sample ID: T30414-1	Date Sampled: 06/02/09
Matrix: AQ - Trip Blank Water	Date Received: 06/04/09
Method: SW846 8021B	Percent Solids: n/a
Project: San Juan Basin Pit Groundwater Remediation 2008-2009	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK031128.D	1	06/05/09	FI	n/a	n/a	GKK1498
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	1.0	0.21	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.35	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	0.55	ug/l	
95-47-6	o-Xylene	ND	1.0	0.55	ug/l	
	m,p-Xylene	ND	1.0	0.66	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	85%		58-125%
98-08-8	aaa-Trifluorotoluene	88%		73-139%

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: HORTON 1E MW-1	
Lab Sample ID: T30414-2	Date Sampled: 06/02/09
Matrix: AQ - Ground Water	Date Received: 06/04/09
Method: SW846 8021B	Percent Solids: n/a
Project: San Juan Basin Pit Groundwater Remediation 2008-2009	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK031118.D	1	06/05/09	FI	n/a	n/a	GKK1498
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	3.6	1.0	0.21	ug/l	
108-88-3	Toluene	1.4	1.0	0.23	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.35	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	0.55	ug/l	
95-47-6	o-Xylene	ND	1.0	0.55	ug/l	
	m,p-Xylene	ND	1.0	0.66	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	84%		58-125%
98-08-8	aaa-Trifluorotoluene	90%		73-139%

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



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY

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

FED-EX Tracking # 8643 8850 8201	Bottle Order Control #
Accutest Quote #	Accutest Job # T30414

Client / Reporting Information		Project Information		Requested Analyses		Matrix Codes	
Company Name MWH		Project Name / No. Horton				DW - Drinking Water	
Project Contact Jed Smith E-Mail: jed.smith@mwhglobal.com		EPTPC San Juan Basin Pit GW Remediation 2008-2009				GW - Ground Water	
Address 1801 California Street, Suite 2900		Bill to El Paso Corp				WW - Wastewater	
City Denver		Address 1001 Louisiana Street, Rm S1904B				SO - Soil	
State CO		City Hou				SL - Sludge	
Zip 80202		State TX				LIQ - Liquid	
Phone No. 303-291-2276		Fax No. 303-291-2276				SOL - Other Solid	
Sampler's Name Troy Urban		Client Purchase Order # West-ALAB-GroundRem-007					
Accutest Sample #	Field ID / Point of Collection	Date	Time	Matrix	# of bottles	Number of preserved bottles	
						<input type="checkbox"/> HD <input type="checkbox"/> MECH <input type="checkbox"/> PHOS <input type="checkbox"/> HSEB <input type="checkbox"/> ENDO <input type="checkbox"/> NITRO <input type="checkbox"/> MEQ <input type="checkbox"/> NONE	
	020609TB02	060209	0655	GW	2	X	
	Horton 1E MW-1	060209	0852	GW	3	X	

Turnaround Time (Business days)	Approved By / Date:	Date 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	_____	<input type="checkbox"/> Commercial "A" <input checked="" type="checkbox"/> Commercial "B" <input type="checkbox"/> Reduced Tier 1 <input type="checkbox"/> Full Data Package	<input type="checkbox"/> TRRP-13 <input type="checkbox"/> EDD Format <input type="checkbox"/> Other
Commercial "A" = Results Only Commercial "B" = Results & Standard QC			

Real time analytical data available via LabLink

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

Relinquished by: Troy Urban	Date Time: 6/3/09 1640	Received By: 1	Relinquished By: 2	Date Time: 6-29-09 9:5	Received By: 2
Relinquished by:	Date Time:	Received By: 3	Relinquished By:	Date Time:	Received By:
Relinquished by:	Date Time:	Received By: 4	Custody Seal #	Preserved where applicable	On Ice <input checked="" type="checkbox"/> Cooler Temp. 4.0°C
Relinquished by:	Date Time:	Received By: 5			

4.1
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SAMPLE INSPECTION FORM

Accutest Job Number: T30414 Client: MWH Date/Time Received: 6-4-9 9:15
of Coolers Received: 1 Thermometer #: 110 Temperature Adjustment Factor: -0.3
Cooler Temps: #1: 4.0°C #2: _____ #3: _____ #4: _____ #5: _____ #6: _____ #7: _____ #8: _____
Method of Delivery: FEDEX UPS Accutest Courier Greyhound Delivery Other
Airbill Numbers: _____

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: _____

INFORMATION AND SAMPLE LABELING VERIFIED BY: _____

CORRECTIVE ACTIONS

Client Representative Notified: _____

Date: _____

By Accutest Representative: _____

Via: Phone Email

Client Instructions:

U:\mwalker\forms\samplemanagement

T30414: Chain of Custody

Page 2 of 3



GC Volatiles

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QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: T30414
Account: MWHCODE Montgomery Watson
Project: San Juan Basin Pit Groundwater Remediation 2008-2009

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1498-MB	KK031117.D 1		06/05/09	FI	n/a	n/a	GKK1498

The QC reported here applies to the following samples:

Method: SW846 8021B

T30414-1, T30414-2

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.35	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	0.55	ug/l	
95-47-6	o-Xylene	ND	1.0	0.55	ug/l	
	m,p-Xylene	ND	1.0	0.66	ug/l	

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	86%	58-125%
98-08-8	aaa-Trifluorotoluene	88%	73-139%

Blank Spike Summary

Job Number: T30414
Account: MWHCODE Montgomery Watson
Project: San Juan Basin Pit Groundwater Remediation 2008-2009

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1498-BS	KK031113.D 1		06/05/09	FI	n/a	n/a	GKK1498

The QC reported here applies to the following samples:

Method: SW846 8021B

T30414-1, T30414-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	19.1	96	86-121
100-41-4	Ethylbenzene	20	19.3	97	81-116
108-88-3	Toluene	20	19.3	97	87-117
1330-20-7	Xylenes (total)	60	57.7	96	85-115
95-47-6	o-Xylene	20	19.2	96	87-116
	m,p-Xylene	40	38.5	96	84-116

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	88%	58-125%
98-08-8	aaa-Trifluorotoluene	91%	73-139%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T30414
Account: MWHCODE Montgomery Watson
Project: San Juan Basin Pit Groundwater Remediation 2008-2009

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T30414-2MS	KK031124.D 1		06/05/09	FI	n/a	n/a	GKK1498
T30414-2MSD	KK031125.D 1		06/05/09	FI	n/a	n/a	GKK1498
T30414-2	KK031118.D 1		06/05/09	FI	n/a	n/a	GKK1498

The QC reported here applies to the following samples:

Method: SW846 8021B

T30414-1, T30414-2

CAS No.	Compound	T30414-2 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	3.6	20	24.5	105	24.4	104	0	86-121/19
100-41-4	Ethylbenzene	ND	20	21.4	107	21.3	107	0	81-116/14
108-88-3	Toluene	1.4	20	22.4	105	22.3	105	0	87-117/16
1330-20-7	Xylenes (total)	ND	60	63.4	106	63.1	105	0	85-115/12
95-47-6	o-Xylene	ND	20	21.1	106	21.0	105	0	87-116/16
	m,p-Xylene	ND	40	42.3	106	42.2	106	0	84-116/13

CAS No.	Surrogate Recoveries	MS	MSD	T30414-2	Limits
460-00-4	4-Bromofluorobenzene	89%	89%	84%	58-125%
98-08-8	aaa-Trifluorotoluene	91%	91%	90%	73-139%

5.3.1
5



Technical Report for

Montgomery Watson

San Juan Basin Pit Groundwater Remediation

HORTON #E

Accutest Job Number: T37836

Sampling Date: 09/16/09

Report to:

Montgomery Watson

Jed.Smith@us.mwhglobal.com

ATTN: Jed Smith

Total number of pages in report: **17**



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 Canevaro
Laboratory Director

Client Service contact: Georgia Jones 713-271-4700

Certifications: TX (T104704220-06-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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1

2

3

4

5



Sample Summary

Montgomery Watson

Job No: T37836

San Juan Basin Pit Groundwater Remediation
Project No: HORTON #E

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
T37836-1	09/16/09	09:35 TU	09/17/09	AQ	Ground Water	HORTON 1E MW-1
T37836-2	09/16/09	10:43 TU	09/17/09	AQ	Ground Water	HORTON 1E MW-2
T37836-3	09/16/09	11:28 TU	09/17/09	AQ	Ground Water	HORTON 1E MW-3
T37836-4	09/16/09	07:00 TU	09/17/09	AQ	Trip Blank Water	160909 TB01

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Montgomery Watson

Job No T37836

Site: San Juan Basin Pit Groundwater Remediation

Report Date 9/22/2009 4:48:45 PM

3 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were collected on 09/16/2009 and were received at Accutest on 09/17/2009 properly preserved, at 2 Deg. C and intact. These Samples received an Accutest job number of T37836. 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 GC By Method SW846 8021B

Matrix AQ

Batch ID: GKK1554

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T37878-3MS, T37878-3MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Ethylbenzene, m,p-Xylene, o-Xylene, Toluene, Xylenes (total) are outside control limits. Probable cause due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Ethylbenzene, m,p-Xylene, o-Xylene, Xylenes (total) are outside control limits. Probable cause due to matrix interference.

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: HORTON 1E MW-1	
Lab Sample ID: T37836-1	Date Sampled: 09/16/09
Matrix: AQ - Ground Water	Date Received: 09/17/09
Method: SW846 8021B	Percent Solids: n/a
Project: San Juan Basin Pit Groundwater Remediation	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK032485.D	1	09/21/09	FI	n/a	n/a	GKK1554
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	0.44	1.0	0.36	ug/l	J
108-88-3	Toluene	ND	1.0	0.28	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
	m,p-Xylene	ND	1.0	0.57	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		58-125%
98-08-8	aaa-Trifluorotoluene	122%		73-139%

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: HORTON 1E MW-2	
Lab Sample ID: T37836-2	Date Sampled: 09/16/09
Matrix: AQ - Ground Water	Date Received: 09/17/09
Method: SW846 8021B	Percent Solids: n/a
Project: San Juan Basin Pit Groundwater Remediation	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK032495.D	1	09/21/09	FI	n/a	n/a	GKK1554
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	1.0	0.36	ug/l	
108-88-3	Toluene	ND	1.0	0.28	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
	m,p-Xylene	ND	1.0	0.57	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%		58-125%
98-08-8	aaa-Trifluorotoluene	120%		73-139%

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:	HORTON 1E MW-3	
Lab Sample ID:	T37836-3	Date Sampled: 09/16/09
Matrix:	AQ - Ground Water	Date Received: 09/17/09
Method:	SW846 8021B	Percent Solids: n/a
Project:	San Juan Basin Pit Groundwater Remediation	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK032496.D	1	09/21/09	FI	n/a	n/a	GKK1554
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	1.0	0.36	ug/l	
108-88-3	Toluene	ND	1.0	0.28	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
	m,p-Xylene	ND	1.0	0.57	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		58-125%
98-08-8	aaa-Trifluorotoluene	121%		73-139%

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: 160909 TB01	Date Sampled: 09/16/09
Lab Sample ID: T37836-4	Date Received: 09/17/09
Matrix: AQ - Trip Blank Water	Percent Solids: n/a
Method: SW846 8021B	
Project: San Juan Basin Pit Groundwater Remediation	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK032484.D	1	09/21/09	FI	n/a	n/a	GKK1554
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	1.0	0.36	ug/l	
108-88-3	Toluene	ND	1.0	0.28	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
	m,p-Xylene	ND	1.0	0.57	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		58-125%
98-08-8	aaa-Trifluorotoluene	120%		73-139%

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



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SAMPLE INSPECTION FORM

Accutest Job Number: T37836 Client: MWH Date/Time Received: 9-17-9 930
 # of Coolers Received: 1 Thermometer #: IR-1 Temperature Adjustment Factor: 1.4
 Cooler Temps: #1: 2.0°C #2: _____ #3: _____ #4: _____ #5: _____ #6: _____ #7: _____ #8: _____
 Method of Delivery: FEDEX UPS Accutest Courier Greyhound Delivery Other
 Airbill Numbers: _____

- 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: [Signature] 9/17/9
 INFORMATION AND SAMPLE LABELING VERIFIED BY: [Signature]

♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ **CORRECTIVE ACTIONS** ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦

Client Representative Notified: _____ Date: _____
 By Accutest Representative: _____ Via: Phone Email
 Client Instructions: _____

i:\walker\forms\samplemanagement





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: T37836
Account: MWHCODE Montgomery Watson
Project: San Juan Basin Pit Groundwater Remediation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1554-MB	KK032483.D 1		09/21/09	FI	n/a	n/a	GKK1554

The QC reported here applies to the following samples:

Method: SW846 8021B

T37836-1, T37836-2, T37836-3, T37836-4

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.36	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
108-88-3	Toluene	ND	1.0	0.28	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
	m,p-Xylene	ND	1.0	0.57	ug/l	

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	99%	58-125%
98-08-8	aaa-Trifluorotoluene	120%	73-139%

Blank Spike Summary

Job Number: T37836
Account: MWHCODE Montgomery Watson
Project: San Juan Basin Pit Groundwater Remediation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1554-BS	KK032479.D 1		09/21/09	FI	n/a	n/a	GKK1554

The QC reported here applies to the following samples:

Method: SW846 8021B

T37836-1, T37836-2, T37836-3, T37836-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	19.3	97	86-121
100-41-4	Ethylbenzene	20	21.3	107	81-116
108-88-3	Toluene	20	20.6	103	87-117
1330-20-7	Xylenes (total)	60	63.1	105	85-115
95-47-6	o-Xylene	20	21.3	107	87-116
	m,p-Xylene	40	41.8	105	84-116

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	102%	58-125%
98-08-8	aaa-Trifluorotoluene	122%	73-139%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T37836
Account: MWHCODE Montgomery Watson
Project: San Juan Basin Pit Groundwater Remediation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T37878-3MS	KK032489.D 1		09/21/09	FI	n/a	n/a	GKK1554
T37878-3MSD	KK032490.D 1		09/21/09	FI	n/a	n/a	GKK1554
T37878-3	KK032488.D 1		09/21/09	FI	n/a	n/a	GKK1554

The QC reported here applies to the following samples:

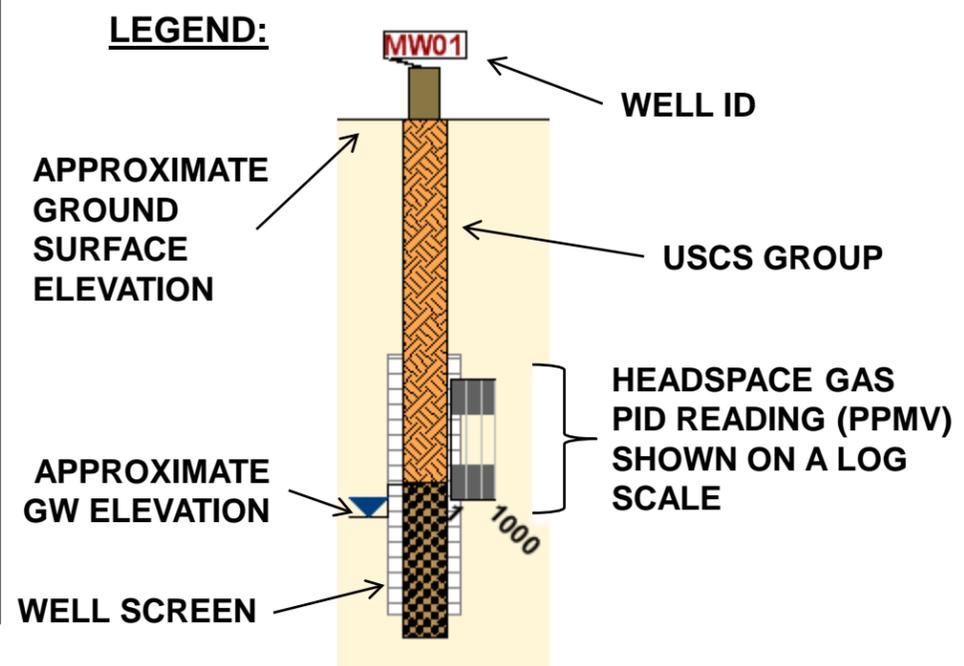
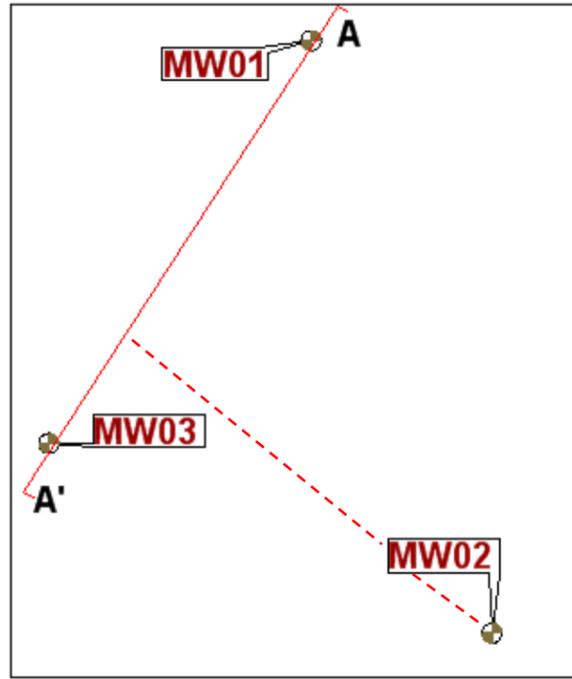
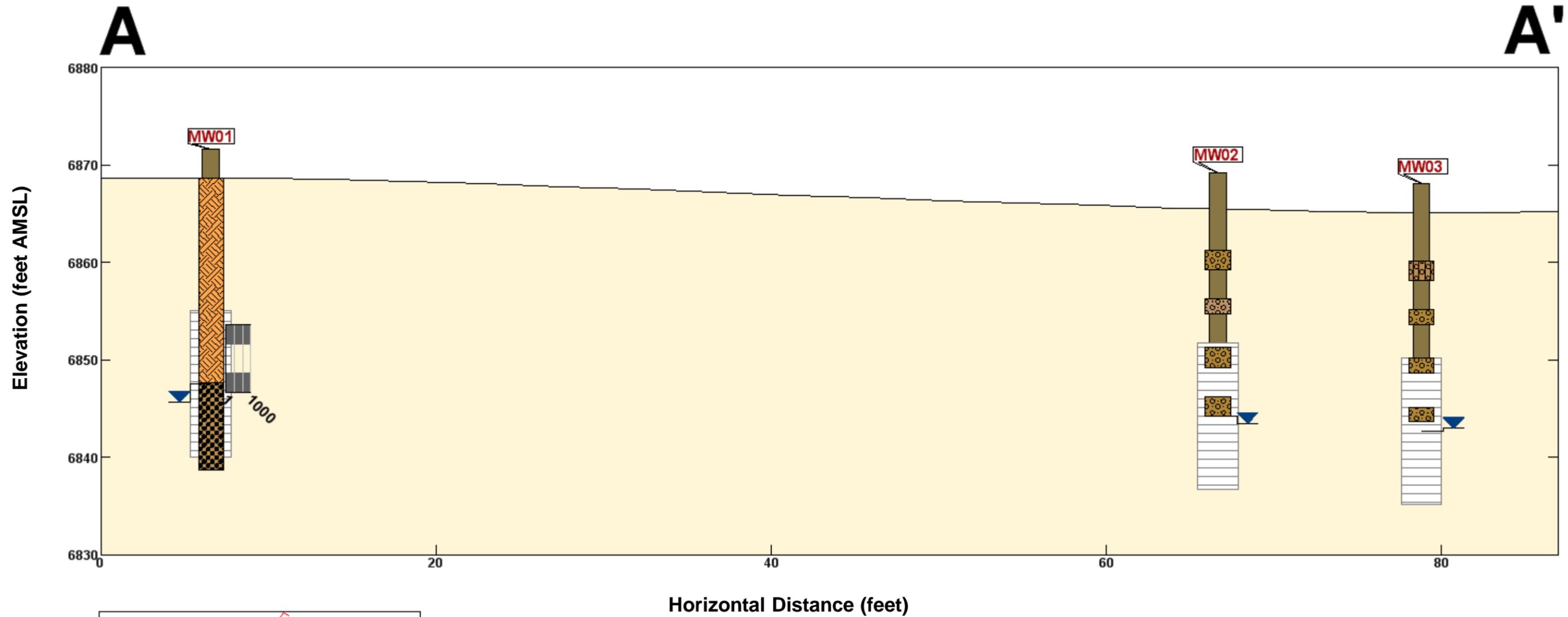
Method: SW846 8021B

T37836-1, T37836-2, T37836-3, T37836-4

CAS No.	Compound	T37878-3 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	2.4	20	24.4	110	24.2	109	1	86-121/19
100-41-4	Ethylbenzene	1.0 U	20	24.8	124*	24.9	125*	0	81-116/14
108-88-3	Toluene	0.82 J	20	24.5	118*	24.3	117	1	87-117/16
1330-20-7	Xylenes (total)	11.7	60	84.1	121*	83.9	120*	0	85-115/12
95-47-6	o-Xylene	6.0	20	30.2	121*	30.2	121*	0	87-116/16
	m,p-Xylene	5.8	40	53.9	120*	53.8	120*	0	84-116/13

CAS No.	Surrogate Recoveries	MS	MSD	T37878-3	Limits
460-00-4	4-Bromofluorobenzene	103%	106%	101%	58-125%
98-08-8	aaa-Trifluorotoluene	124%	124%	123%	73-139%

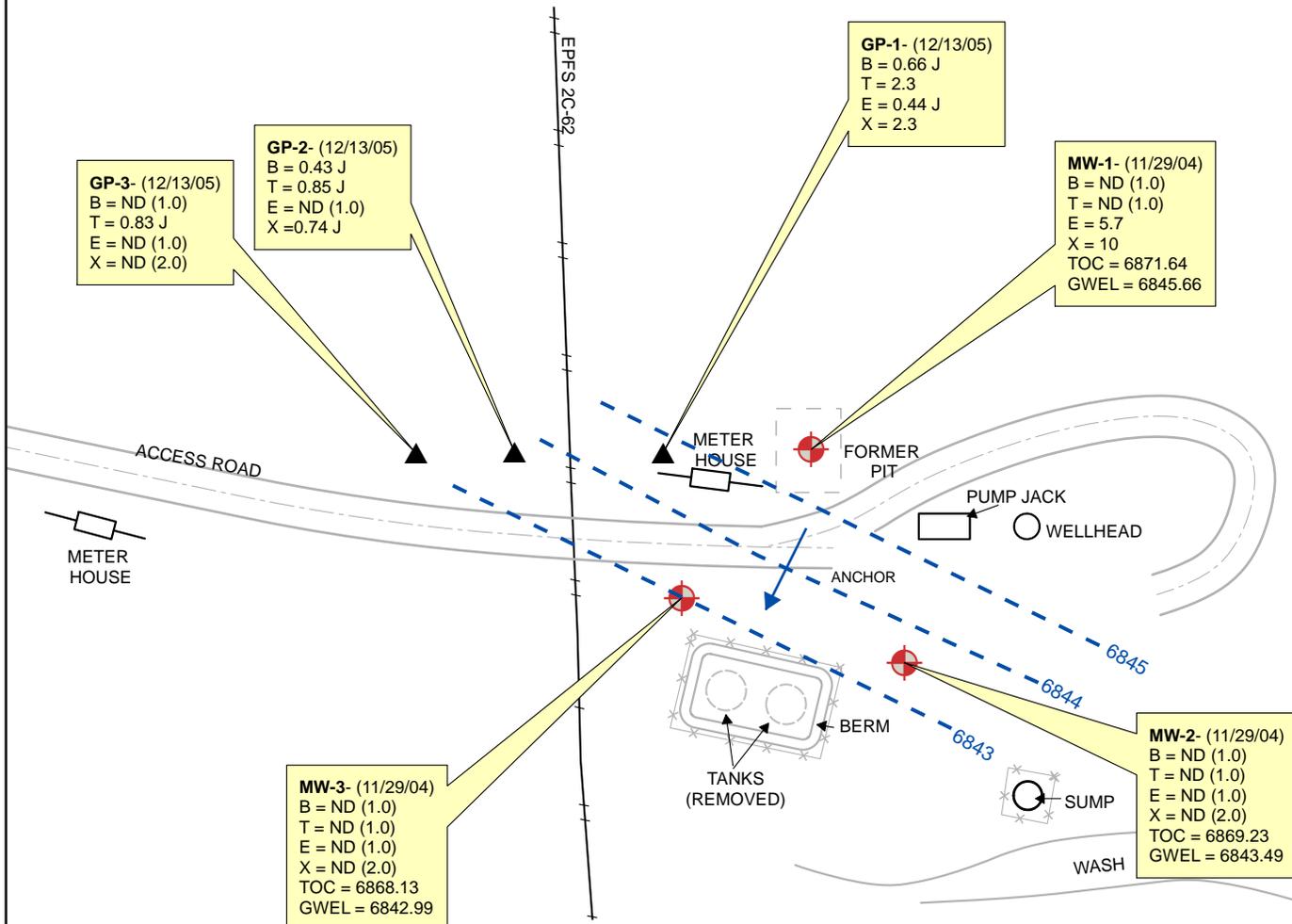
5.3.1
5



USCS Group	
	FILL
	SC
	SW-SM
	SM
	SW

- NOTES:**
- PID DATA SHOWN IN UNITS OF PPMV, OR PARTS PER MILLION BY VOLUME IN THE SOIL HEADSPACE VAPOR
 - GROUND SURFACE IS APPROXIMATE
 - FT AMSL – FEET ABOVE MEAN SEA LEVEL

TITLE	
CROSS-SECTION A-A'	
PROJECT	
LINDRITH B #24 EL PASO CORPORATION	
	FIGURE
C-1	



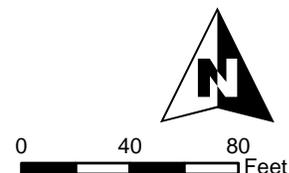
NMWQCC Groundwater Standards

- B** 10 (ug/L)
- T** 750 (ug/L)
- E** 750 (ug/L)
- X** 620 (ug/L)

LEGEND

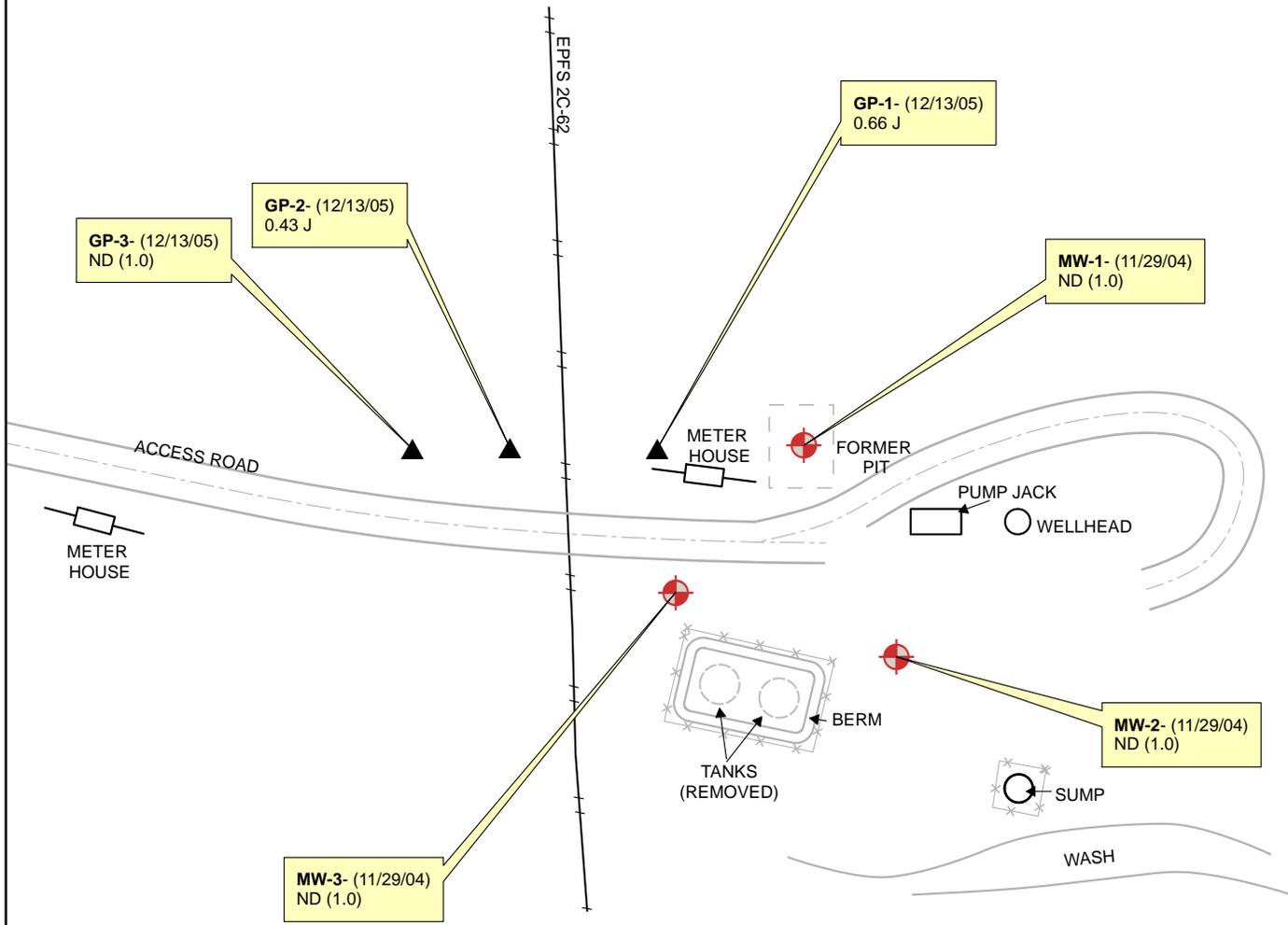
- MW-1** Existing Monitoring / Observation Well
- GP-1** Geoprobe Location
- Groundwater Flow Direction
- Potentiometric Surface Contour (Inferred Where Dashed)
- ND** Not Detected; Reporting Limit Shown In Parenthesis

- B** Benzene (ug/L)
- T** Toluene (ug/L)
- E** Ethylbenzene (ug/L)
- X** Total Xylenes (ug/L)
- TOC** Top of Casing (ft. AMSL)
- GWEL** Groundwater Elevation (ft. AMSL)
- J** Result Flagged as Estimated



PROJECT: LINDRITH B#24
 TITLE: Groundwater Potentiometric Surface Map, and BTEX Concentrations - 2004-2005

FIGURE: **C-2**



NMWQCC Groundwater Standard

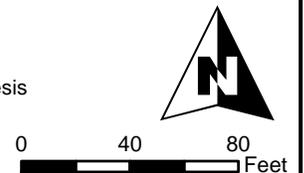
Benzene 10 (ug/L)

NOTE: Concentration isopleths not interpreted due to lack of detections.

LEGEND

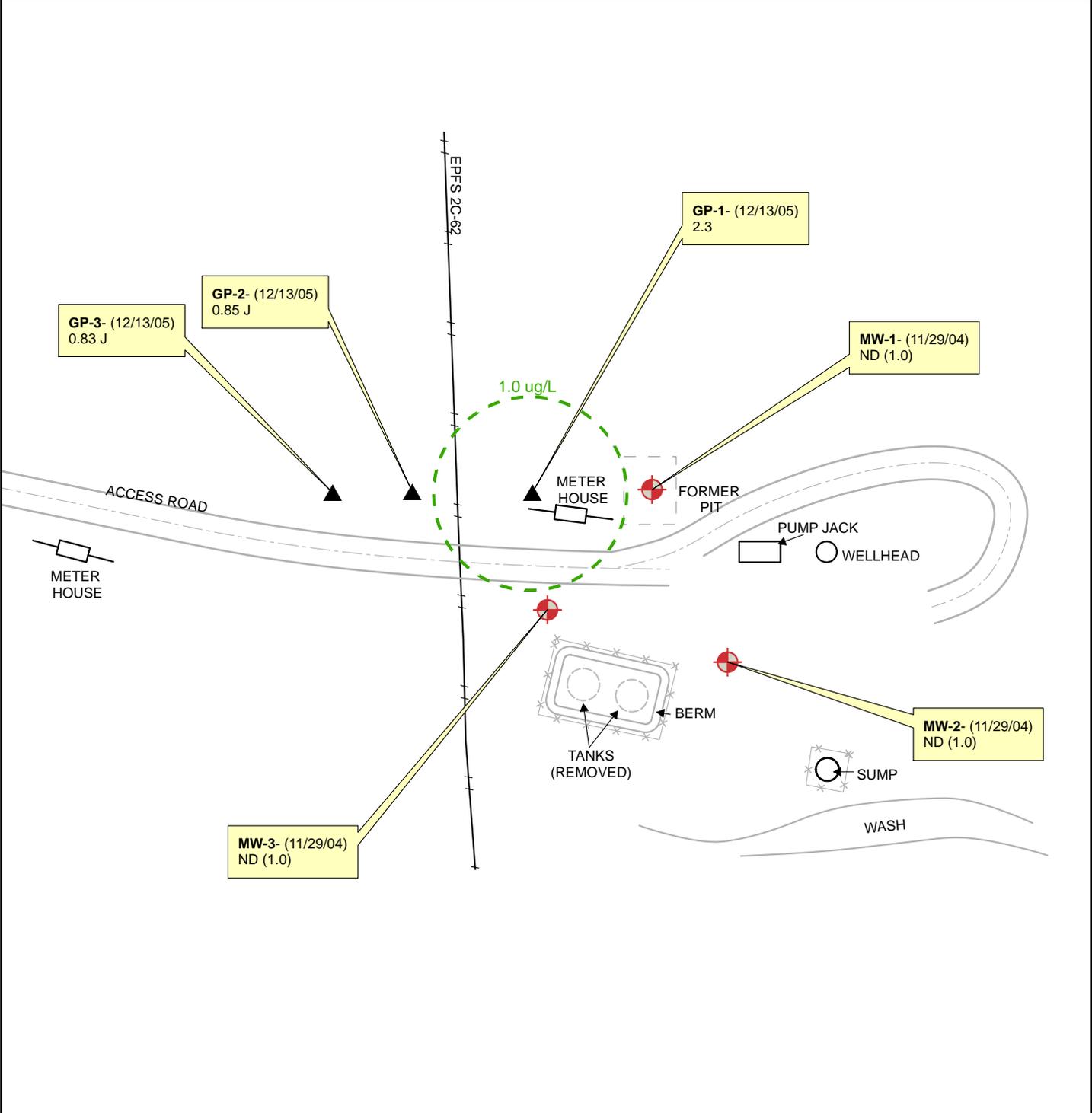
MW-1 Existing Monitoring / Observation Well
GP-1 Geoprobe Location

Benzene (ug/L)
ND Not Detected; Reporting Limit Shown In Parenthesis
J Result Flagged as Estimated



PROJECT: LINDRITH B#24
 TITLE: Groundwater Benzene Concentration Map 2004-2005

FIGURE:
C-3



NMWQCC Groundwater Standard

Toluene 750 (ug/L)

LEGEND

MW-1 Existing Monitoring / Observation Well

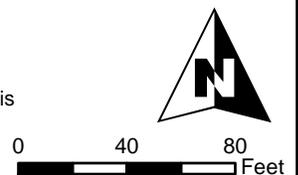
GP-1 Geoprobe Location

1.0 ug/L Concentration Isopleth (Inferred When Dashed)

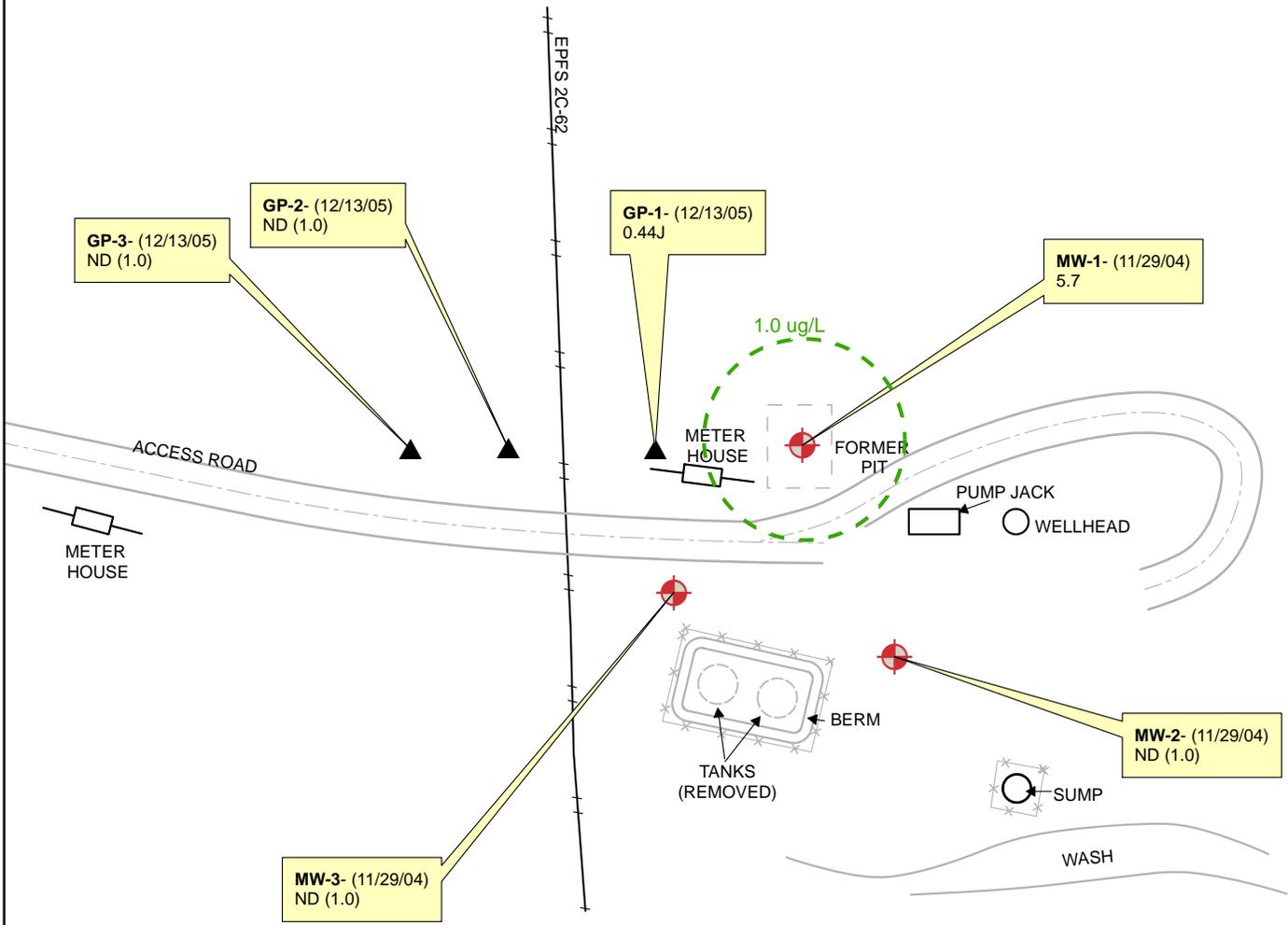
2.3 Toluene (ug/L)

ND Not Detected; Reporting Limit Shown In Parenthesis

J Result Flagged as Estimated



		PROJECT: LINDRITH B#24	FIGURE: C-4
		TITLE: Groundwater Toluene Concentration Isopleth Map 2004-2005	

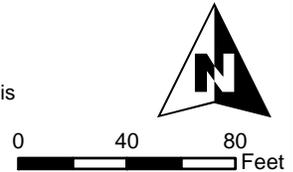


NMWQCC Groundwater Standard

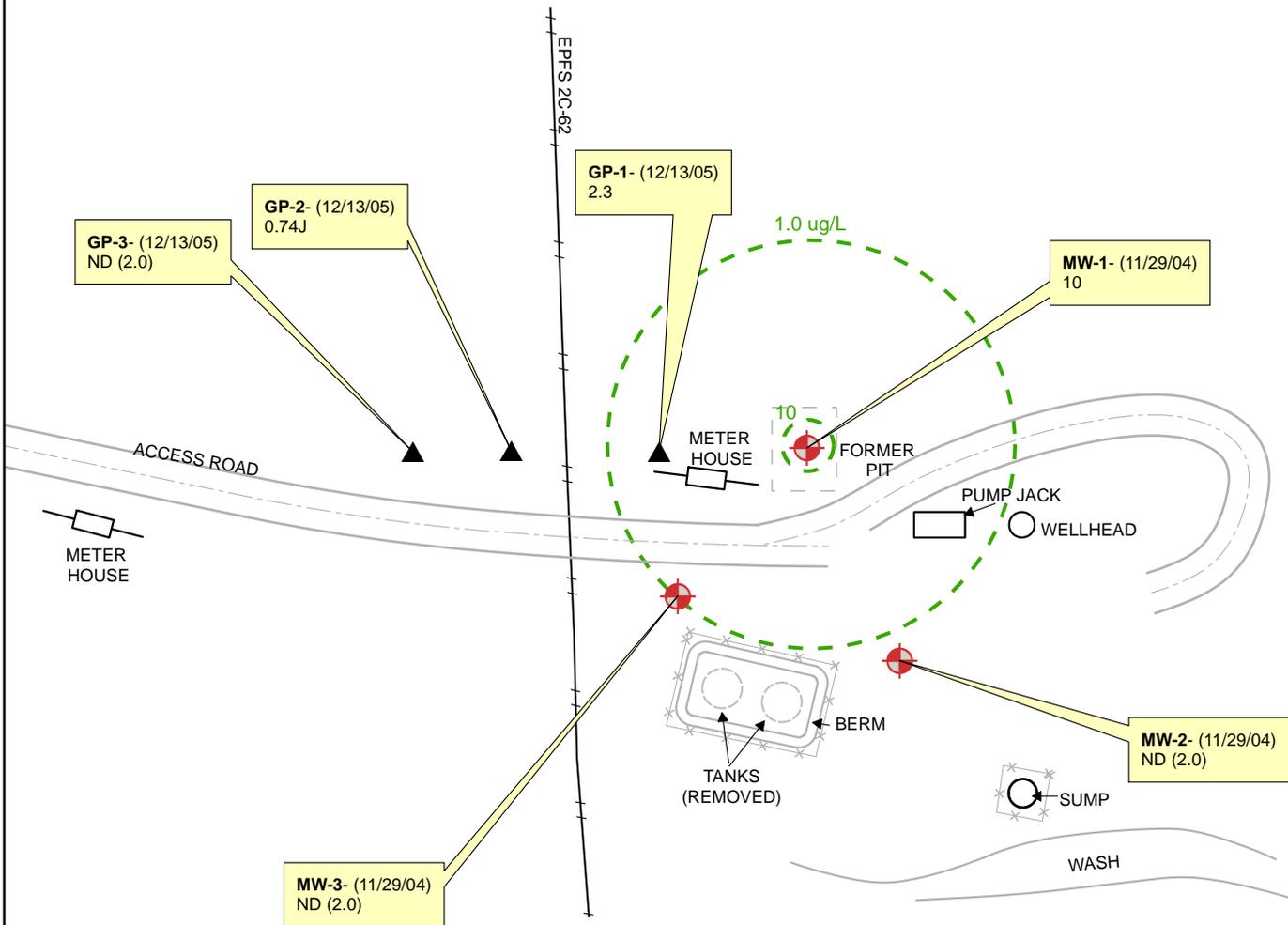
Ethylbenzene 750 (ug/L)

LEGEND

- MW-1 Existing Monitoring / Observation Well
- GP-1 Geoprobe Location
- 1.0 ug/L Concentration Isopleth (Inferred When Dashed)
- 5.7 Ethylbenzene (ug/L)
- ND Not Detected; Reporting Limit Shown In Parenthesis
- J Result Flagged as Estimated



		PROJECT: LINDRITH B#24	FIGURE:
		TITLE: Groundwater Ethylbenzene Concentration Isopleth Map 2004-2005	C-5

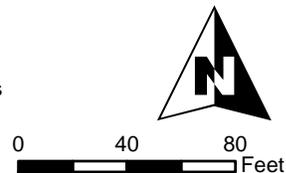


NMWQCC Groundwater Standard

Xylene 620 (ug/L)

LEGEND

- MW-1 Existing Monitoring / Observation Well
- GP-1 Geoprobe Location
- 1.0 ug/L Concentration Isopleth (Inferred When Dashed)
- 10 Xylene (ug/L)
- ND Not Detected; Reporting Limit Shown In Parenthesis
- J Result Flagged as Estimated

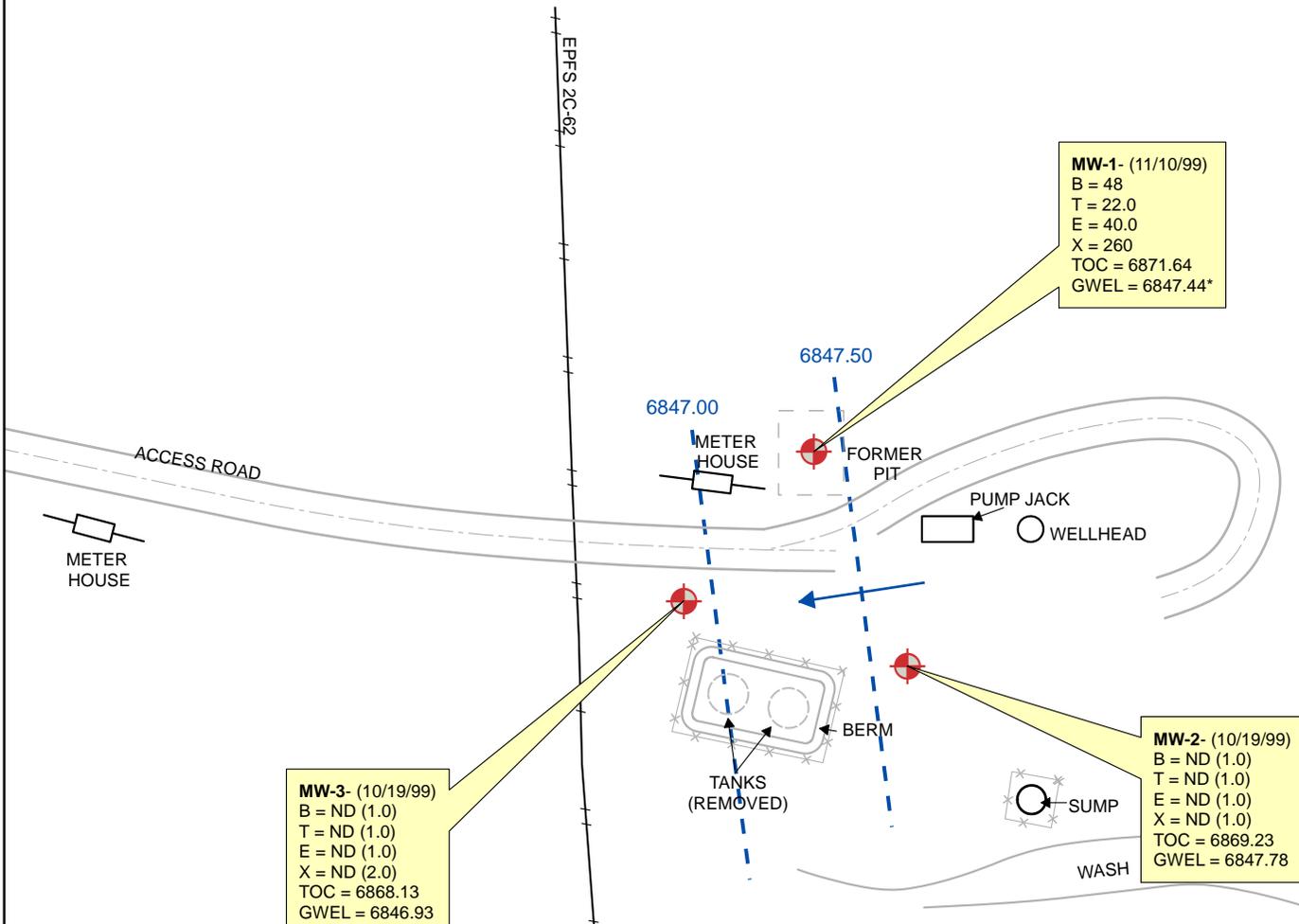


PROJECT: LINDRITH B#24

TITLE: Groundwater Xylene Concentration Isopleth Map 2004-2005

FIGURE:

C-6



NMWQCC Groundwater Standards

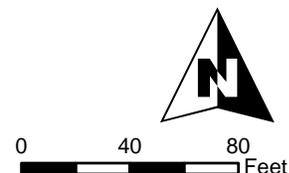
- B 10 (ug/L)
- T 750 (ug/L)
- E 750 (ug/L)
- X 620 (ug/L)

* Not gauged at same time as MW-2 and MW-3. Groundwater flow direction is approximate.

LEGEND

- MW-1 Existing Monitoring / Observation Well
- Groundwater Flow Direction
- 6847- - Potentiometric Surface Contour (Inferred Where Dashed)
- ND Not Detected; Reporting Limit Shown In Parenthesis

- B Benzene (ug/L)
- T Toluene (ug/L)
- E Ethylbenzene (ug/L)
- X Total Xylenes (ug/L)
- TOC Top of Casing (ft. AMSL)
- GWEL Groundwater Elevation (ft. AMSL)
- J Results Flagged as Estimated

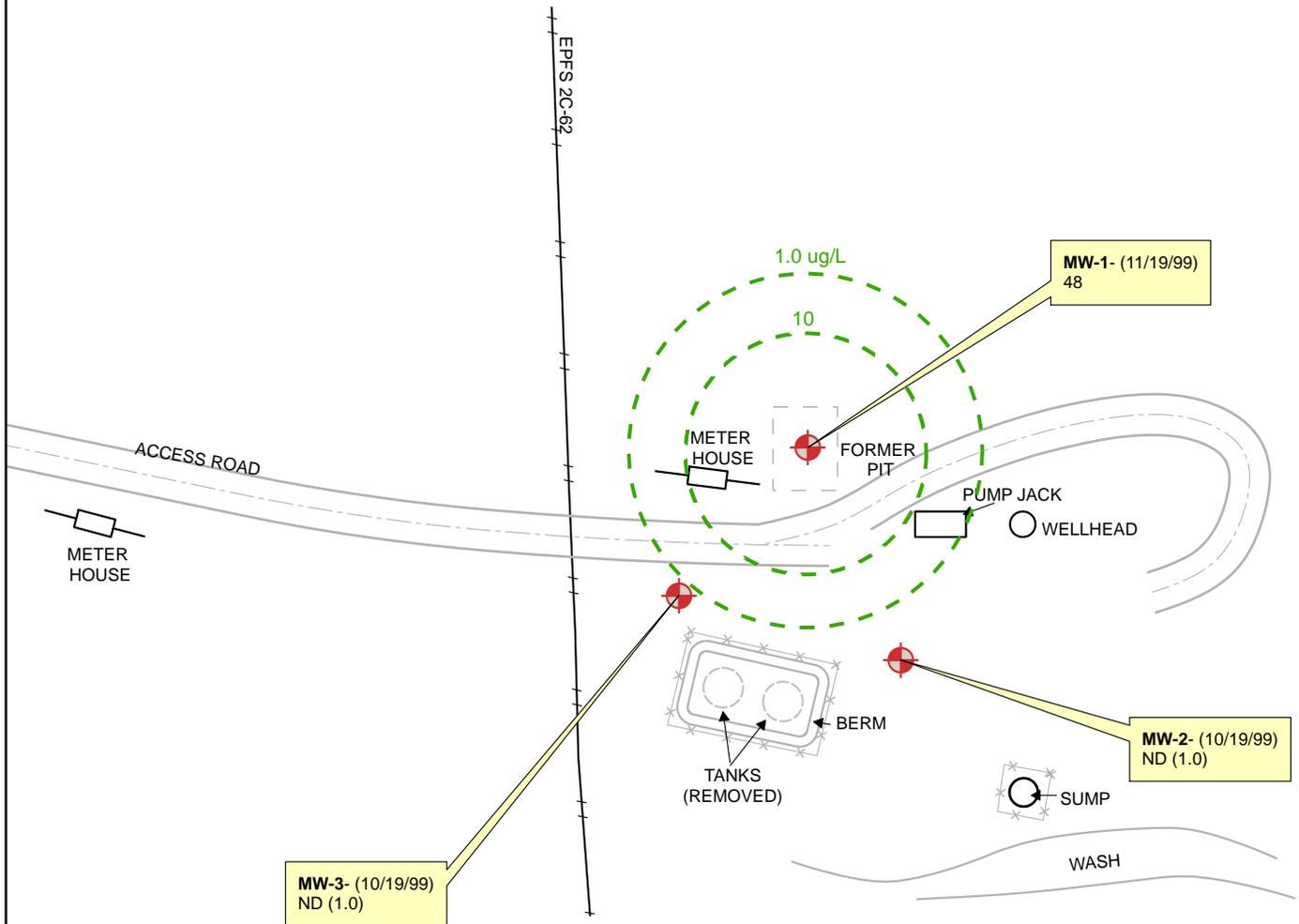


PROJECT: LINDRITH B#24

TITLE: Groundwater Potentiometric Surface Map, and BTEX Concentrations 1999

FIGURE:

C-7

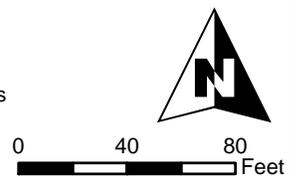


NMWQCC Groundwater Standard

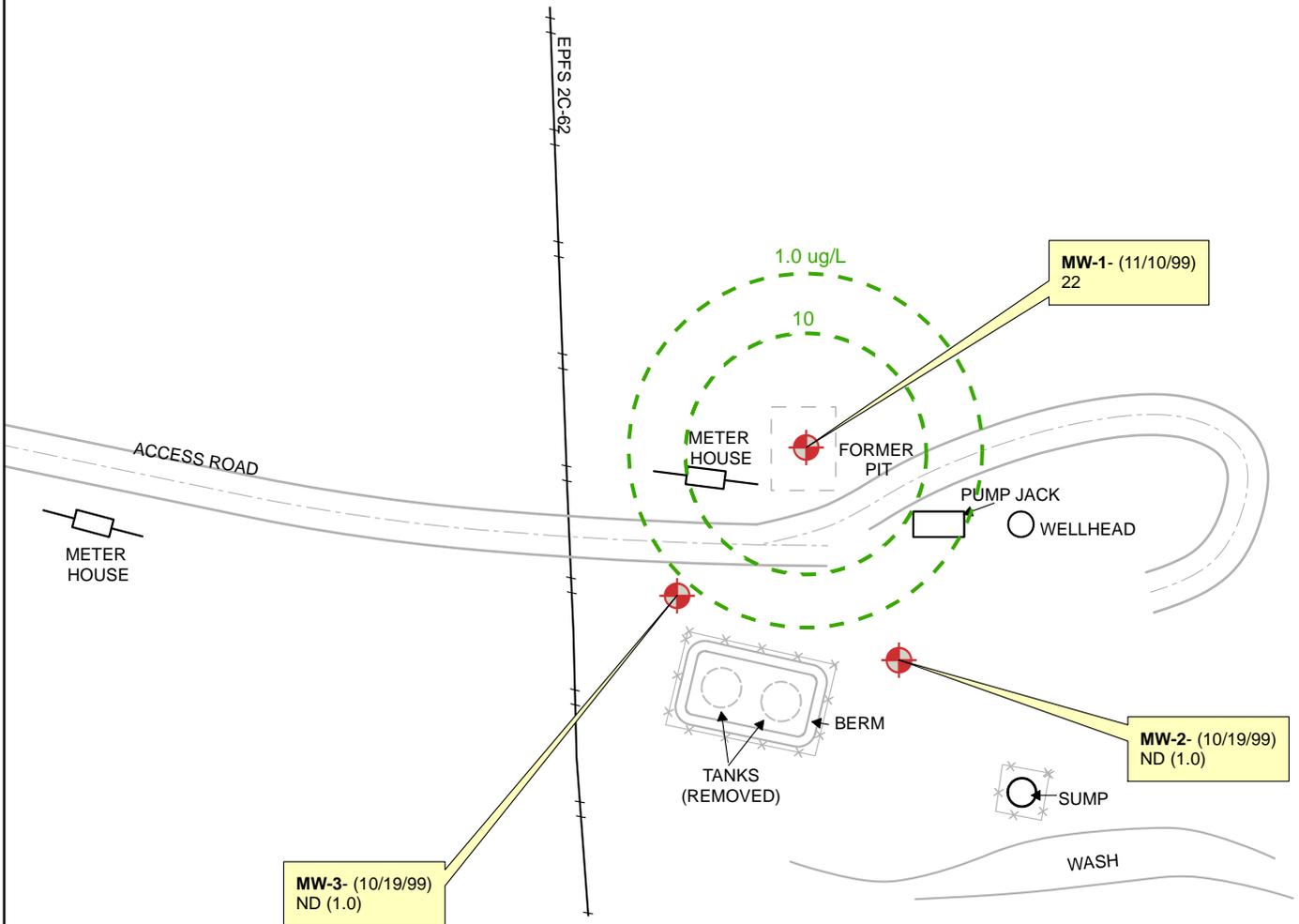
Benzene 10 (ug/L)

LEGEND

- MW-1 Existing Monitoring / Observation Well
- Benzene (ug/L)
- 1.0 ug/L Concentration Isopleth (Inferred When Dashed)
- ND Not Detected; Reporting Limit Shown In Parenthesis



		PROJECT: LINDRITH B#24	FIGURE: C-8
		TITLE: Groundwater Benzene Concentration Isopleth Map 1999	

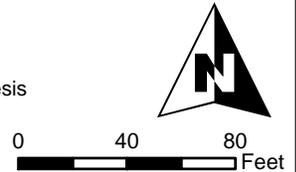


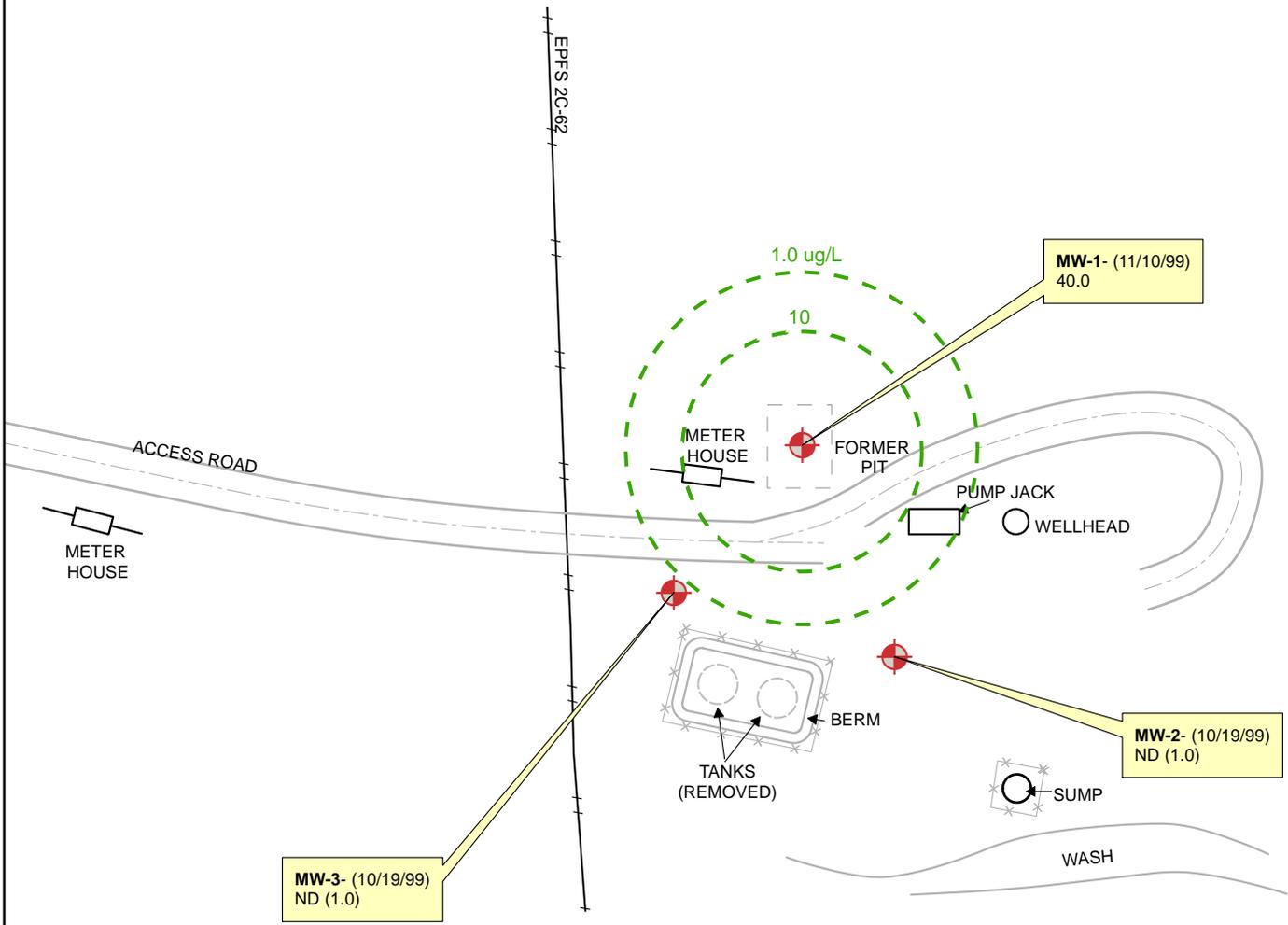
NMWQCC Groundwater Standard

Toluene 750 (ug/L)

LEGEND

- MW-1 Existing Monitoring / Observation Well
- Toluene (ug/L)
- 1.0 ug/L Concentration Isopleth (Inferred When Dashed)
- ND Not Detected; Reporting Limit Shown In Parenthesis





NMWQCC Groundwater Standard

Ethylbenzene 750 (ug/L)

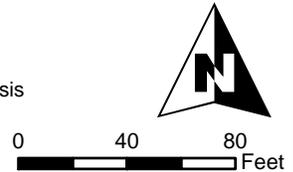
LEGEND

MW-1 Existing Monitoring / Observation Well

1.0 ug/L Concentration Isopleth (Inferred When Dashed)

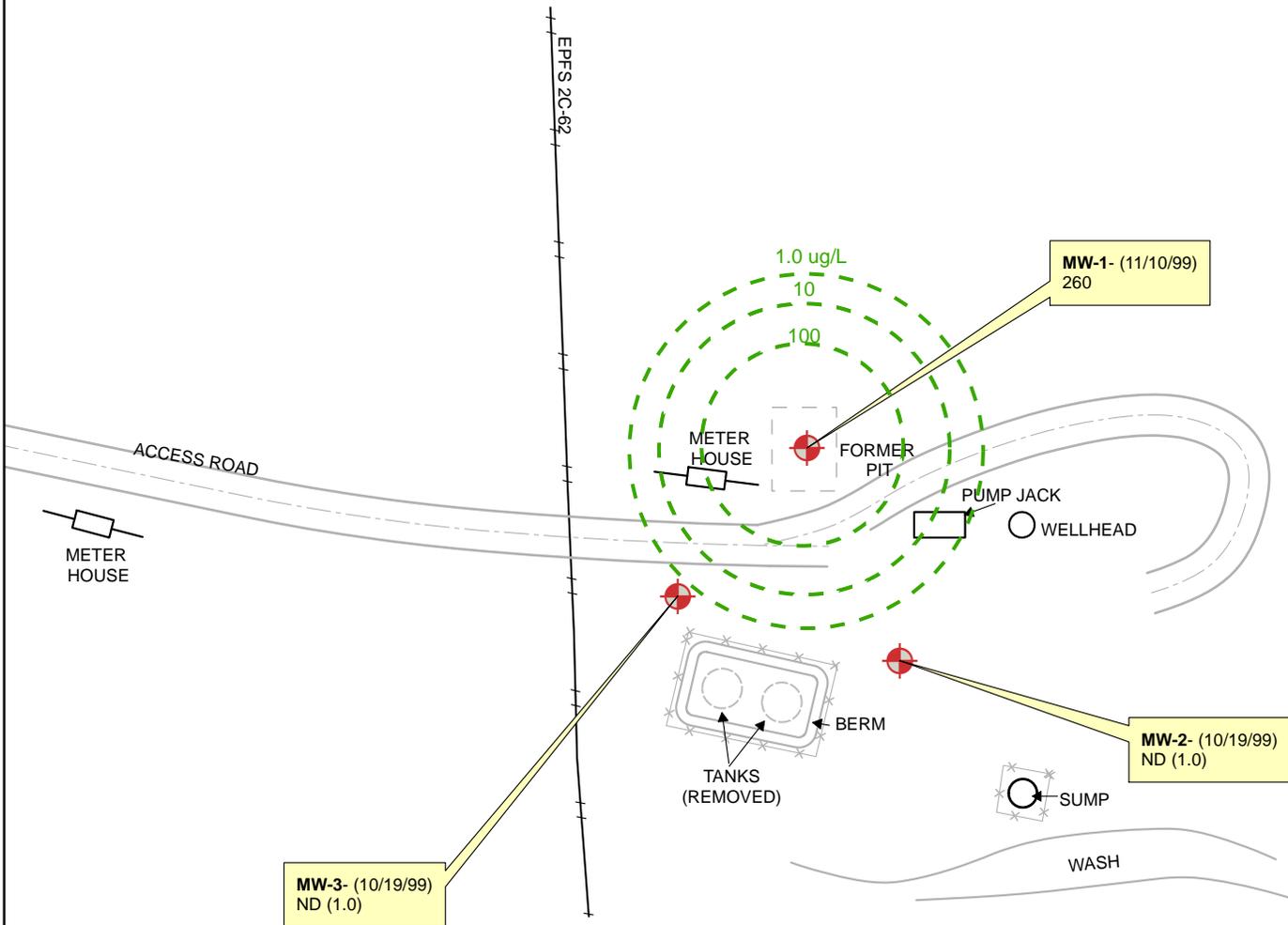
40 Ethylbenzene (ug/L)

ND Not Detected; Reporting Limit Shown In Parenthesis



PROJECT: LINDRITH B#24
 TITLE: Groundwater Ethylbenzene Concentration Isopleth Map 1999

FIGURE:
C-10



NMWQCC Groundwater Standard

Xylene 620 (ug/L)

LEGEND

MW-1 	Existing Monitoring / Observation Well	 260	Xylene(ug/L)
	Concentration Isopleth (Inferred When Dashed)	ND	Not Detected; Reporting Limit Shown In Parenthesis

0 40 80 Feet





Via UPS

July 11, 2008

Mr. Glenn von Gonten
Senior Hydrologist
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

**RE: Re-Submittal of Closure Request for Lindrith B #24 Site - January 24, 2006
NMOCD Case No. 3R0214**

Dear Mr. von Gonten:

El Paso Tennessee Pipeline Company (EPTPC), formerly El Paso Field Services, hereby re-submits the Closure Request for Lindrith B #24 Site (NMOCD Case No. 3R0214) dated January 24, 2006. The letter report documents the results of additional site characterization activities conducted in December 2005 at the request of the New Mexico Oil Conservation Division (OCD) and formally requests closure of the site based on the site data obtained and documented.

While reviewing the project file, EPTPC noticed that the OCD case number was not included in the January 24, 2006 correspondence and that the request for site closure was not clearly referenced in either the heading or subject lines. Therefore, EPTPC respectfully re-submits the Lindrith B #24 closure request for your review and consideration.

If you have any comments or questions concerning the attached correspondence, please contact me at (713) 420-5150.

Sincerely,

Doug Stavinoha
Project Manager for El Paso Tennessee Pipeline Co.

cc: Matt Rhoades – MWH, w / o enclosures
Pit Groundwater Remediation – General File, w / enclosures

El Paso Tennessee Pipeline Company
1001 Louisiana Street
Houston, Texas 77002



Project Name: GW PIT - LINDRITH B-24

File in:

Correspondence: _____
 (Agency) General, Inter-Office)
 Reports
 Analytical Data
 Other _____

Via Federal Express

January 24, 2006

Mr. Glenn von Gonten
 Senior Hydrologist
 New Mexico Oil Conservation Division
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

Geoprobe Groundwater Samples, Lindrith B #24 Groundwater Site

Dear Mr. von Gonten;

El Paso Tennessee Pipeline Company (EPTPC), formerly El Paso Field Services (EPFS), has prepared this letter in response to New Mexico Oil Conservation Division's (NMOCD) September 6, 2005 approval of the Scope of Work for Lindrith B #24 Groundwater Site (Scope of Work), submitted August 18, 2005. This letter has been developed following the field activities described in the Scope of Work, which were completed on December 13, 2005.

EPTPC originally requested closure of the Lindrith B#24 site on February 4, 2005. This request was denied by NMOCD in a letter dated May 20, 2005, based on two requirements that (1) EPTPC conduct a groundwater investigation to characterize the release form the Lindrith B#24 production pit and (2) that after it has defined the contaminate plume, it demonstrate that it is in compliance with the Water Quality Control Commission (WQCC) abatement standards for eight consecutive quarters. EPTPC responded in a letter on June 23, 2005, in which EPTPC provided additional rationale for the site characterization efforts at the site to date. EPTPC also provided a copy of the 1995 EPFS Workplan with this letter, for which NMOCD approved the use of four consecutive quarters for site closures.

EPTPC submitted the Scope of Work to NMOCD on August 18, 2005, which was approved in a letter from NMOCD dated September 6, 2005. NMOCD approved the Scope of Work and required that a report and recommendations be submitted "no later than 45 days after the geoprobe borings have been installed and sampled." This letter describes the results of the geoprobe groundwater sampling conducted on December 13, 2005 at the Lindrith B #24 site, and EPTPCs recommendation for final closure of this site based on the results contained herein.

Based on discussions with NMOCD, EPTPC proposed to implement a geoprobe investigation at the site to confirm the presence or absence of hydrocarbon contamination in the groundwater to the west of EPTPCs former pit. Based on historic groundwater flow maps, as well as the regional gradient of Largo wash, groundwater flow was expected to be to the southwest; however, there is some indication from original groundwater flow maps that flow may have been to the west as

recently as August 2001 (2001 Groundwater Sites Annual Report). Therefore, the investigation was limited to the area west of the former pit.

The number and locations of the geoprobe borings and associated groundwater samples are shown on the attached Figure 1. These locations are approximately 50-, 100- and 150-feet to the west of the footprint of the former EPTPC pit. The targeted distances from the pit were based on the estimated travel time of groundwater from the former pit since the last time that the groundwater gradient suggested flow in this direction (August 2001), as specified in the approved August 18, 2005 Scope of Work.

Fieldwork:

A geoprobe rig was used to drive borings through the unconsolidated sediments to the depth of first groundwater (estimated approximately 25 to 30 feet below ground). The number and locations of the proposed geoprobe borings and associated groundwater samples are shown on the attached Figure 1. These locations are approximately 50-, 100- and 150-feet to the west of the footprint of the former EPTPC pit. Temporary, PVC well points were placed at the water table for the collection of groundwater samples. Groundwater samples were collected using a peristaltic pump and collected in VOA vials for transport to the analytical laboratory. Samples were stored on ice and shipped to the laboratory within 48 hours of sample collection. All samples were analyzed for BTEX constituents using method EPA 8021B.

Analytical Results and Discussion:

Groundwater samples were collected from three geoprobe locations, listed on Figure 1. Laboratory results are attached, and shown in Table 1. BTEX concentrations at all three locations were well below NMOCD closure standards, with the majority of the detected constituents below the laboratory reporting limits. Historic data and these results are consistent with physical attenuation mechanisms or biodegradation of the hydrocarbons that have resulted in significant reductions of hydrocarbon concentrations inside and outside the source area.

Based on the results of prior activity at the site and this geoprobe investigation, EPTPC believes the extent of contamination at the former pit has been fully characterized and shown to be below NMOCD closure criteria. Therefore, EPTPC formally requests final closure of the Lindrith B #24 site. Please feel free to contact me at 719-520-4761 with any questions or concerns you may have.

Sincerely,



Todd J. Muelhoefer, P.G.
Project Manager
Environmental Remediation
El Paso Corporation

cc: Mr. Denny Foust, NMOCD Aztec District Office
Mr. Bruce Meyerson, Enterprise, Farmington
Mr. Doug Jordan, Enterprise, Houston
Dr. Ted Helfgott, Enterprise, Houston
Dr. Robert Sterrett, EMS
Chandler Cole, MWH
Todd Muelhoefer – General File
Lindrith B 24 file

TABLES

TABLE 1

**SUMMARY OF BTEX COMPOUNDS IN GEOPROBE GROUNDWATER SAMPLES
LINDRITH B #24 (METER #94967)**

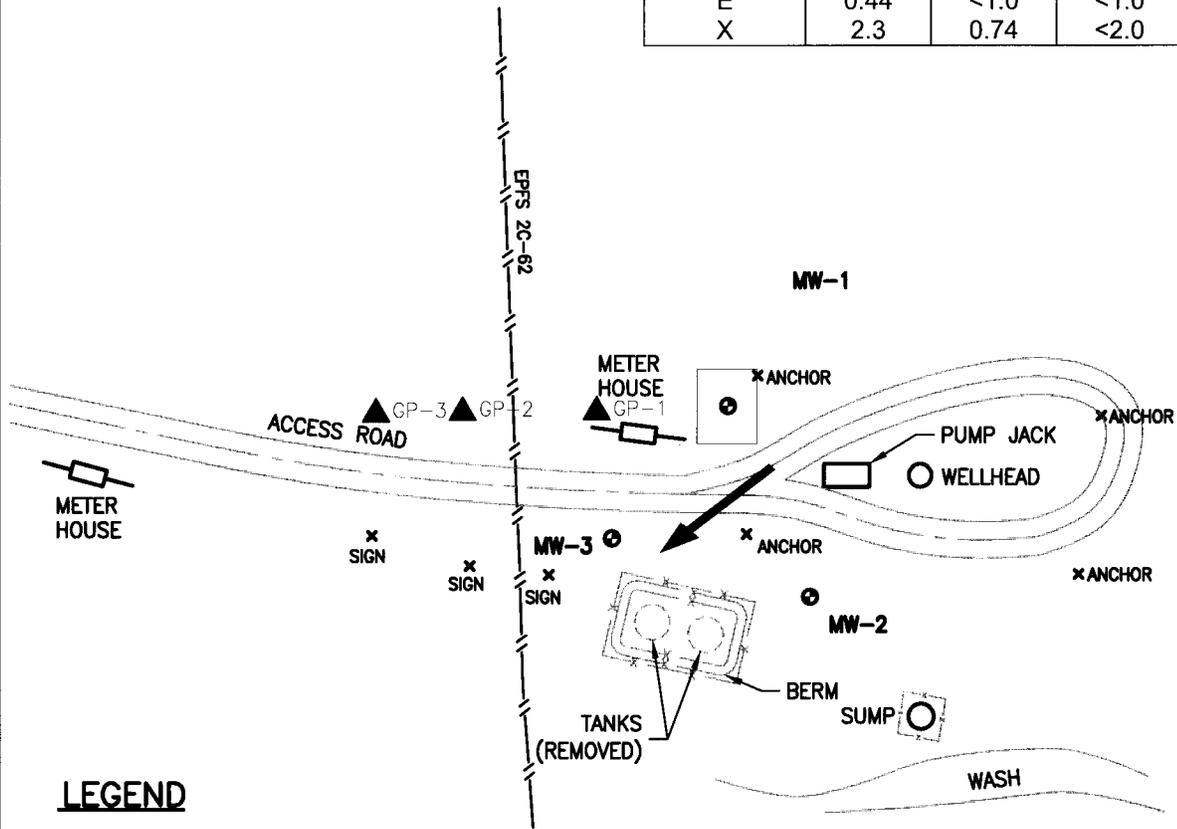
Well Name	Geoprobe Point	Sample Date	Chlorobenzene (ug/L)	Benzene (ug/L)	1,2-Dichlorobenzene (ug/L)	1,4-Dichlorobenzene (ug/L)
Lindrith B #24	GP-1	12/13/2005	0.66	2.3	0.44	2.3
Lindrith B #24	GP-2	12/13/2005	0.43	0.85	< 1.0	0.74
Lindrith B #24	GP-3	12/13/2005	< 1.0	0.83	< 1.0	< 2.0

ug/L: micrograms per liter

< indicates value was not detected, reporting limit shown.

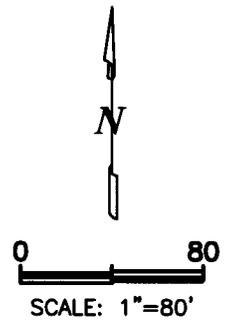
FIGURES

12/13/2005	GP-1	GP-2	GP-3
B	0.66	0.43	<1.0
T	2.3	0.85	0.83
E	0.44	<1.0	<1.0
X	2.3	0.74	<2.0



LEGEND

- MW-1 **Approximate Monitoring Well Location and Number**
- Centerline of Road**
- Fence Line**
- Pipe Line**
- B** **Benzene (µg/L)**
- T** **Toluene (µg/L)**
- E** **Ethylbenzene (µg/L)**
- X** **Total Xylenes (µg/L)**
- Direction of Groundwater Flow (Estimated from June 2004 Data)**
- GP-1 **Approximate Geoprobe Location and Number**



LINDRITH NO. 24, METER 94967
DECEMBER 2005

GROUNDWATER SITES
EL PASO TENNESSEE PIPELINE COMPANY

FIGURE 1

APPENDIX A



Gulf Coast

01/12/06

Technical Report for

Montgomery Watson

EPFS San Juan Basin Groundwater Site

D-ALAB-GROUNDREM-004

Accutest Job Number: T12069

Sampling Date: 12/13/05

Report to:

MWH Americas, Inc.

jennifer.a.hurley@mwhglobal.com

ATTN: Ms. Jennifer Hurley

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.


Ron Martino
Laboratory Manager

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

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Sample Summary

Montgomery Watson

Job No: T12069

EPFS San Juan Basin Groundwater Site
Project No: D-ALAB-GROUNDREM-004

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
T12069-1	12/13/05	08:46 MN	12/14/05	AQ	Ground Water	LINDRITH GP-1
T12069-2	12/13/05	09:13 MN	12/14/05	AQ	Ground Water	LINDRITH GP-2
T12069-3	12/13/05	09:30 MN	12/14/05	AQ	Ground Water	LINDRITH GP-3

Report of Analysis

Client Sample ID:	LINDRITH GP-1	Date Sampled:	12/13/05
Lab Sample ID:	T12069-1	Date Received:	12/14/05
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8021B		
Project:	EPFS San Juan Basin Groundwater Site		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK10279.D	1	12/19/05	JH	n/a	n/a	GKK712
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	0.66	1.0	0.38	ug/l	J
108-88-3	Toluene	2.3	1.0	0.36	ug/l	
100-41-4	Ethylbenzene	0.44	1.0	0.35	ug/l	J
1330-20-7	Xylenes (total)	2.3	2.0	0.72	ug/l	
95-47-6	o-Xylene	0.57	1.0	0.42	ug/l	J
	m,p-Xylene	1.7	2.0	0.72	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%		56-136%
98-08-8	aaa-Trifluorotoluene	104%		50-144%

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:	LINDRITH GP-2	Date Sampled:	12/13/05
Lab Sample ID:	T12069-2	Date Received:	12/14/05
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8021B		
Project:	EPFS San Juan Basin Groundwater Site		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK10280.D	1	12/19/05	JH	n/a	n/a	GKK712
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	0.43	1.0	0.38	ug/l	J
108-88-3	Toluene	0.85	1.0	0.36	ug/l	J
100-41-4	Ethylbenzene	ND	1.0	0.35	ug/l	
1330-20-7	Xylenes (total)	0.74	2.0	0.72	ug/l	J
95-47-6	o-Xylene	ND	1.0	0.42	ug/l	
	m,p-Xylene	ND	2.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	95%		56-136%
98-08-8	aaa-Trifluorotoluene	106%		50-144%

(a) Sample was not preserved to a pH < 2; 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:	LINDRITH GP-3	Date Sampled:	12/13/05
Lab Sample ID:	T12069-3	Date Received:	12/14/05
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8021B		
Project:	EPFS San Juan Basin Groundwater Site		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK10281.D	1	12/19/05	JH	n/a	n/a	GKK712
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	1.0	0.38	ug/l	
108-88-3	Toluene	0.83	1.0	0.36	ug/l	J
100-41-4	Ethylbenzene	ND	1.0	0.35	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	0.72	ug/l	
95-47-6	o-Xylene	ND	1.0	0.42	ug/l	
	m,p-Xylene	ND	2.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		56-136%
98-08-8	aaa-Trifluorotoluene	106%		50-144%

(a) Sample was not preserved to a pH < 2; 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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



ACCUTEST.

VARIANCE MEMO
SAMPLE LOG-IN

SAMPLE(S) _____ DATE 12/14/05
PROJECT Trip Blank
FILED BY Groundwater LAB NO. T12069

VARIANCE - Check applicable items(s):

- Insufficient sample sent for proper analysis; _____ received approx. _____
- Sample bottle received broken and/or cap not intact.
- Samples received without paperwork; paperwork received without samples.
- Samples received without proper refrigeration, when it has been deemed necessary. Temperature at receipt: 1.0
- Illegible sample number or label missing from bottle.
- Numbers on sample not the same as numbers on paper work.
- Incomplete instructions received with sample(s) i.e., no request for analysis, no chain of custody, incomplete billing instructions, no due date, etc. Temperature at receipt: _____
- Samples received in improper container or lacking proper preservation.
- Physical characteristics different than those on sampling sheets;

Describe: _____
Rush samples on hold because of incomplete paperwork.
Other (specify): TRIP BLANK WAS REC'D BROKEN.
Majority of the temp. blank was frozen.

CORRECTIVE ACTION TAKEN

- Scott Pope Person Contacted By phone.
- Client informed verbally.
- Client informed by memo/letter.
- Samples processed as is.
- Samples preserved by lab.
- Client will resample and resubmit.

Notes: Increased client of Broken Trip Blank Vials and
As's Rec @ 1.0

ROUTING

TITLE	DATE	INITIALS	CORRECTED?
Sample Manager:			
Login:	<u>12/14/05</u>	<u>AV</u>	
Project Manager:			

Comments:

Form: SMC06

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: T12069
 Account: MWHSLCUT Montgomery Watson
 Project: EPFS San Juan Basin Groundwater Site

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK712-MB	KK10277.D	1	12/19/05	JH	n/a	n/a	GKK712

4.1
4

The QC reported here applies to the following samples:

Method: SW846 8021B

T12069-1, T12069-2, T12069-3

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.38	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.35	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	0.72	ug/l	
95-47-6	o-Xylene	ND	1.0	0.42	ug/l	
	m,p-Xylene	ND	2.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	102%	56-136%
98-08-8	aaa-Trifluorotoluene	106%	50-144%

Blank Spike Summary

Job Number: T12069
 Account: MWHSLCUT Montgomery Watson
 Project: EPFS San Juan Basin Groundwater Site

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK712-BS	KK10278.D	1	12/19/05	JH	n/a	n/a	GKK712

4.2
4

The QC reported here applies to the following samples:

Method: SW846 8021B

T12069-1, T12069-2, T12069-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	17.9	90	72-125
100-41-4	Ethylbenzene	20	19.1	96	76-125
108-88-3	Toluene	20	18.7	94	74-125
1330-20-7	Xylenes (total)	60	57.6	96	78-124
95-47-6	o-Xylene	20	19.3	97	78-124
	m,p-Xylene	40	38.3	96	78-125

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	94%	56-136%
98-08-8	aaa-Trifluorotoluene	95%	50-144%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T12069
 Account: MWHSLCUT Montgomery Watson
 Project: EPFS San Juan Basin Groundwater Site

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T12121-1MS	KK10285.D	1	12/19/05	JH	n/a	n/a	GKK712
T12121-1MSD	KK10286.D	1	12/19/05	JH	n/a	n/a	GKK712
T12121-1	KK10284.D	1	12/19/05	JH	n/a	n/a	GKK712

4.3
4

The QC reported here applies to the following samples:

Method: SW846 8021B

T12069-1, T12069-2, T12069-3

CAS No.	Compound	T12121-1 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	160	20	180	100	180	100	0	45-137/21
100-41-4	Ethylbenzene	43.0	20	63.9	105	63.8	104	0	68-126/15
108-88-3	Toluene	49.6	20	69.7	101	69.7	101	0	63-130/22
1330-20-7	Xylenes (total)	267	60	331	107	332	108	0	72-125/19
95-47-6	o-Xylene	73.7	20	95.1	107	95.0	107	0	70-128/20
	m,p-Xylene	193	40	236	108	237	110	0	63-136/19

CAS No.	Surrogate Recoveries	MS	MSD	T12121-1	Limits
460-00-4	4-Bromofluorobenzene	96%	95%	99%	56-136%
98-08-8	aaa-Trifluorotoluene	98%	91%	101%	50-144%



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

September 6, 2005

Mr. Scott T. Pope
El Paso Corporation
2 North Nevada
Colorado Springs, CO 80903

**RE: SCOPE OF WORK FOR LINDRITH B #24 GROUNDWATER SITE
SAN JUAN COUNTY, NEW MEXICO
3R0214**

Dear Mr. Pope:

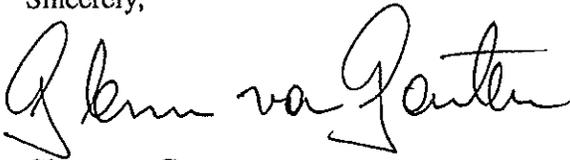
The New Mexico Oil Conservation Division (OCD) has reviewed El Paso Field Services' (EPFS) "*Scope Of Work For Lindrith B #24 Groundwater Site*" submitted on August 18, 2005. EPFS has proposed a geoprobe investigation of its Lindrith B #24 site in which it will advance 3 geoprobe borings to first ground water at locations west of its former pit. EPFS's work plan is approved with the following conditions:

1. EPNG must conduct all sampling and analysis activities using EPA approved methods and procedures including appropriate quality assurance/quality control (QA/QC).
2. EPNG must dispose of all wastes generated at an OCD approved facility or in an OCD approved manner.
3. EPNG's report and recommendations must be submitted to the OCD Santa Fe Office with a copy provided to the OCD Aztec Office no later than 45 days after the geoprobe borings have been installed and sampled.
4. If EPNG's ground water investigation detects contamination at concentrations that exceed the Water Quality Control Commission (WQCC) abatement standards specified at 20.6.2.3103 NMAC, then it must submit both a Stage 1 and Stage 2 Abatement Plan proposal within sixty (60) days of notifying OCD that it has discovered additional contamination, in accordance with Subsection E of 19.15.1.19 NMAC.

Please be advised that OCD's approval does not relieve EPNG of liability if contamination exists which is beyond the scope of the work plan, if the activities fail to adequately determine the extent of contamination; or if the activities fail to adequately remediate contamination related to EPNG's activities. In addition, OCD approval does not relieve EPNG of responsibility for compliance with any other federal, state, tribal or local laws and regulations.

If you have any questions, please call me at (505) 476-3488.

Sincerely,

A handwritten signature in cursive script that reads "Glenn von Gonten". The signature is written in black ink and is positioned above the typed name.

Glenn von Gonten
Senior Hydrologist
Environmental Bureau

xc: Denny Foust, OCD Aztec District Office
Mr. Bill Liess, Bureau of Land Management
Mr. Mike Matush, New Mexico State Land Office
Mr. Bill Freeman, Navajo Nation EPA
Mr. Kurt Sandoval, Jicarilla Apache Tribe Environmental Protection Office



Via UPS

August 18, 2005

Mr. Glenn von Gonten
Senior Hydrologist
New Mexico Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

RE: Scope of Work for Lindrith B #24 Groundwater Site

Dear Mr. von Gonten;

El Paso Field Services (EPFS) has prepared this Scope of Work and Workplan for additional investigation at the Lindrith B#24 groundwater site near Farmington, New Mexico. This Workplan has been prepared in response to a letter from New Mexico Oil Conservation Division (NMOCD) to EPFS, dated July 18, 2005, in which NMOCD denied closure of the Lindrith B#24 site pending additional characterization of potential groundwater hydrocarbon contamination. This Scope of Work has been developed following the discussions held between EPFS and NMOCD at a meeting on August 3, 2005, and based on additional technical assessment of site data with regard to the potential for a hydrocarbon plume.

EPFS originally requested closure of the Lindrith B#24 site on February 4, 2005. This request was denied by NMOCD in a letter dated May 20, 2005, based on two requirements that (1) EPFS conduct a groundwater investigation to characterize the release from the Lindrith B#24 discharge pit and (2) that after it has defined the contaminant plume, it demonstrate that it is in compliance with the Water Quality Control Commission (WQCC) abatement standards for eight consecutive quarters. EPFS responded in a letter on June 23, 2005, in which EPFS provided additional rationale for the site characterization efforts at the site to date. EPFS also provided a copy of the 1995 EPFS Workplan with this letter, for which NMOCD approved the use of four consecutive quarters for site closures.

In the most recent letter from NMOCD, dated July 18, 2005, NMOCD rescinded its June 23, 2005 requirement of eight quarters, recognizing the approved, subsequent agreement of allowing four, consecutive quarters for closure. However, NMOCD reaffirmed the denial of EPFS's closure request "...and require[d] the EPFS implement a ground water investigation to determine the extent of the contamination." In a subsequent meeting between EPFS and NMOCD, held in the Santa Fe, New Mexico NMOCD offices on August 3, 2005, it was discussed that EPFS would investigate potential hydrocarbon contamination to the west of the former pit. This letter has been prepared to provide the scope of work and work details to fulfill NMOCD's requirement.

Scope of Work:

NMOCD's letter of July 18, 2005, requires that "EPFS must submit a ground water investigation plan to install a sufficient number of additional monitoring wells to delineate the downgradient extent of the ground water contamination from the Lindrith B#24 pit site... The purpose of the ground water investigation is for EPFS to demonstrate that it has adequately delineated and remediated the hydrocarbon contamination.... EPFS may wish to propose a investigative approach that relies on temporary well points and screening criteria."

Based on discussions with NMOCD, EPFS proposes to implement a geoprobe investigation at the site to confirm the presence or absence of hydrocarbon contamination in the groundwater to the west of EPFS' former pit. Based on historic groundwater flow maps, as well as the regional gradient of Largo wash, groundwater flow is expected to be to the southwest; however, there is some indication from original groundwater flow maps that flow may have been to the west as recently as August 2001 (2001 Groundwater Sites Annual Report). EPFS maintains that adequate characterization has been completed within the footprint, and to the southwest, of the former pit. Therefore, the investigation will be limited to the area west of the former pit.

The number and locations of the proposed geoprobe borings and associated groundwater samples are shown on the attached Figure 1. These locations are approximately 50-, 100- and 150-feet to the west of the footprint of the former EPFS pit. The targeted distances from the pit are based on the estimated travel time of groundwater from the former pit since the last time that the groundwater gradient suggested flow in this direction (August 2001). Based on a conservative estimate of saturated hydraulic conductivity of 1×10^{-3} cm/sec for a poorly sorted, fine- to medium-grained sand (MW-1 boring; and Freeze and Cherry, 1979); an estimated porosity of 0.25 (Freeze and Cherry, 1979); and an estimated hydraulic gradient of 0.0065 ft/ft, which is the approximate gradient of Largo wash in the vicinity of the site (measured from the 7.5 minute USGS topographic digital data), the most likely estimate of groundwater flow velocity is approximately 27 feet per year. Based on this estimate, the calculated distance that groundwater would have traveled over four years is approximately 108 feet (Table 1). Therefore, the proposed borings have been placed between 50- and 150-feet to investigate this area.

It should further be noted that these estimates of groundwater travel time do not take into consideration any physical attenuation mechanisms or biodegradation of the hydrocarbons which typically result in significant reductions of hydrocarbon concentrations from the source area. Natural attenuation is applicable to both the dissolved phase in groundwater as well as free product. The reduction in concentration for dissolved constituents in groundwater is due primarily to a number of fate and transport processes including dilution, dispersion, sorption, volatilization, and biotic and abiotic transformations (Wiedemeier, T.H., Rifai, H. S., Newell, C. J., and Wilson, J. T., 1999, *Natural Attenuation of Fuels and Chlorinated Solvents in the Subsurface*, John Wiley & Sons, Inc. New York, NY, 617p.).

Evidence of natural attenuation at the site is demonstrated by site data collected between 2001 and 2004. During this period, the highest benzene concentration at MW-1 was measured in November 2001 at 280 µg/L, and free-product was detected in the well in August 2001 and August 2003. The estimated groundwater flow direction, based on data collected from August 2001 through 2004 was consistently to the southwest, from MW-1 towards MW-3. Based on the estimated flow velocity of 27 feet per year, groundwater from MW-1 would arguably have passed MW-3 during this period (the distance between MW-1 and MW-3 is approximately 80 feet). However, neither free-product nor benzene concentrations above the detection limit have been

detected in MW-3, indicating that natural attenuation mechanisms are affecting the hydrocarbon plume and limiting the nature and physical extent of these constituents.

The limited extent of hydrocarbons dissolved in groundwater is not unique to the subject site. The California Leaking Underground Fuel Tank (LUFT) Historical Case Analysis reported that plume lengths at 271 fuel hydrocarbon sites in California "change slowly and stabilize at relatively short distances from the release site" (usually less than 250 feet). Of these 271 plumes, 59 percent were stable, 33 percent were shrinking, and only 8 percent were growing (Rice, D.W., Dooher, B.P., Cullen, S.J., Everett, L.G., Kastenber, W.E., Grose, R.D., and Marino, M.A., 1995, *Recommendations to Improve the Cleanup Process for California's Leaking Underground Fuel Tanks (LUFTs)*, report submitted to the California State Water Resources Control Board and the Senate Bill 1764 Leaking Underground Fuel Tank Advisory Committee, California Environmental Protection Department, Sacramento, CA, 20 pp.). It should be noted that the majority of sites studied by Rice et al. were associated with gasoline stations where benzene, toluene, ethylbenzene and total xylenes (BTEX) concentrations are expected to be elevated. Significantly elevated BTEX concentrations are not encountered at the subject site, and as such, the extent of BTEX constituents would be expected to be limited.

Mace et al. (1997) studied 217 fuel release sites in Texas as part of a Texas Bureau of Economic Geology investigation (Mace, R.E., Fisher, R.S., Welch, D.M., and Parra, S.P., 1997, *Extent, Mass, and Duration of Hydrocarbon Plumes from Leaking Petroleum Storage Tank Sites in Texas*, Bureau of Economic Geology Geological Circular 97-1, 52pp.). Mace et al. found that most benzene plumes (75 percent) are less than 250 feet long and have either stabilized or are decreasing in length and concentration.

As demonstrated by these technical reports, and based on the experience of EPFS with typical pit sites, these hydrocarbon plumes associated with the remediated pits typically do not extend far from the source areas. EPFS therefore maintains that the proposed area of investigation, to the west of the former pit, is appropriately located.

Workplan:

As discussed above, the fact that BTEX constituents have not been detected at well MW-3 strongly suggests that hydrocarbons are being naturally attenuated, and limited in concentration and extent near the former source; therefore, it follows that hydrocarbon contamination is unlikely to have migrated to the west of the pit. As such, EPFS feels that additional investigation of this site is not necessary; however, in the spirit of cooperation and in order to achieve a speedy closure of this site, EPFS will undertake an investigation of the area west of the pit at this site. The following is a brief description of the proposed field and laboratory investigations.

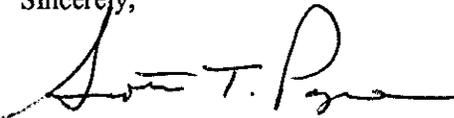
A geoprobe rig will be used to drive borings through the unconsolidated sediments to the depth of first groundwater (estimated approximately 25 to 30 feet below ground). The number and locations of the proposed geoprobe borings and associated groundwater samples are shown on the attached Figure 1. These locations are approximately 50-, 100- and 150-feet to the west of the footprint of the former EPFS pit. Temporary, PVC well points will be placed at the water table for the collection of groundwater samples. Groundwater samples will be collected using a mini-bailer or peristaltic pump and collected in VOA vials for transport to the analytical laboratory. Samples will be stored on ice and shipped to the laboratory within 48 hours of sample collection. All samples will be analyzed for BTEX constituents using method EPA M8021B.

Page 4 of 6
August 18, 2005
Mr. Glen von Gonten, NMOCD

EPFS maintains that the Scope of Work presented in this letter is adequate for determining whether hydrocarbon contamination has migrated to the west of the former pit, and whether EPFS has adequately delineated and remediated the hydrocarbon contamination at this site. If the groundwater samples collected from these borings indicate BTEX concentrations below the WQCC standards, EPFS will, at that time, re-submit the Lindrith B#24 site for closure.

This investigation is tentatively scheduled for October 2005, pending access agreements with landowners and other scheduling considerations. NMOCD will be notified one week prior to initiation of the field work. If you have any questions concerning this Scope of Work and/or Workplan, or require additional information please call me at (719) 520-4433.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott T. Pope". The signature is fluid and cursive, with a large initial "S" and "P".

Scott T. Pope, P.G.
Project Manager

cc: Mr. Denny Foust, NMOCD Aztec District Office

Table 1
Groundwater Travel Time Estimate
Lindrith B#24 Groundwater Site
El Paso Field Services - Groundwater Sites Project 2005

<u>Sat. Hydraulic Conductivity</u>		<u>Gradient</u>	<u>Porosity</u>	<u>Darcy velocity</u>		<u>Plume Distance</u>
K	K	i	n	q	q	*Assumes no attenuation
cm/sec	ft/day	ft/ft		ft/day	ft/yr	ft (4 years)
0.0001	0.283	0.0065	0.25	0.0074	2.7	11
0.001	2.83	0.0065	0.25	0.074	27	108
0.01	28.3	0.0065	0.25	0.74	269	1076

Range of hydraulic conductivity estimates (1×10^{-2} to 1×10^{-4} cm/sec) based on a poorly sorted sand (Freeze and Cherry, 1979).

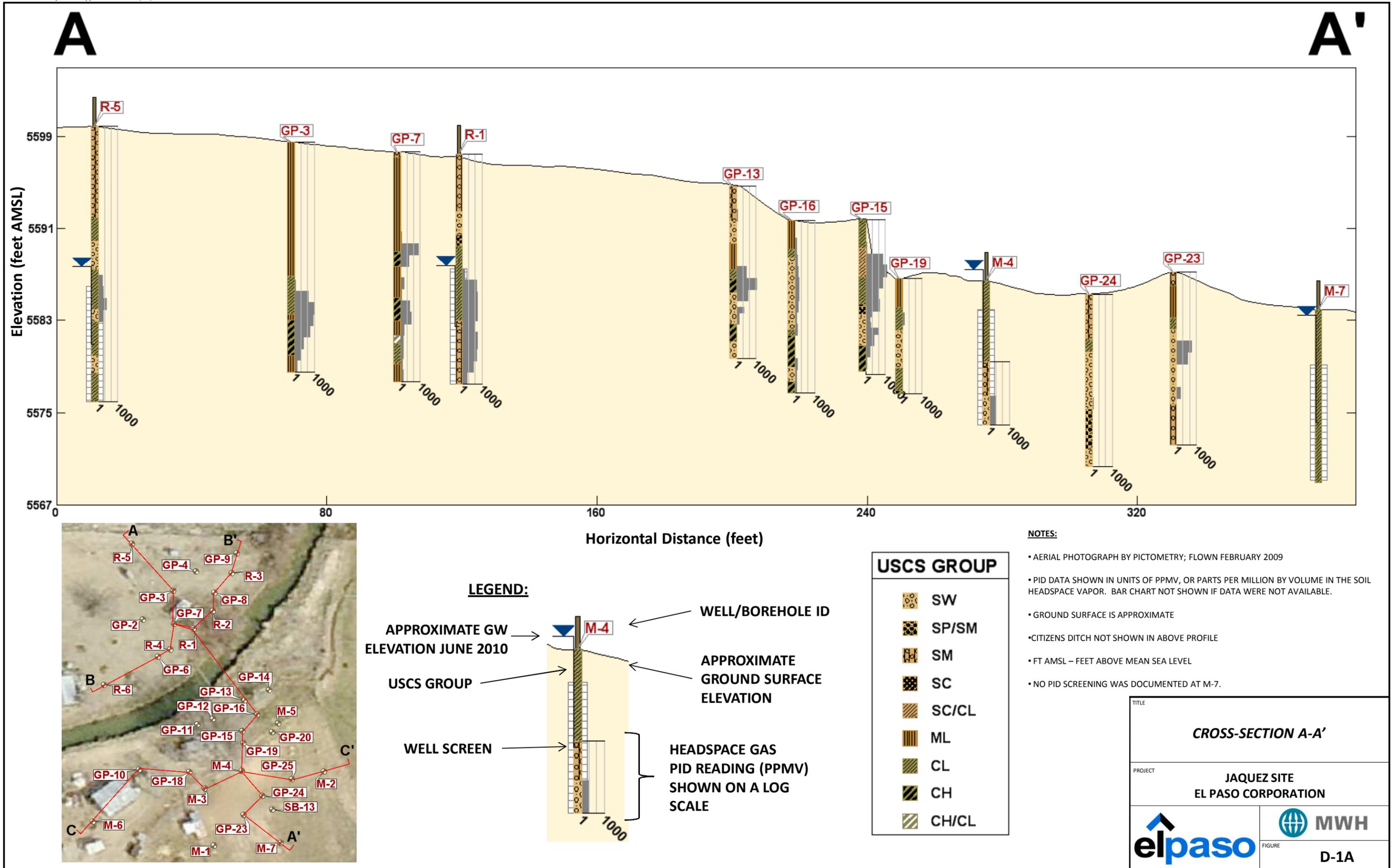
Hydraulic gradient calculated from USGS 7.5' topographic map.

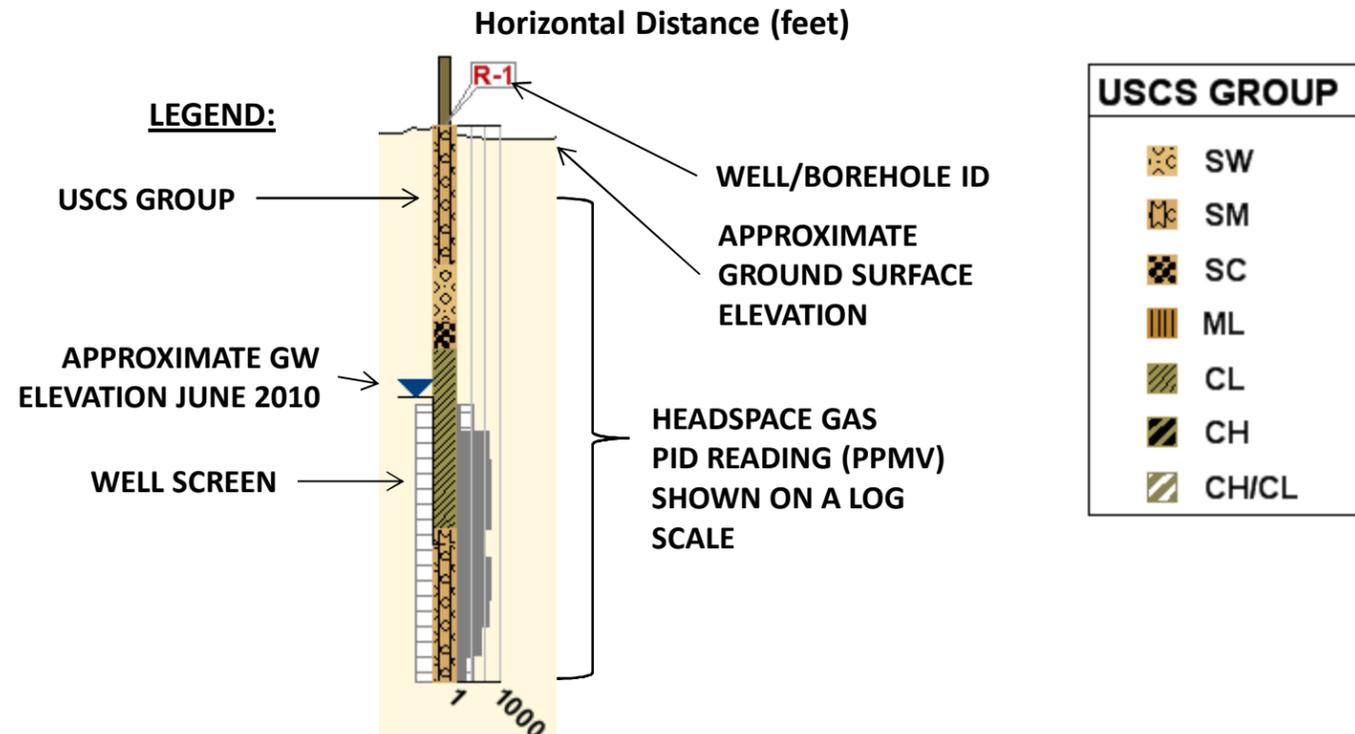
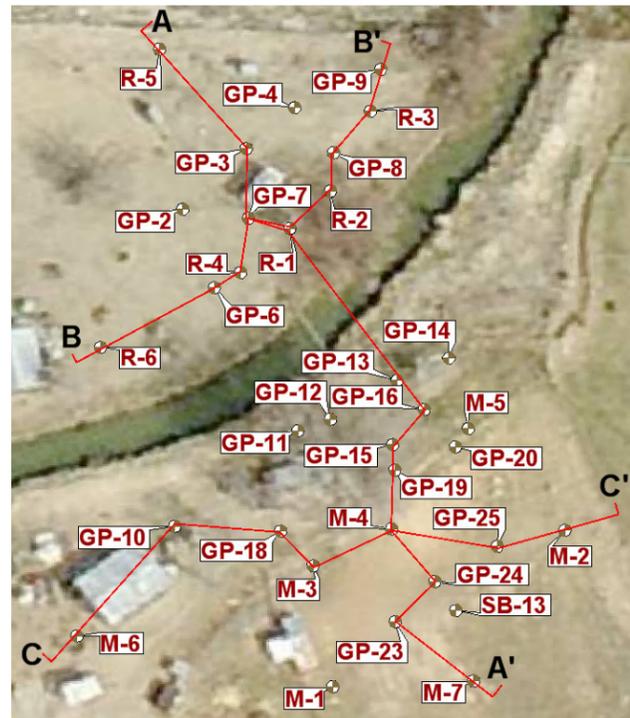
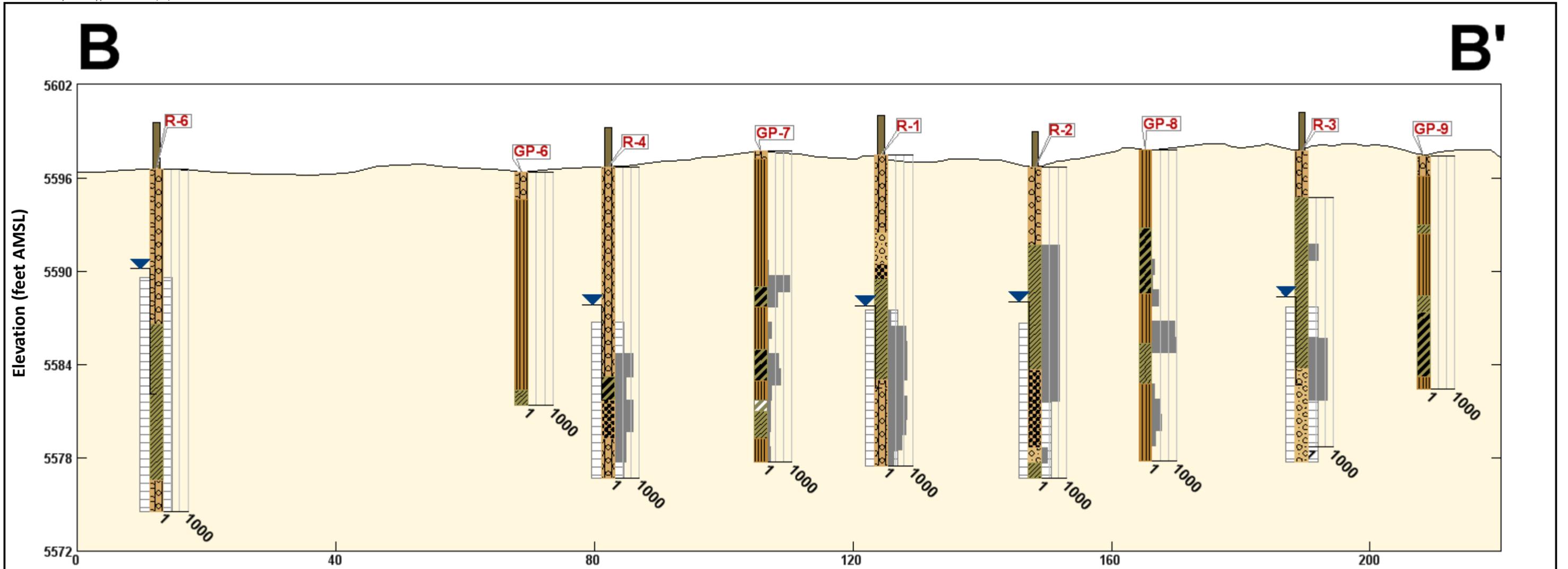
Estimated gradient of Largo Wash in the vicinity of the site (60 ft / 9240 ft).

Plume distance does not take into consideration physical attenuation mechanisms or biodegradation of hydrocarbons.

The most recent event that groundwater flow was estimated to be toward the west was in August 2001 (4 years ago).

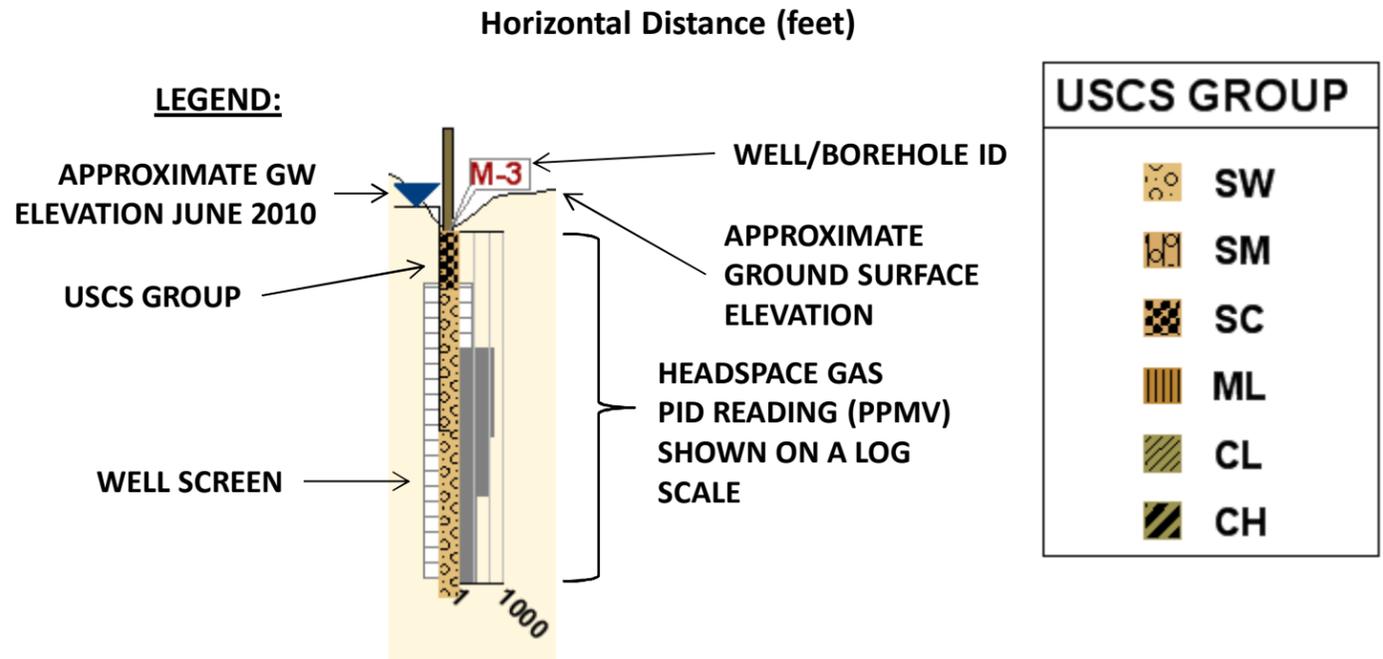
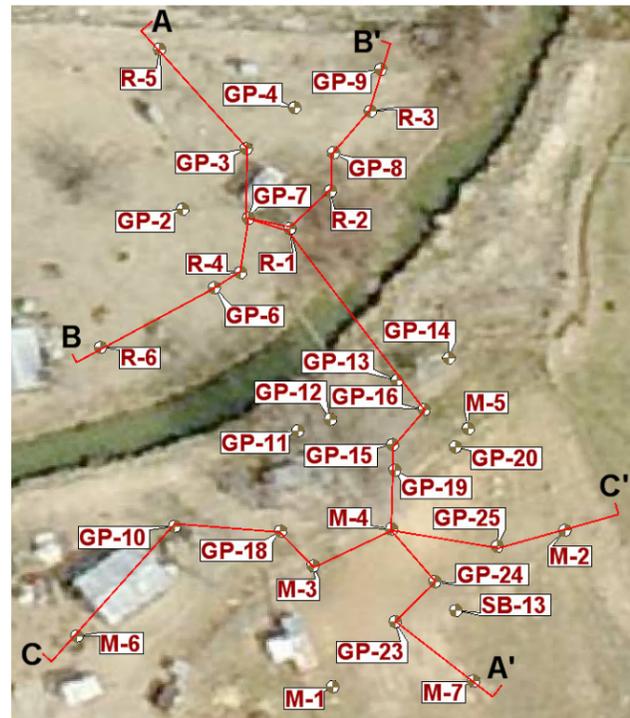
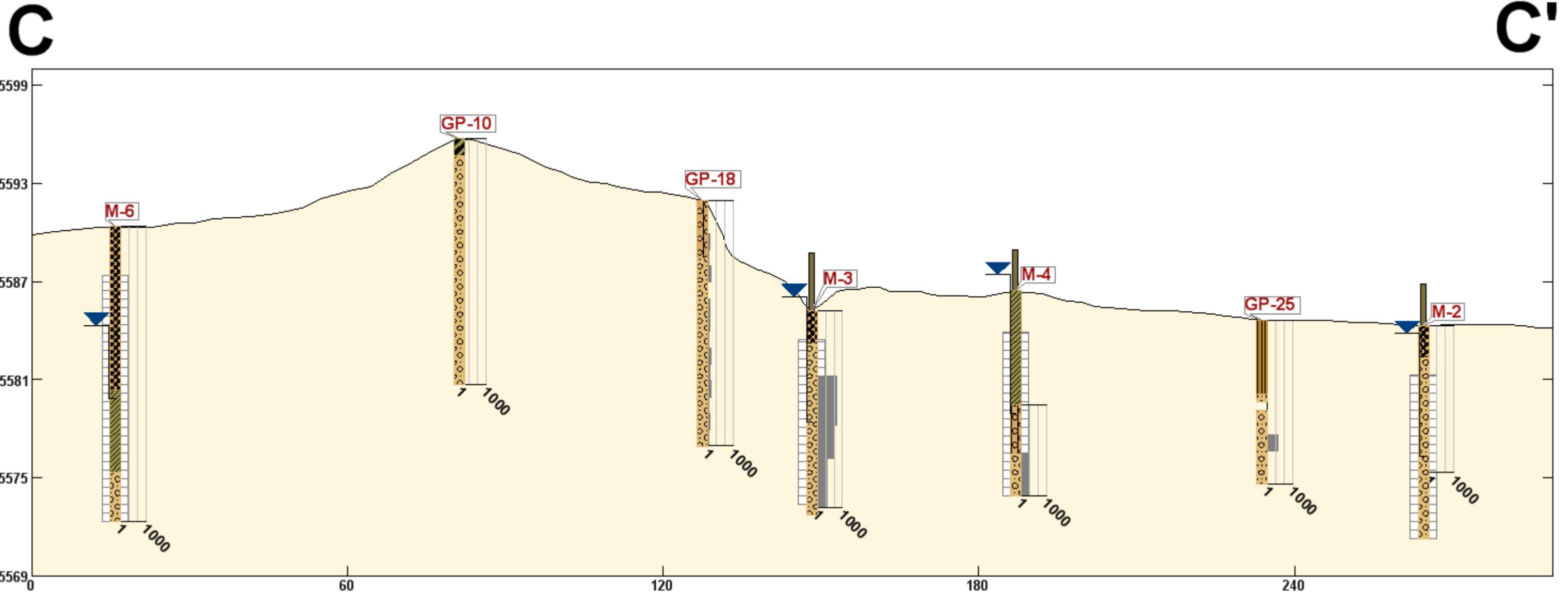
bcc: Dr. Robert Sterrett, EMS
Pam Anderson, MWH
Scott Pope – General File
Lindrith file





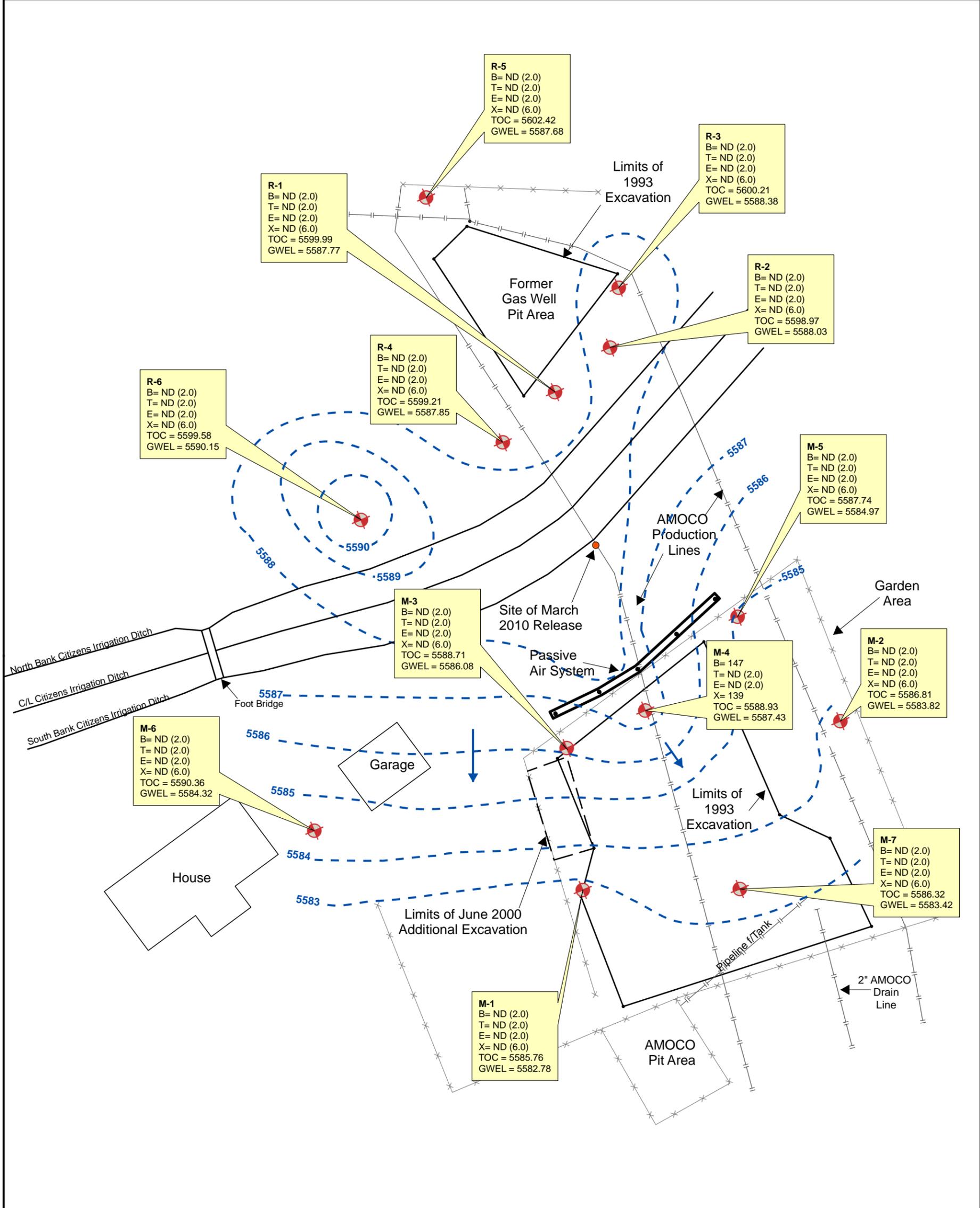
- NOTES:**
- AERIAL PHOTOGRAPH BY PICTOMETRY; FLOWN FEBRUARY 2009
 - PID DATA SHOWN IN UNITS OF PPMV, OR PARTS PER MILLION BY VOLUME IN THE SOIL HEADSPACE VAPOR
 - GROUND SURFACE IS APPROXIMATE
 - CITIZENS DITCH NOT SHOWN IN ABOVE PROFILE
 - FT AMSL – FEET ABOVE MEAN SEA LEVEL

TITLE	CROSS-SECTION B-B'	
PROJECT	JAQUEZ SITE EL PASO CORPORATION	
FIGURE	D-1B	



- NOTES:**
- AERIAL PHOTOGRAPH BY PICTOMETRY; FLOWN FEBRUARY 2009
 - PID DATA SHOWN IN UNITS OF PPMV, OR PARTS PER MILLION BY VOLUME IN THE SOIL HEADSPACE VAPOR
 - GROUND SURFACE IS APPROXIMATE
 - CITIZENS DITCH NOT SHOWN IN ABOVE PROFILE
 - FT AMSL – FEET ABOVE MEAN SEA LEVEL

TITLE	CROSS-SECTION C-C'	
PROJECT	JAQUEZ SITE EL PASO CORPORATION	
		FIGURE D-1C



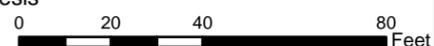
NMWQCC Groundwater Standards

B	10 (ug/L)
T	750 (ug/L)
E	750 (ug/L)
X	620 (ug/L)

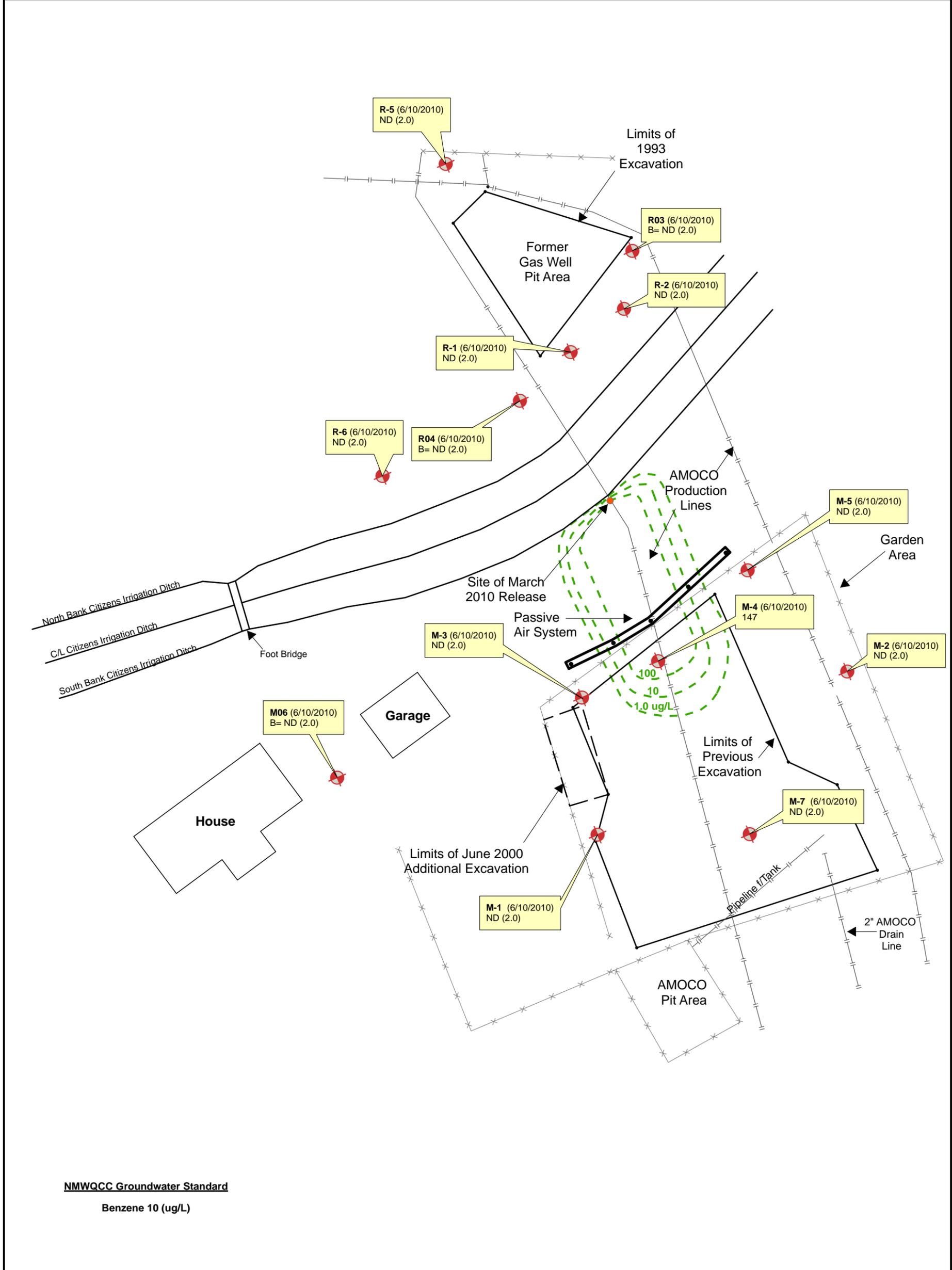
LEGEND

- M-1 Existing Monitoring / Observation Well
- Groundwater Flow Direction
- -5583 - - Potentiometric Surface Contour (Inferred Where Dashed)

- B Benzene (ug/L)
- T Toluene (ug/L)
- E Ethylbenzene (ug/L)
- X Total Xylenes (ug/L)
- TOC Top of Casing (ft.)
- GWEL Groundwater Elevation (ft. AMSL)
- ND Not Detected; Reporting Limit Shown in Parenthesis



		PROJECT: Jaquez Site	FIGURE: D-2
		TITLE: Groundwater Potentiometric Surface Map, and BTEX Concentrations - June 10, 2010	

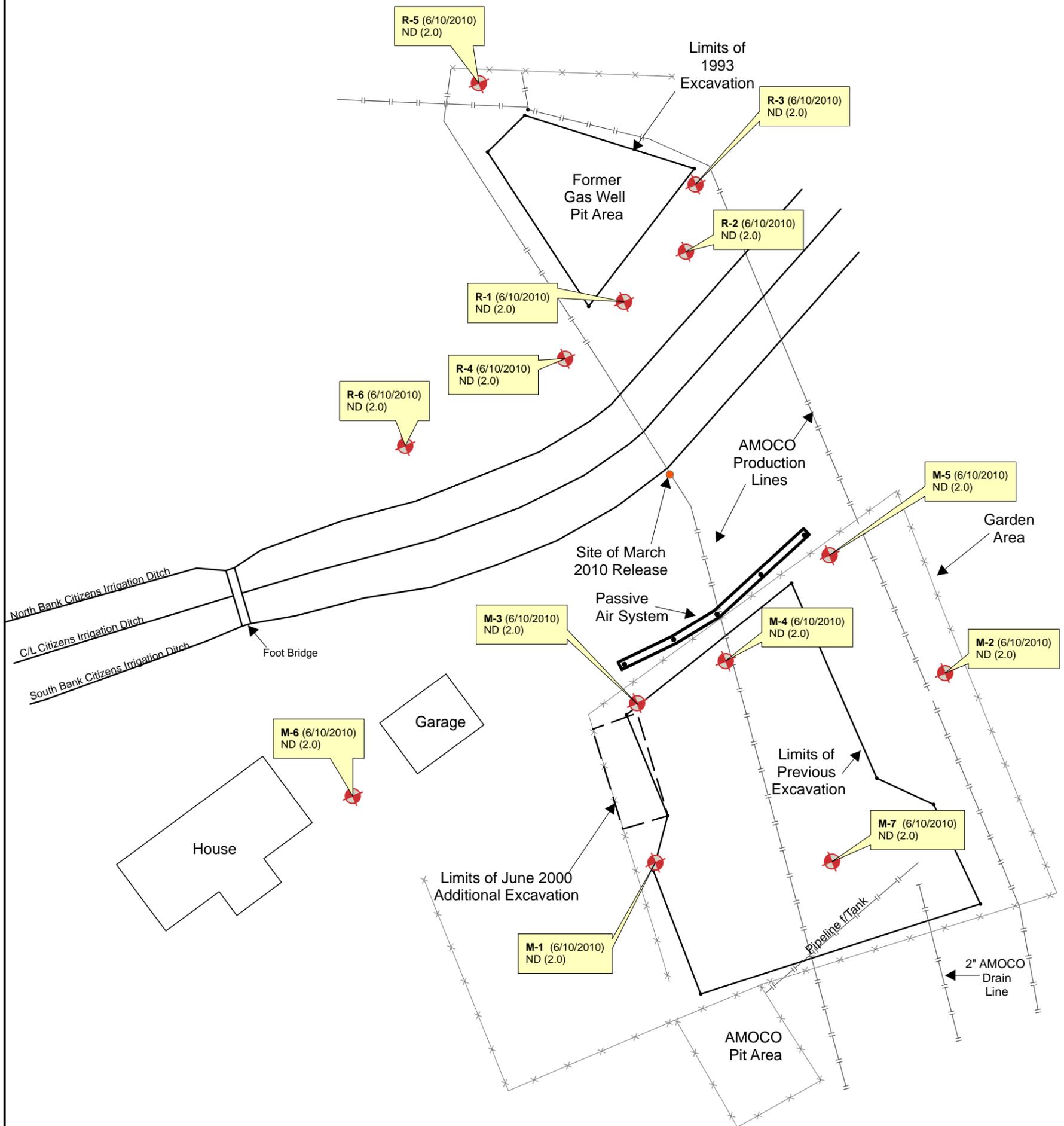


LEGEND

- M-1 Existing Monitoring / Observation Well
- Benzene (ug/L)
- 1.0 ug/L Concentration Isopleth (Inferred When Dashed)
- ND Not Detected; Reporting Limit Shown in Parenthesis



		PROJECT: Jaquez Site	FIGURE: D-3
		TITLE: Groundwater Benzene Concentration Isopleth Map - June 10, 2010	



NMWQCC Groundwater Standard
Toluene 750 (ug/L)

NOTE: Concentration isopleths not interpreted due to lack of detections.

LEGEND

M-1 Existing Monitoring / Observation Well

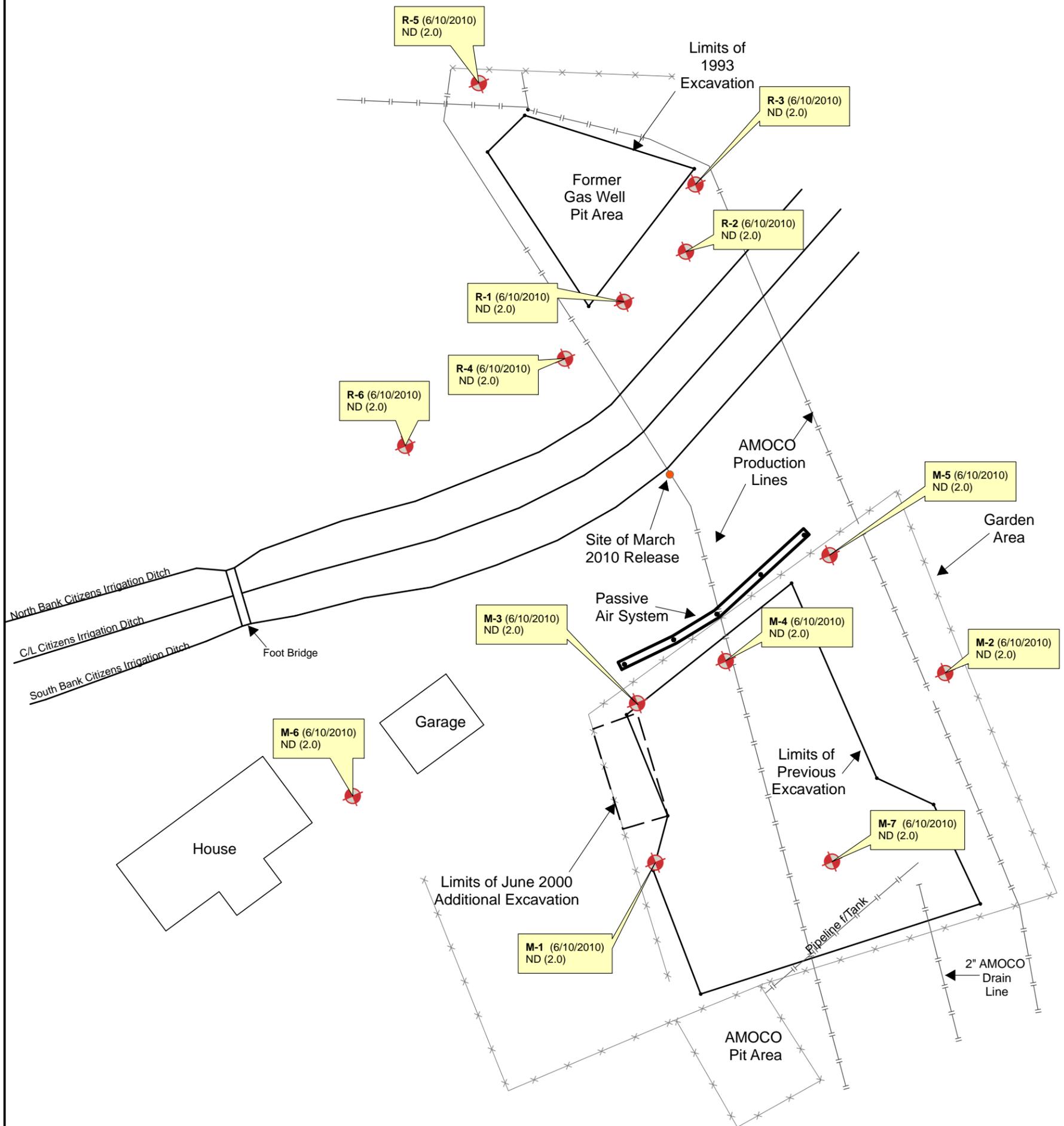
ND (2.0) Toluene (ug/L)

ND Not Detected; Reporting Limit Shown in Parenthesis



PROJECT: Jaquez Site
TITLE: Groundwater Toluene Concentration Isopleth Map - June 10, 2010

FIGURE: D-4



NMWQCC Groundwater Standard
Ethylbenzene 750 (ug/L)

NOTE: Concentration isopleths not interpreted due to lack of detections.

LEGEND

M-1 Existing Monitoring / Observation Well

ND (2.0) Ethylbenzene (ug/L)

ND Not Detected; Reporting Limit Shown in Parenthesis



MWH



PROJECT:

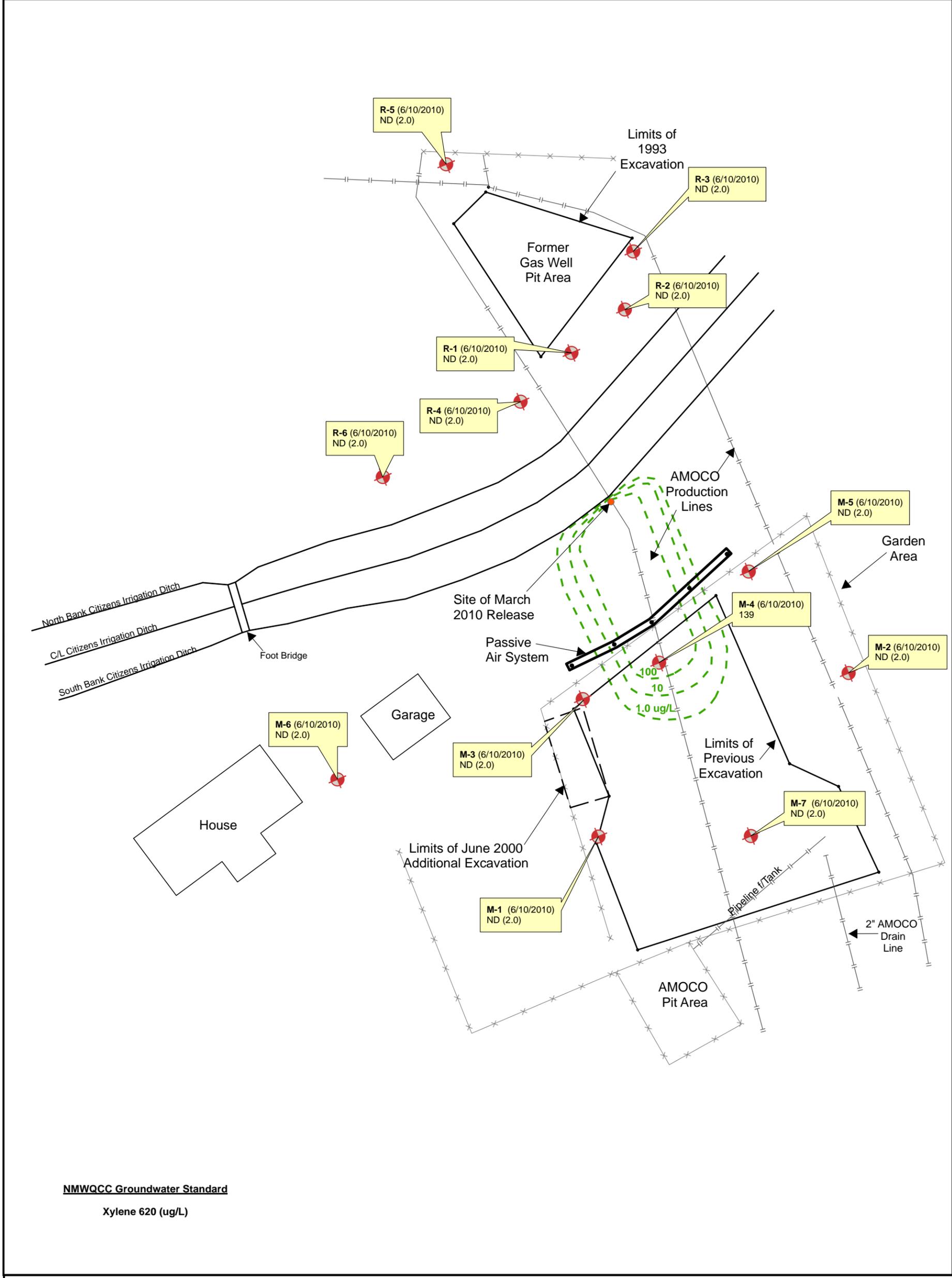
Jaquez Site

TITLE:

Groundwater Ethylbenzene Concentration
Isopleth Map - June 10, 2010

FIGURE:

D-5

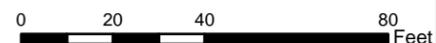


NMWQCC Groundwater Standard

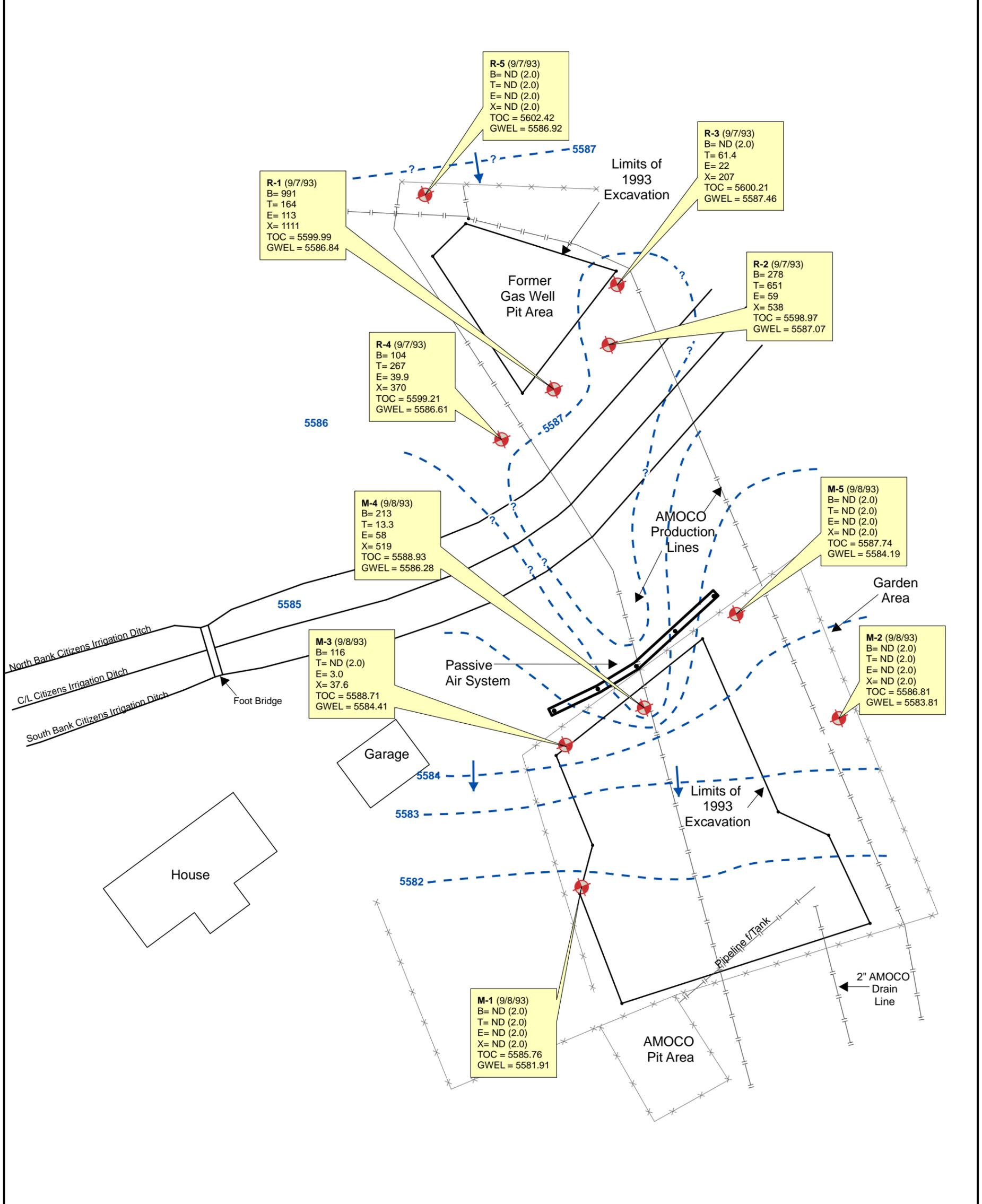
Xylene 620 (ug/L)

LEGEND

- M-1 Existing Monitoring / Observation Well
- Xylene (ug/L)
- 1.0 ug/L Concentration Isopleth (Inferred When Dashed)
- ND Not Detected; Reporting Limit Shown in Parenthesis



		PROJECT: Jaquez Site	FIGURE: D-6
		TITLE: Groundwater Xylene Concentration Isopleth Map - June 10, 2010	



NMWQCC Groundwater Standards

- B 10 (ug/L)
- T 750 (ug/L)
- E 750 (ug/L)
- X 620 (ug/L)

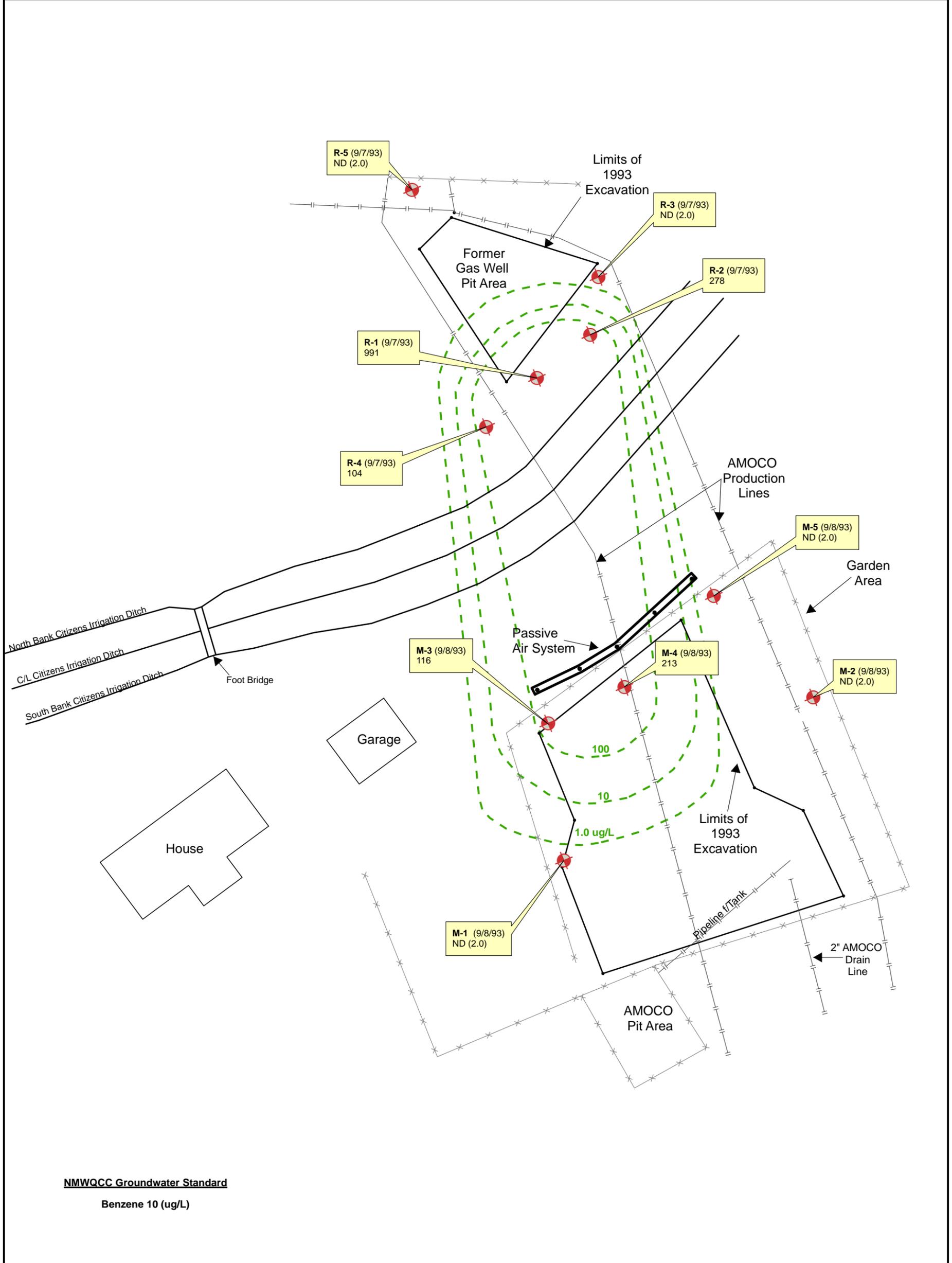
LEGEND

- M-1 Existing Monitoring / Observation Well
- Groundwater Flow Direction
- Potentiometric Surface Contour (Inferred Where Dashed)

- B Benzene (ug/L)
- T Toluene (ug/L)
- E Ethylbenzene (ug/L)
- X Total Xylenes (ug/L)
- TOC Top of Casing (ft.)
- GWEL Groundwater Elevation (ft. AMSL)
- ND Not Detected; Reporting Limit Shown in Parenthesis
- ? No Data Available



		PROJECT: Jaquez Site	FIGURE: D-7
		TITLE: Groundwater Potentiometric Surface Map, and BTEX Concentrations - September 7-8, 1993	



NMWQCC Groundwater Standard

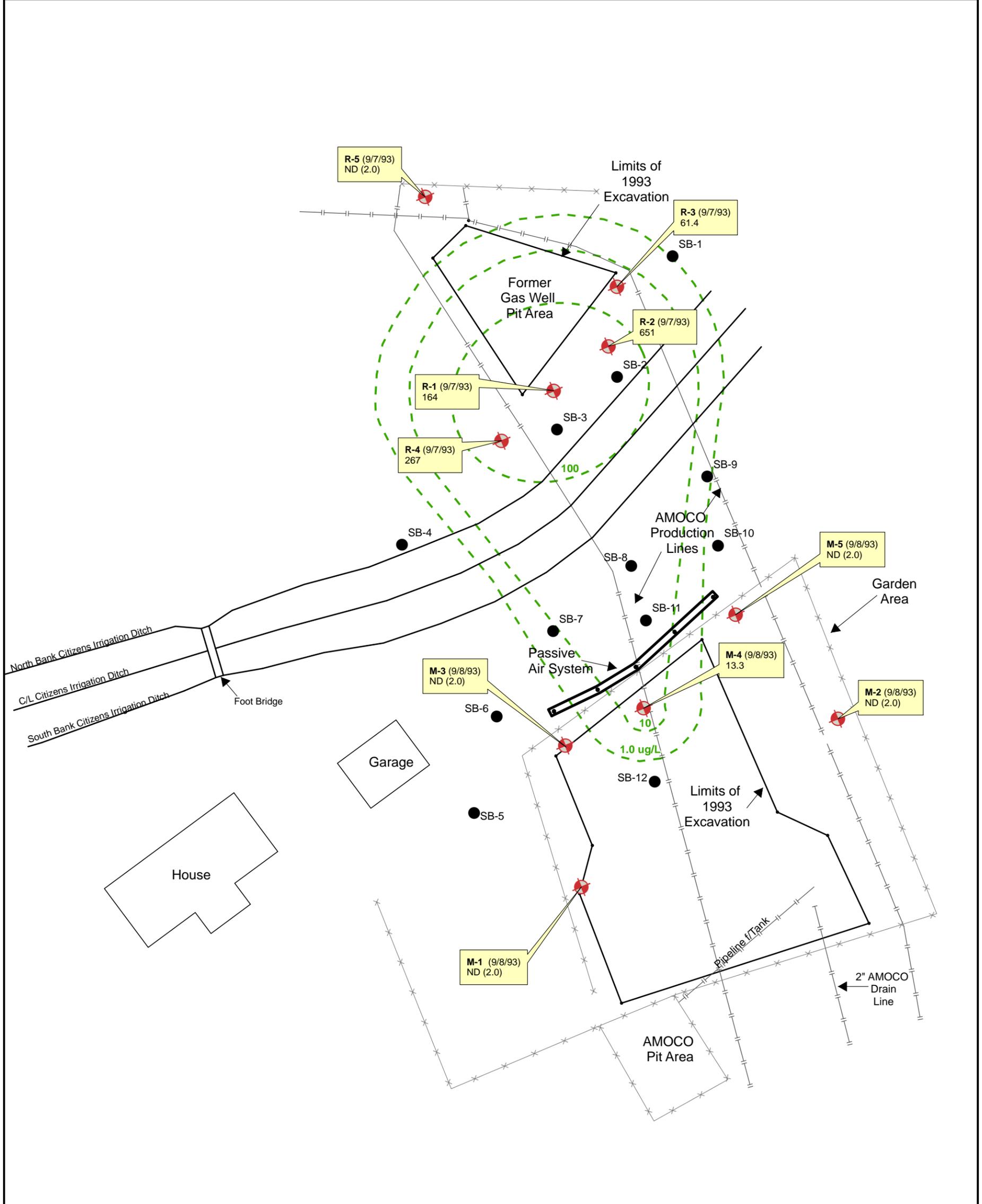
Benzene 10 (ug/L)

LEGEND

- M-1 Existing Monitoring / Observation Well
- Benzene (ug/L)
- Concentration Isopleth (Inferred When Dashed)
- ND Not Detected; Reporting Limit Shown in Parenthesis



		PROJECT: Jaquez Site	FIGURE: D-8
		TITLE: Groundwater Benzene Concentration Isopleth Map - September 7 & 8, 1993	



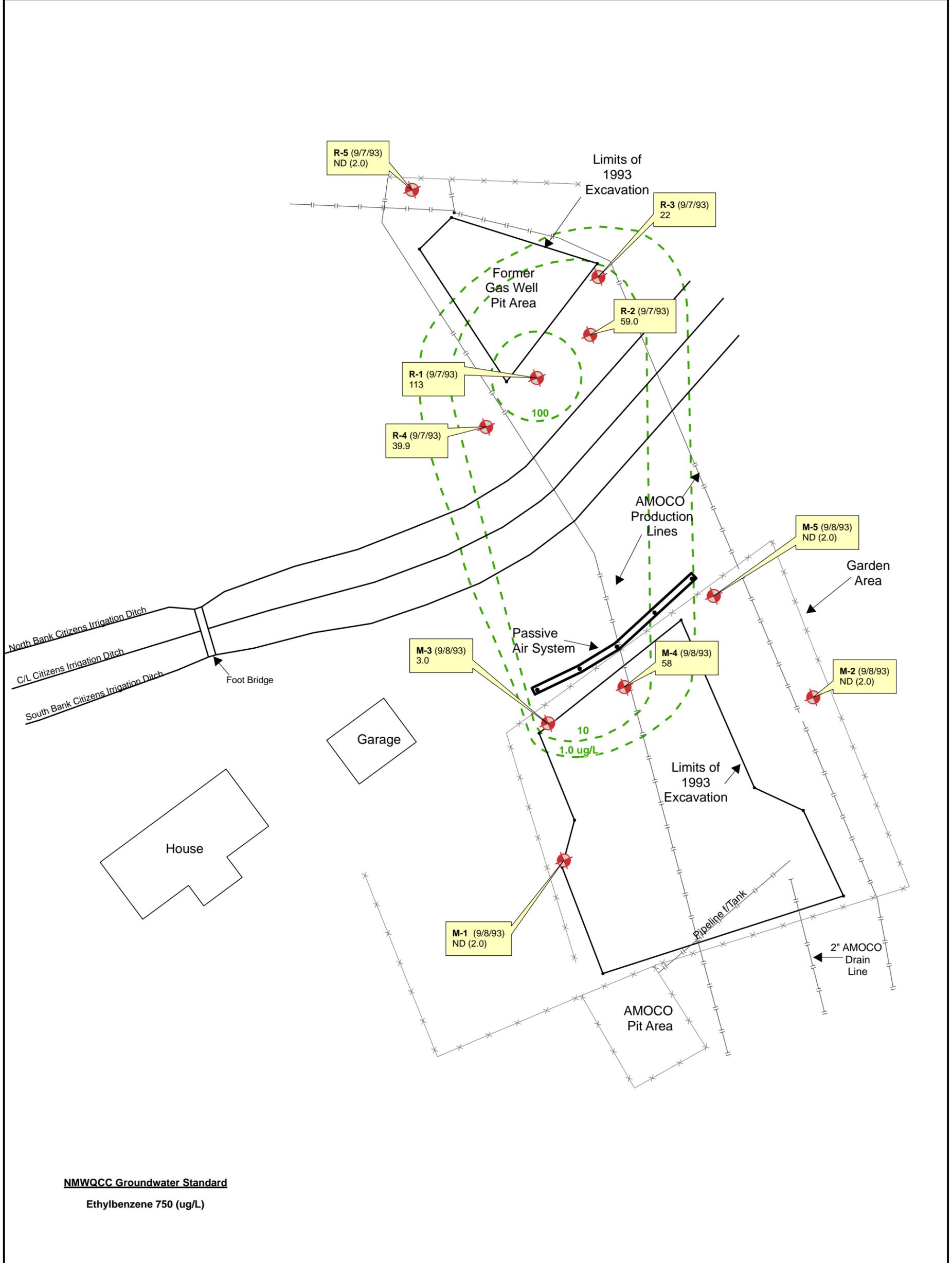
NMWQCC Groundwater Standard
Toluene 750 (ug/L)

LEGEND

- M-1 Existing Monitoring / Observation Well
- Toluene (ug/L)
- 1.0 ug/L Concentration Isopleth (Inferred When Dashed)
- ND Not Detected; Reporting Limit Shown in Parenthesis



		PROJECT: Jaquez Site	FIGURE: D-9
		TITLE: Groundwater Toluene Concentration Isopleth Map - September 7 & 8, 1993	



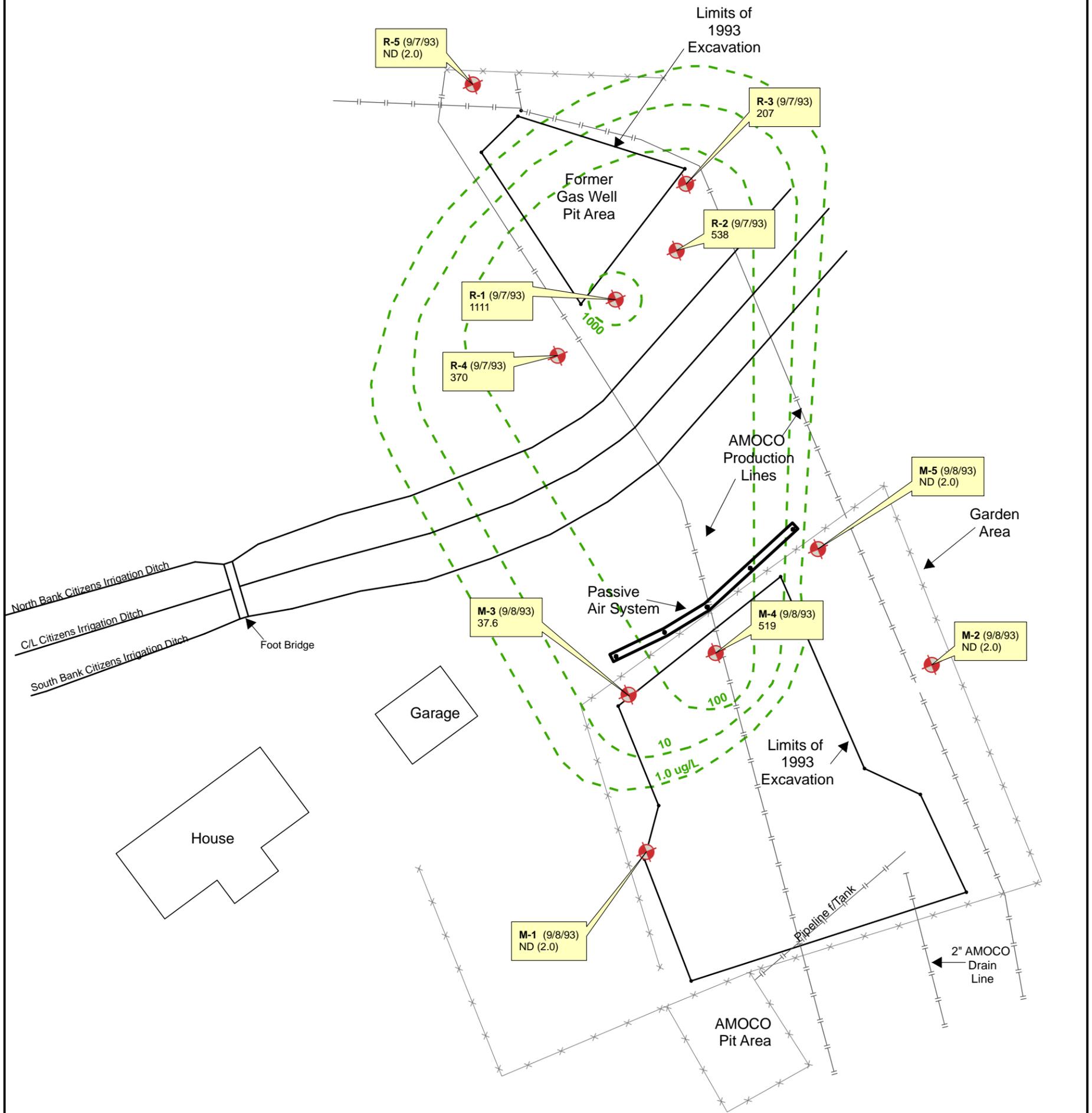
NMWQCC Groundwater Standard
Ethylbenzene 750 (ug/L)

LEGEND

- M-1 Existing Monitoring / Observation Well
- Ethylbenzene (ug/L)
- Concentration Isopleth (Inferred When Dashed)
- ND Not Detected; Reporting Limit Shown in Parenthesis



		PROJECT: Jaquez Site	FIGURE: D-10
		TITLE: Groundwater Ethylbenzene Concentration Isopleth Map - September 7 & 8, 1993	



NMWQCC Groundwater Standard

Xylene 620 (ug/L)

LEGEND

- M-1 Existing Monitoring / Observation Well
- 1.0 ug/L Concentration Isopleth (Inferred When Dashed)
- 1111 Xylene (ug/L)
- ND Not Detected; Reporting Limit Shown in Parenthesis



		PROJECT: Jaquez Site	FIGURE: D-11
		TITLE: Groundwater Xylene Concentration Isopleth Map - September 7 & 8, 1993	

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

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

November 2010

Prepared for:

**EL PASO CORPORATION
1001 Louisiana Street
Houston, Texas 77002**

Prepared by:

**MWH
1801 California Street, Suite 2900
Denver, Colorado 80202**

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A	August-September 2010 Soil Boring Logs
B	Field Sampling Forms and Notes
C	Laboratory Analytical Reports

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 NMOCD 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 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.

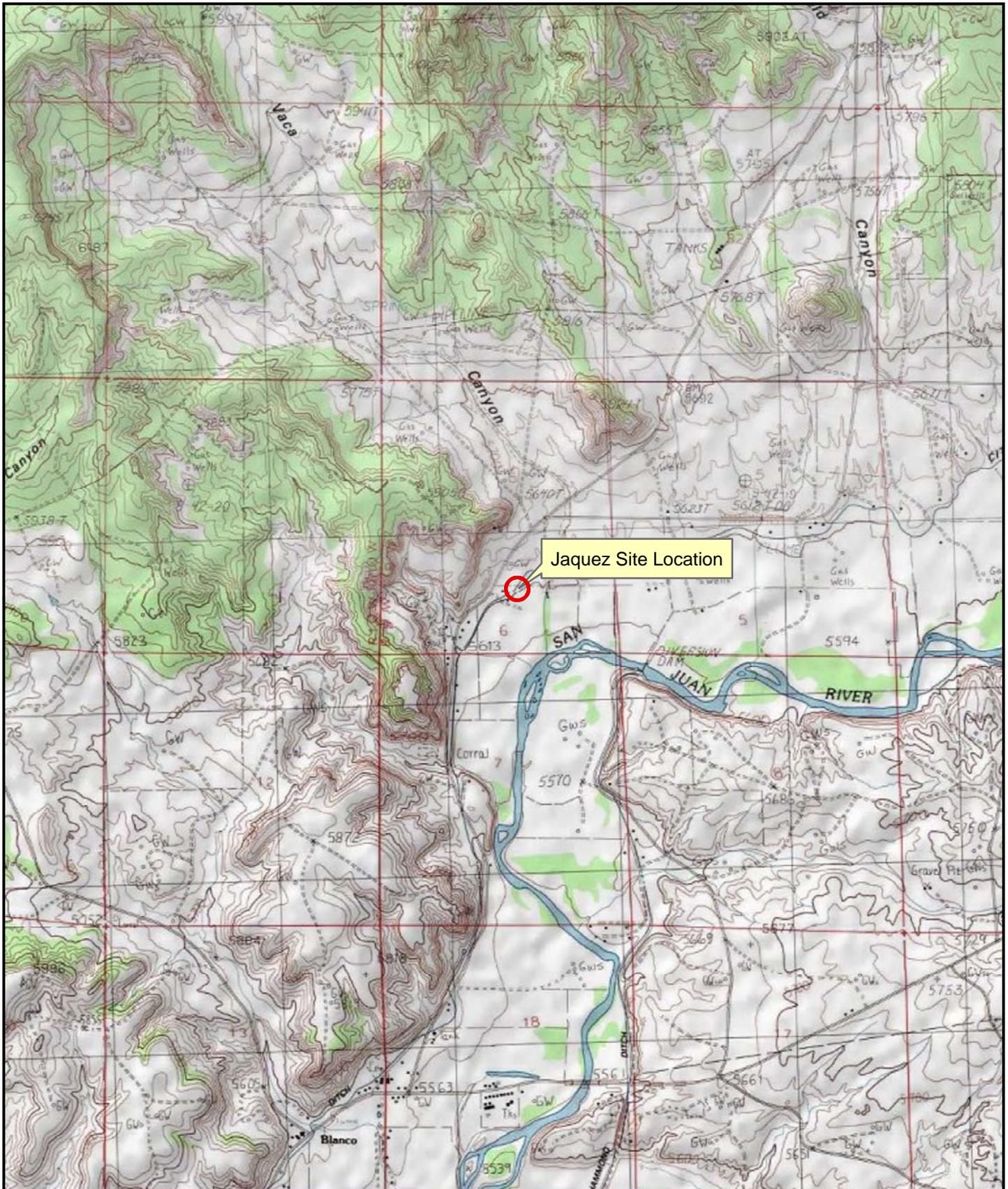
Based upon the review of data collected at the Jaquez Site during these assessment activities, the following recommendations are provided:

- 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.

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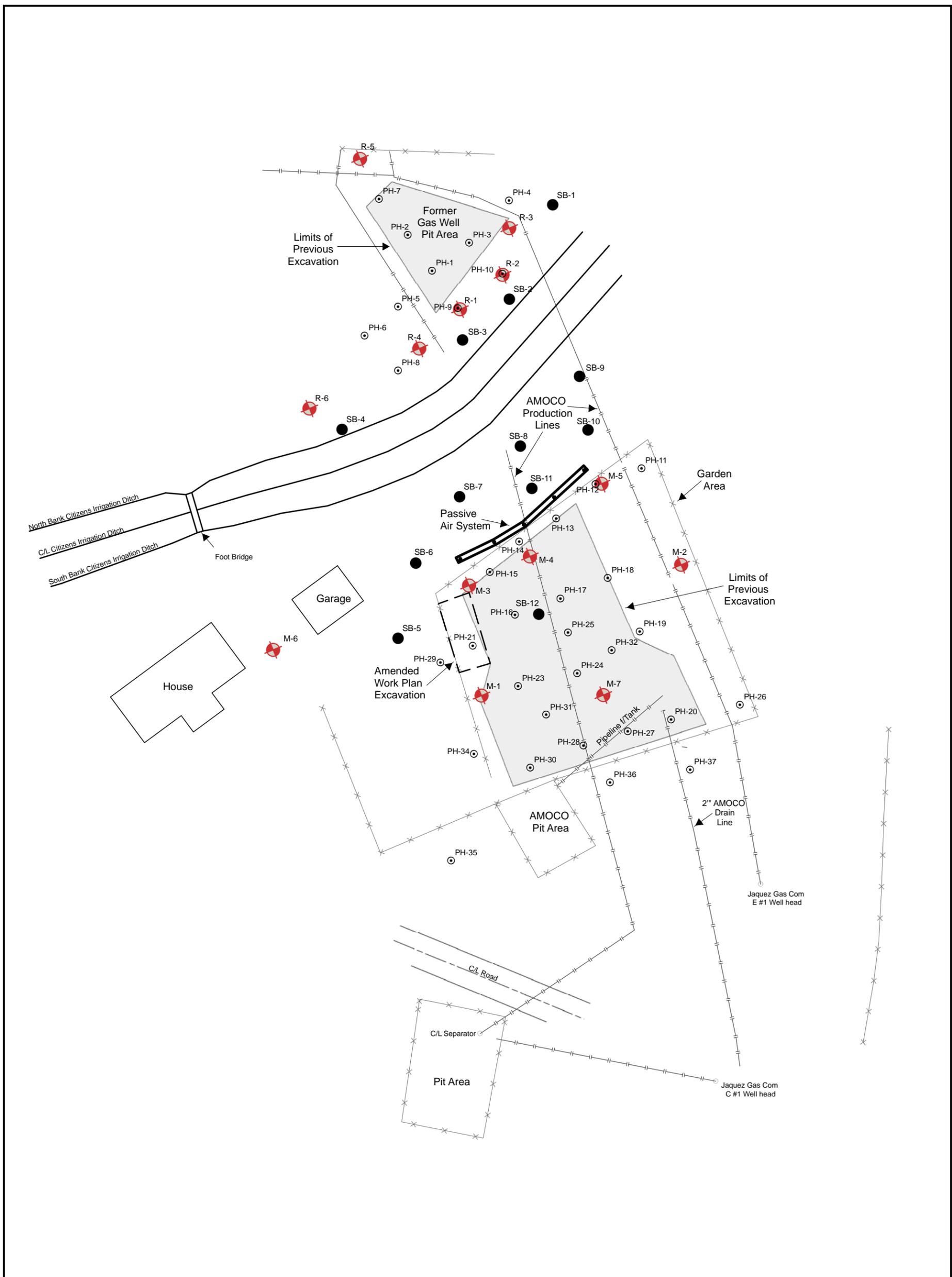
Figures



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 	PROJECT:	Jaquez Site	FIGURE:
	TITLE:	Site Location	1

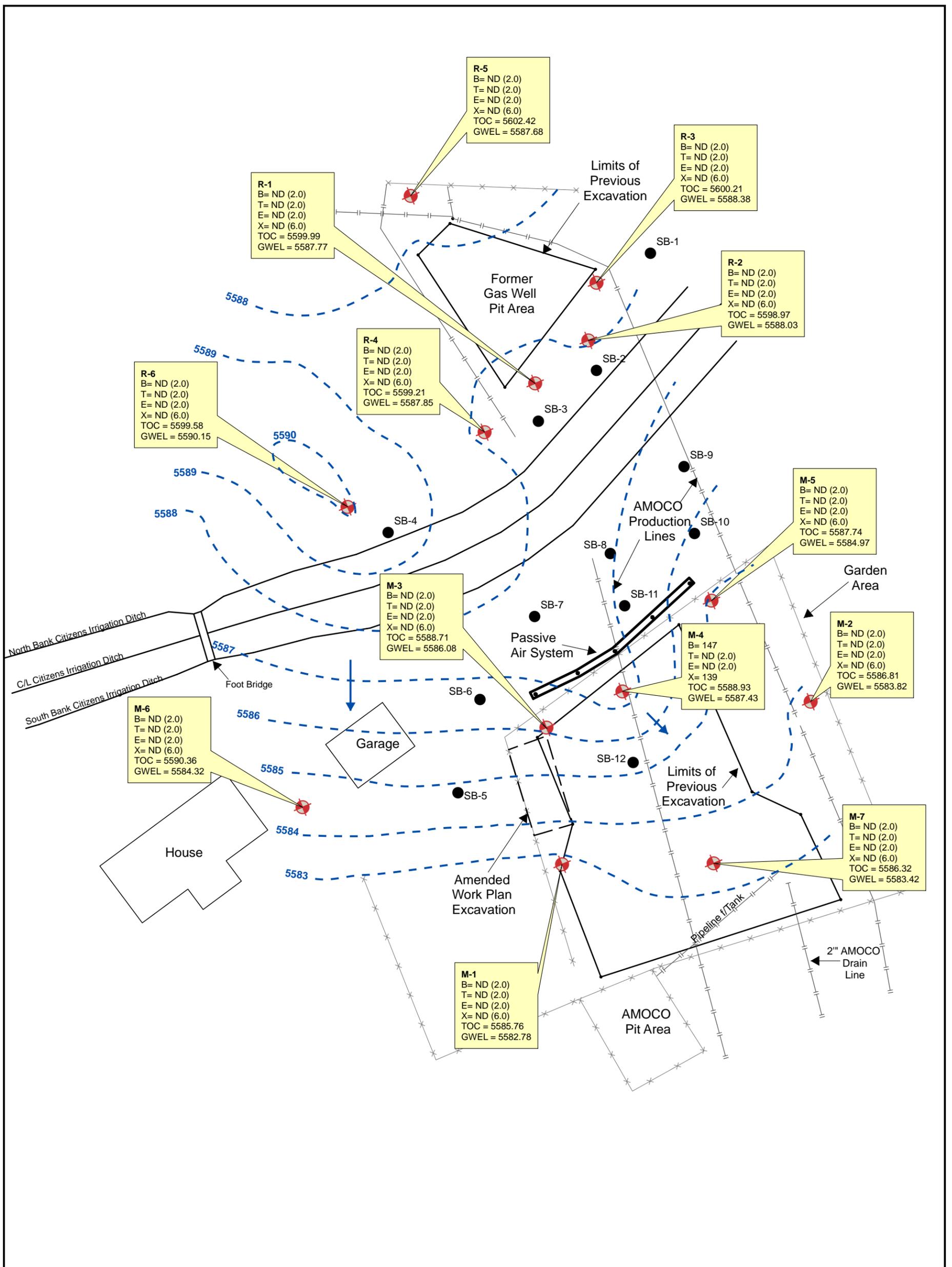


LEGEND

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



		PROJECT: Jaquez Site	FIGURE: 2
		TITLE: Site Layout	

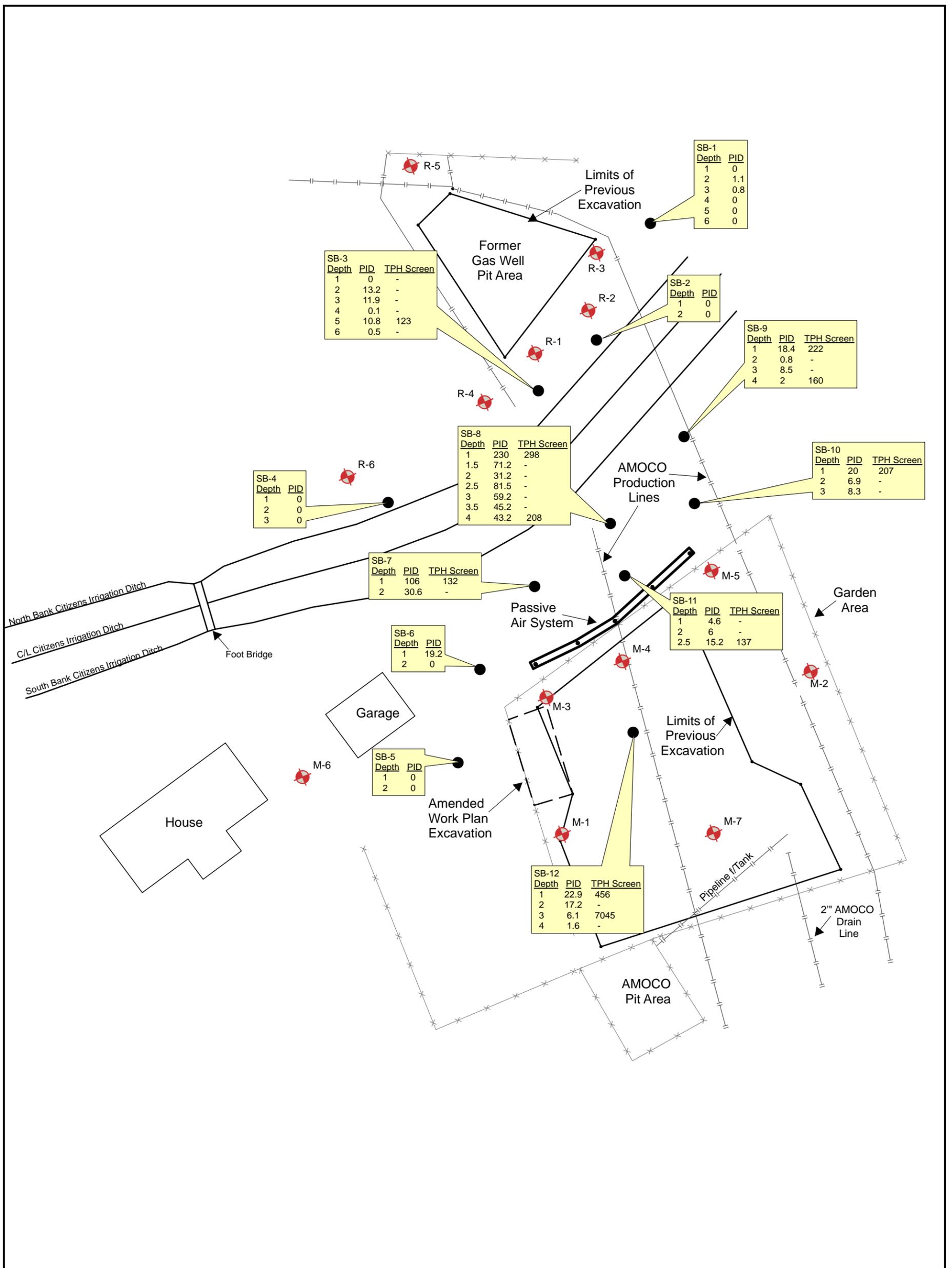


LEGEND

- M-4 Existing Monitoring / Observation Well
- SB-1 Soil Borings
- Groundwater Flow Direction
- Potentiometric Surface Contour (Inferred Where Dashed)

- B Benzene (ug/L)
- T Toluene (ug/L)
- E Ethylbenzene (ug/L)
- X Total Xylenes (ug/L)
- TOC Top of Casing (ft.)
- GWEL Groundwater Elevation (ft. AMSL)
- ND Not Detected; Reporting Limit Shown In Parenthesis



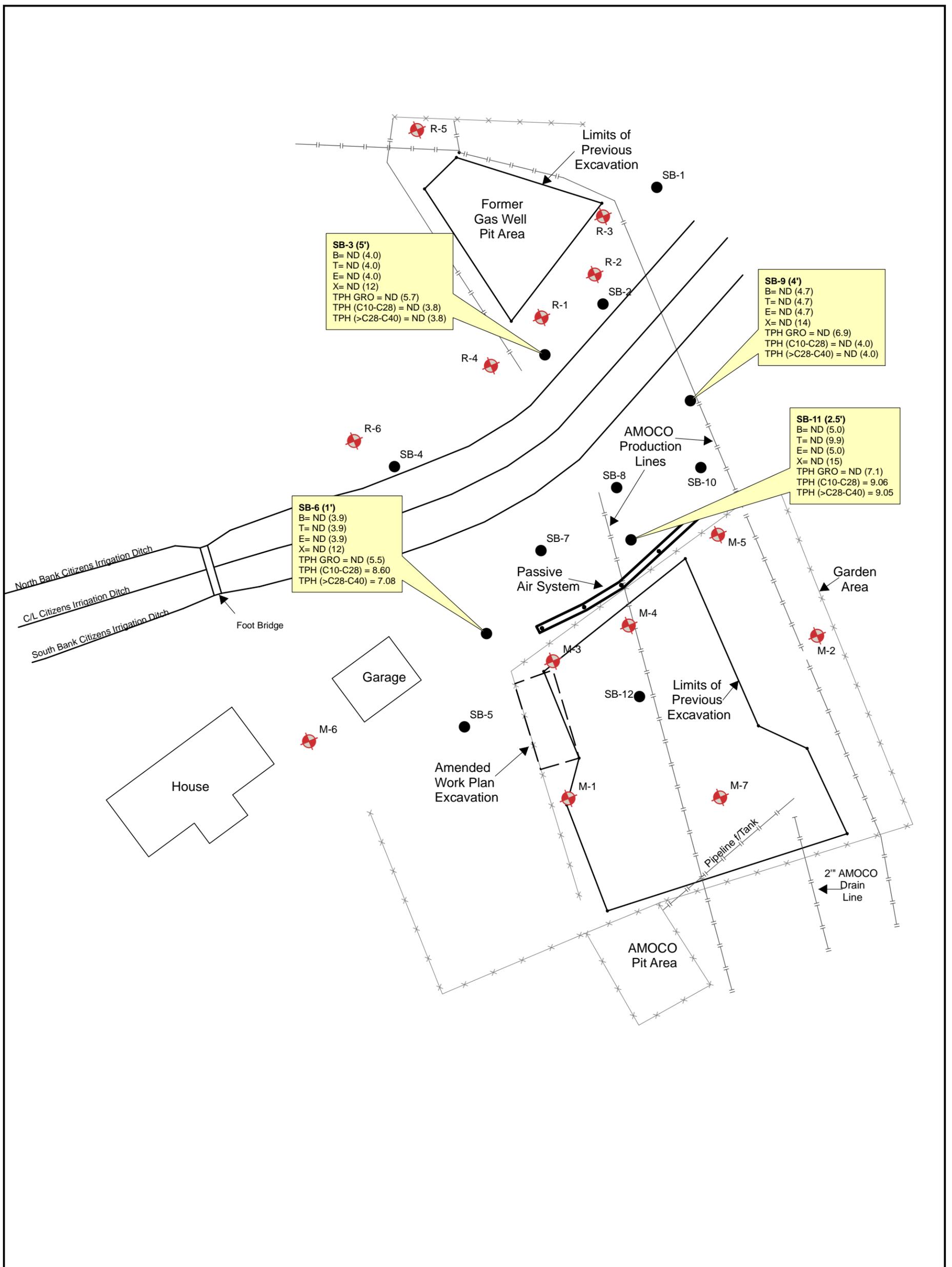


LEGEND

- 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)





LEGEND

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

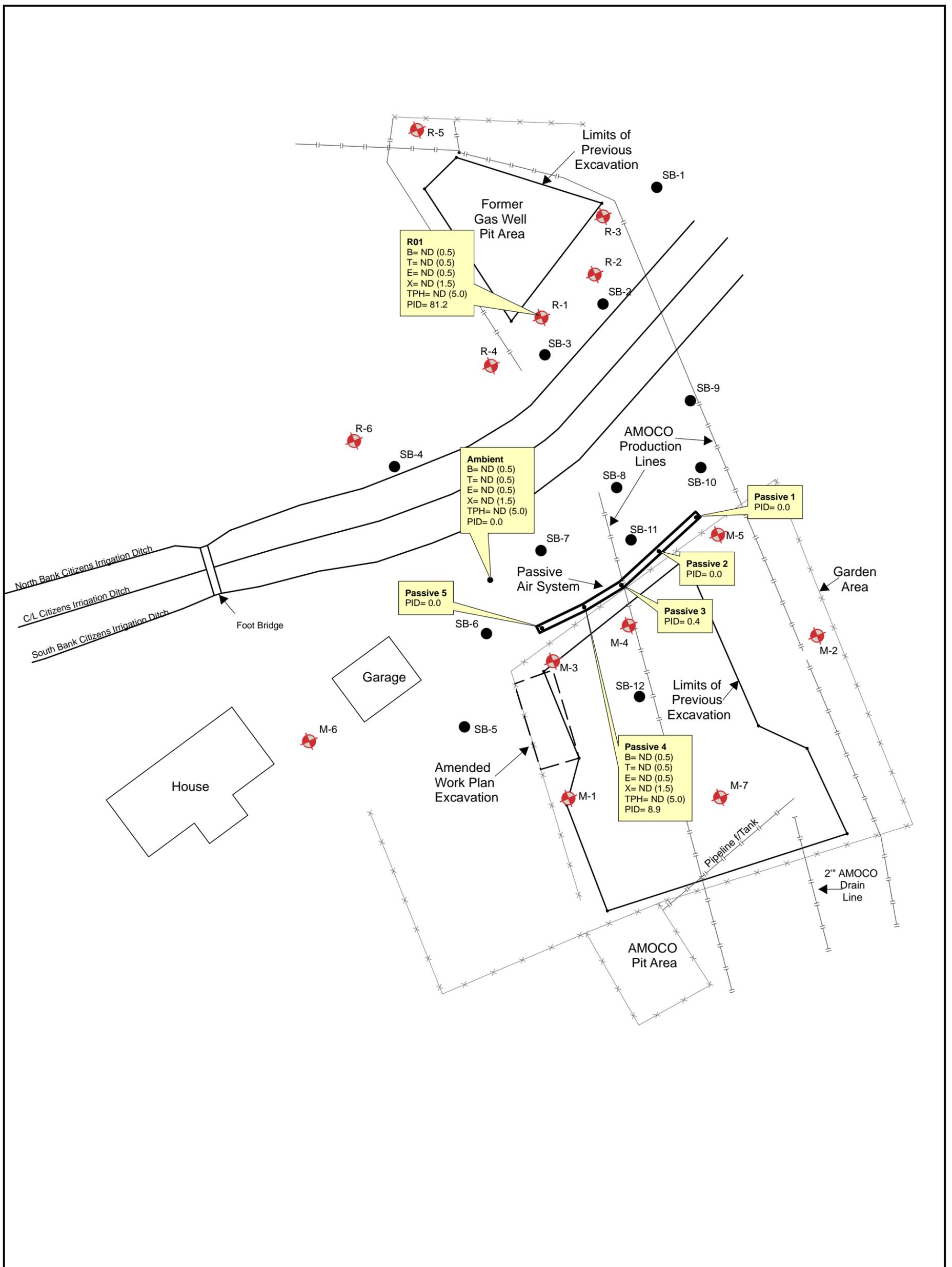
Note: Listed depth is the midpoint of each 6" sample interval.

- 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



PROJECT: Jaquez Site
 TITLE: Soil Analytical Results (June 11, 2010)



LEGEND

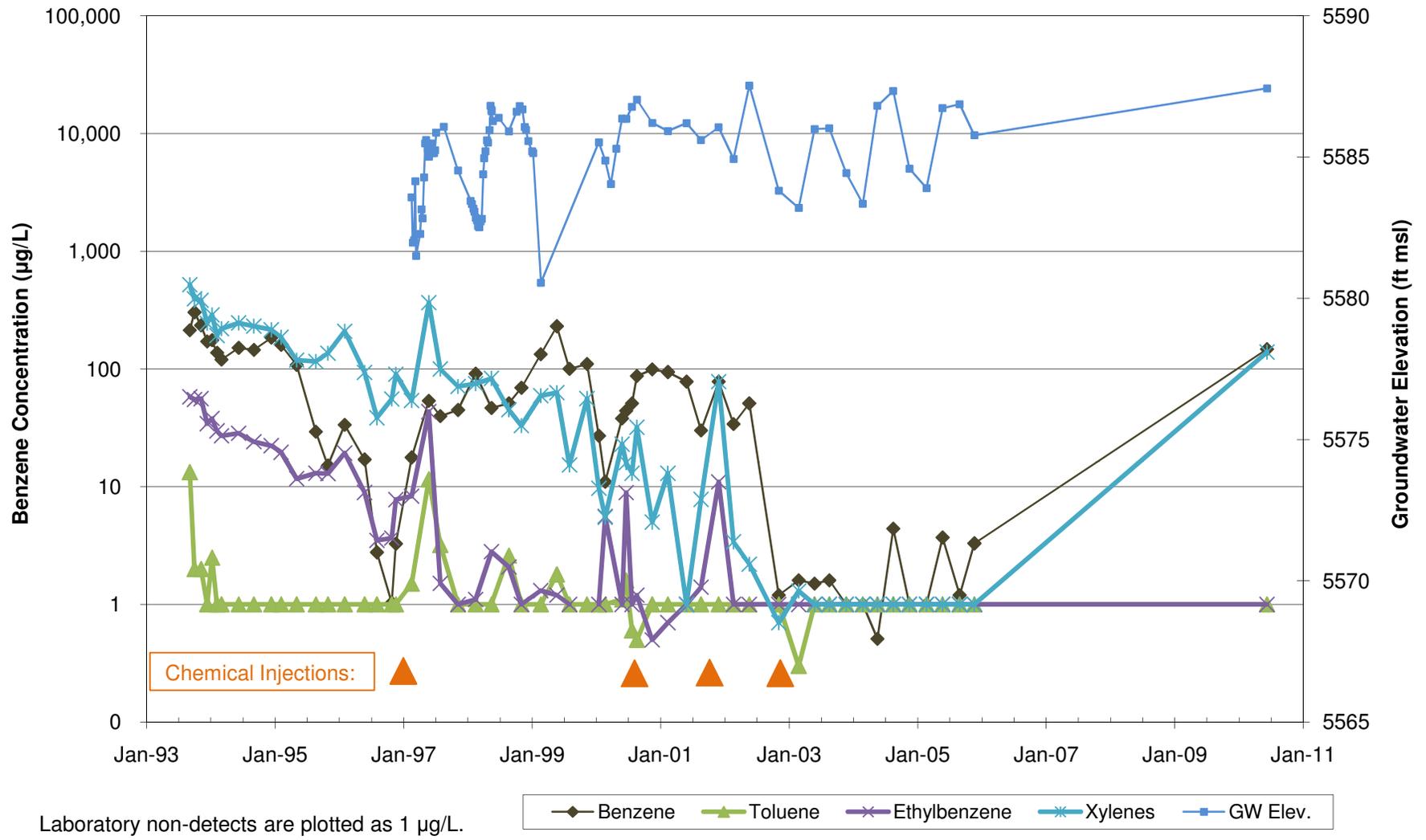
M-4 Existing Monitoring / Observation Well
SB-3 Soil Borings

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



		PROJECT: Jaquez Site	FIGURE: 6
		TITLE: Vapor Field Screening and Laboratory Analytical Results (June 11, 2010)	

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





DRAFT

LEGEND

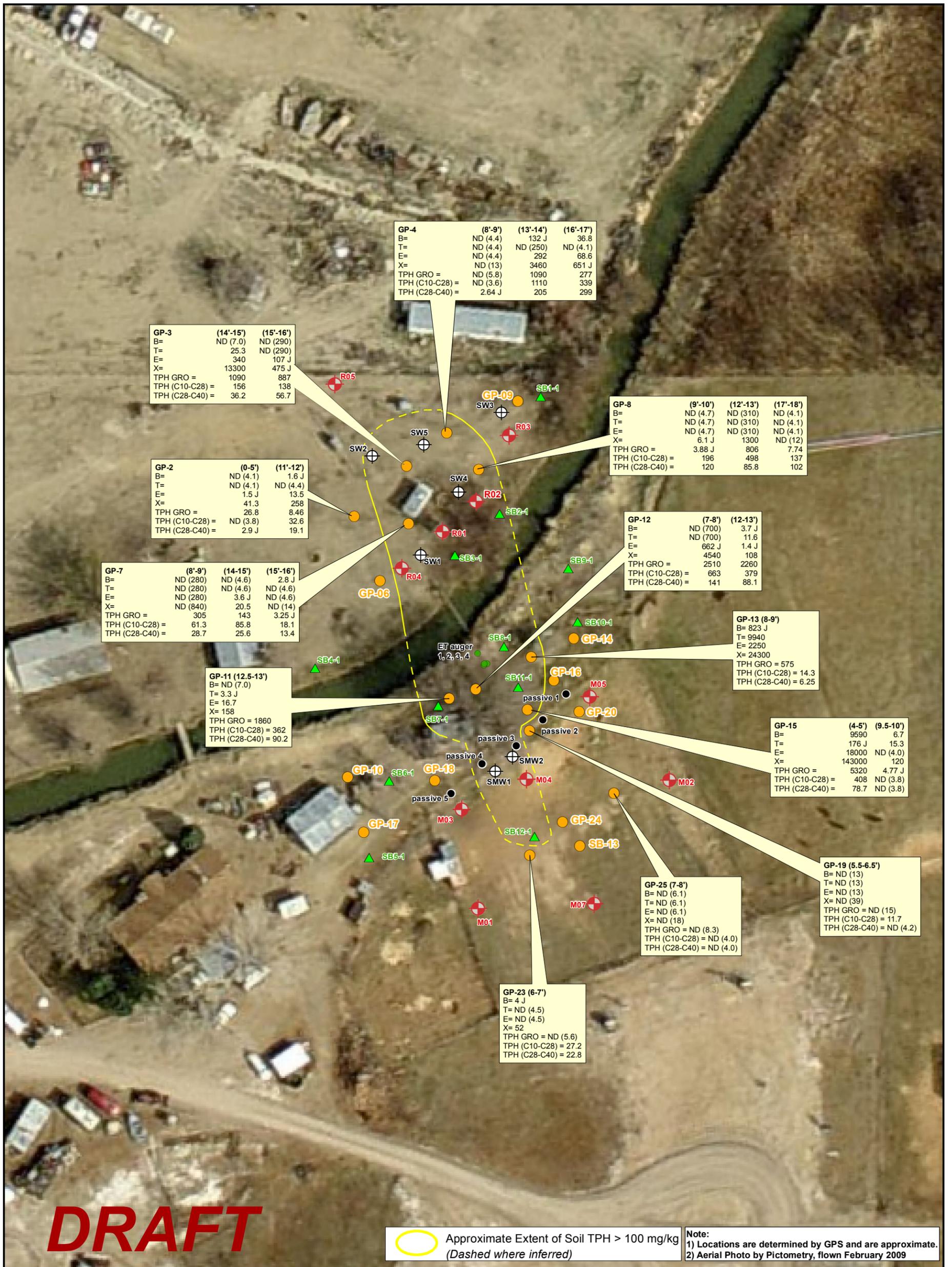
- M-4**  Existing Monitoring / Observation Well*
- GP-16**  Soil Borings***
- SB-1**  Soil Borings**
- SW1**  Sparge Wells*
- Passive 1**  Passive Air Wells

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



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

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





DRAFT

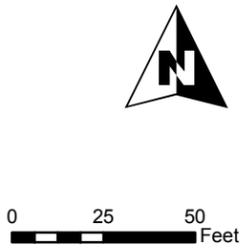
Note:
 1) Locations are determined by GPS and are approximate.
 2) Aerial Photo by Pictometry, flown February 2009

LEGEND

- M-4** Existing Monitoring / Observation Well*
- GP-7 (15'-16') 200** Soil Borings*** (Depth below ground surface) Concentration (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)	

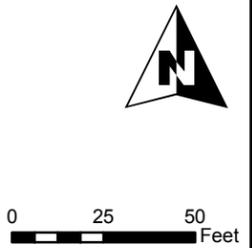


Note:
 1) Locations are determined by GPS and are approximate.
 2) Aerial Photo by Pictometry, flown February 2009

LEGEND

- M-4** Existing Monitoring / Observation Well*
- 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



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

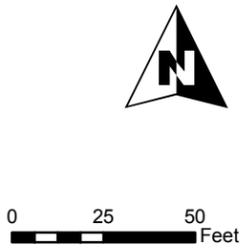


Note:
 1) Locations are determined by GPS and are approximate.
 2) Aerial Photo by Pictometry, flown February 2009

LEGEND

- M-4** Existing Monitoring / Observation Well*
- Soil Borings*** (Depth below ground surface) Concentration (ug/kg)
- SB-1** Soil Borings**
- SW1** Sparge Wells*
- Passive 1** Passive Air Wells
- 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: 14
		TITLE: Maximum Concentrations of Toluene in Soil (8/26/10 - 9/2/10)	



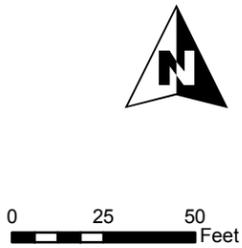
DRAFT

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*
- Soil Borings*** (Depth below ground surface) Concentration (ug/kg)
- SB-1** Soil Borings**
- SW1** Sparge Wells*
- Passive 1** Passive Air Wells
- 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



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



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*
- Soil Borings***
(Depth below ground surface)
Concentration (ug/kg)
- SB-1** Soil Borings**
- SW1** Sparge Wells*
- Passive 1** Passive Air Wells
- 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



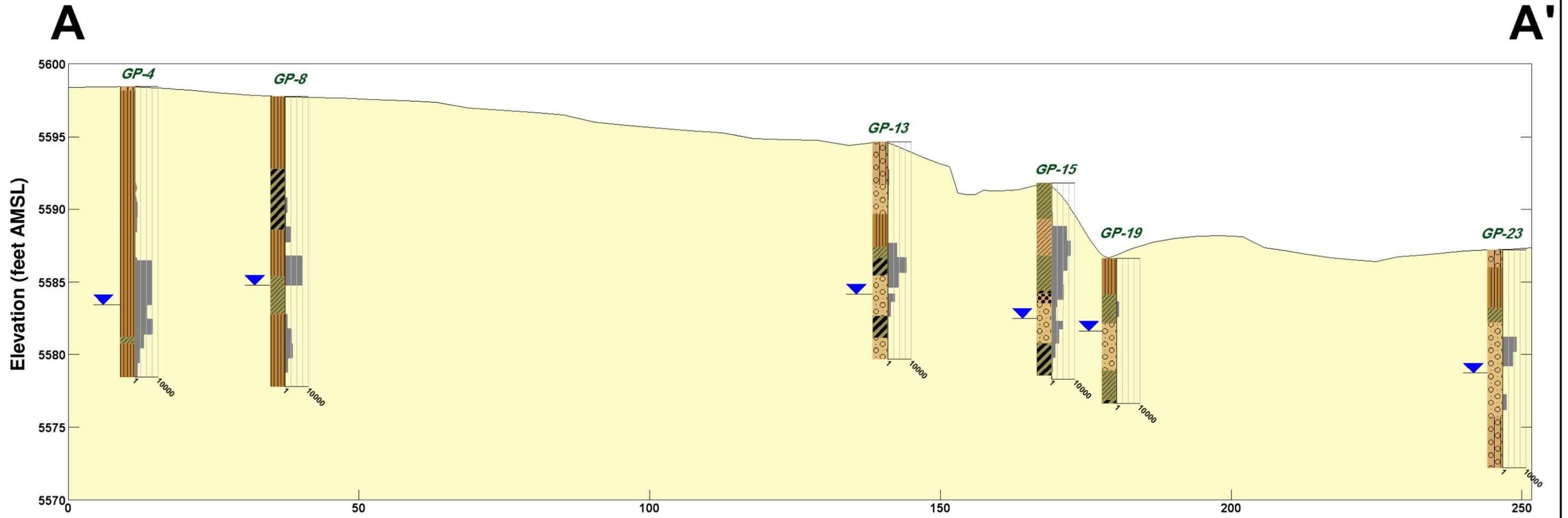
MWH



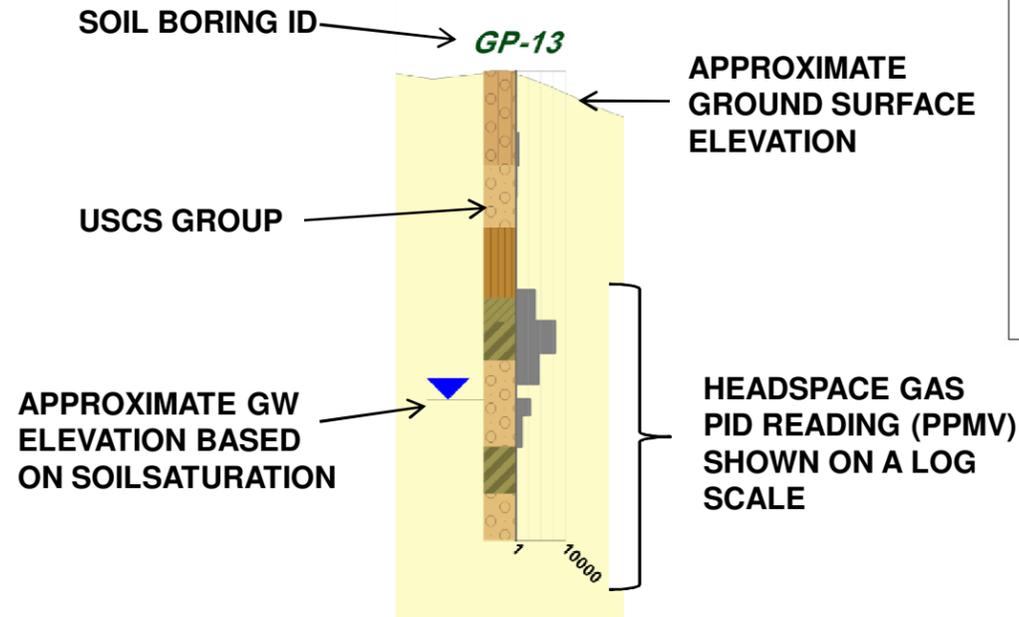
PROJECT: Jaquez Site
 TITLE: Maximum Concentrations of Total Xylenes in Soil
 (8/26/10 - 9/2/10)

FIGURE:

16



LEGEND:

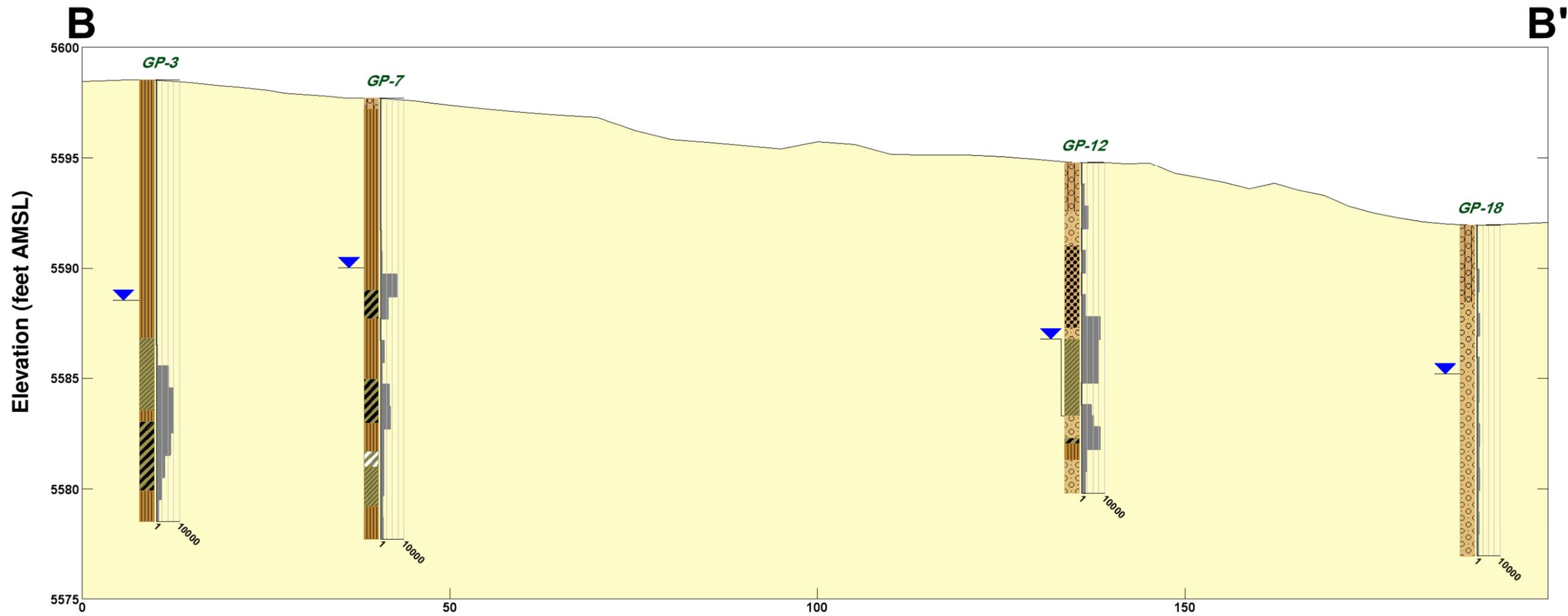


USCS GROUP	
	SW
	SM
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	SC/CL
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	CL
	CH

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

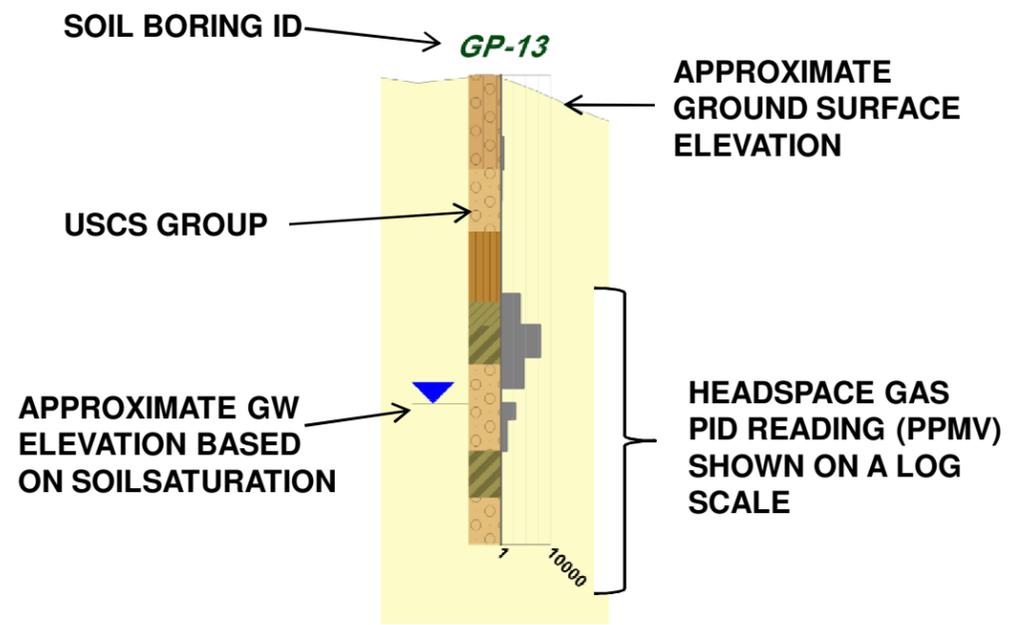
TITLE	
CROSS-SECTION A-A'	
PROJECT	
JAQUEZ SITE SOIL DELINEATION EL PASO CORPORATION	
	FIGURE
17	



- 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..



LEGEND:



USCS GROUP	
	SW
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	ML
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	CH/CL
	CH

TITLE	
CROSS-SECTION B-B'	
PROJECT	
JAQUEZ SITE SOIL DELINEATION EL PASO CORPORATION	
	FIGURE
	18

Tables

Table 1
June 2010 Groundwater Measurements and Laboratory Analytical Data
El Paso Corporation Jaquez Site, San Juan County, New Mexico

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

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)	Ethylbenzen e (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	Floating Product (inches)	Nitrates (mg/l)
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

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-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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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-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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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-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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Sample Location	Date Sampled	Benzene (µg/l)	Toluene (µg /l)	Ethylbenzen e (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	Floating Product (inches)	Nitrates (mg/l)
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

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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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Sample Location	Date Sampled	Benzene (µg/l)	Toluene (µg /l)	Ethylbenzen e (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	Floating Product (inches)	Nitrates (mg/l)
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

TABLE 2
Summary of Historical Groundwater Analytical Data
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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-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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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-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	NoTest	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

TABLE 2
Summary of Historical Groundwater Analytical Data
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Sample Location	Date Sampled	Benzene (µg/l)	Toluene (µg /l)	Ethylbenzen e (µg/l)	Total Xylenes (µg/l)	Total BTEX (µg/l)	Floating Product (inches)	Nitrates (mg/l)
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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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-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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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

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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)
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

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Sample Location	Date Sampled	Benzene (µg/l)	Toluene (µg /l)	Ethylbenzen e (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)	Ethylbenzen e (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

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	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

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-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	-	-	-	-	-	-	-	-	-
	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-4	1	6/11/2010	0	-	-	-	-	-	-	-	-	-
	2	6/11/2010	0	-	-	-	-	-	-	-	-	-
	3	6/11/2010	0	-	-	-	-	-	-	-	-	-
SB-5	1	6/11/2010	0	-	-	-	-	-	-	-	-	-
	2	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	-	-	-	-	-	-	-	-	-

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-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	-	-	-	-	-	-	-	-	-
	4	6/11/2010	43.2	208	-	-	-	-	-	-	-	-
SB-9	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)
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	-	-	-	-	-	-	-	-	-

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)

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										
			Benzene	Toluene	Ethylbenzene	Total Xylenes	m,p-Xylene	o-Xylene	Total BTEX	TPH (C6-C10)	TPH (C10-C28)	TPH (>C28-C40)	Total TPH
			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	mg/kg	mg/kg	mg/kg	mg/kg
			Units==>	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	mg/kg	mg/kg	mg/kg
NMOCD Standard==>			NA	NA	NA	NA	NA	NA	50,000	100	100	100	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	258	257	0.82 J	275	8.46	32.6	19.1	60
GP-3	(14-15')	8/26/2010	ND (7.0)	25	340	13,300	12,000	1,270	13,669	1,090	156	36.2	1,282
GP-3	(15-16')	8/26/2010	ND (290)	ND (290)	107 J	475 J	393 J	82.0 J	872	887	138	56.7	1,082
GP-4	(8-9')	8/26/2010	ND (4.4)	ND (4.4)	ND (4.4)	ND (13)	ND (8.8)	ND (4.4)	ND	ND (5.8)	ND (3.6)	2.64 J	7
GP-4	(13-14')	8/26/2010	132 J	ND (250)	292	3,460	3,320	137 J	4,009	1,090	1,110	205	2,405
GP-4	(16-17')	8/26/2010	36.8	ND (4.1)	68.6	651 J	498 J	153 J	758	277	339	299	915
GP-7	(8-9')	8/26/2010	ND (280)	ND (280)	ND (280)	ND (840)	ND (560)	ND (280)	ND	305	61.3	28.7	395
GP-7	(14-16')	8/26/2010	ND (4.6)	ND (4.6)	3.6 J	20.5	16.8	3.6 J	29	143	85.8	25.6	254
GP-7	(15-16')	8/26/2010	2.8 J	ND (4.6)	ND (4.6)	ND (14)	ND (9.2)	ND (4.6)	14	3.25 J	18.1	13.4	35
GP-8	(9-10')	8/26/2010	ND (4.7)	ND (4.7)	ND (4.7)	6.1 J	5.0 J	1.1 J	13	3.88 J	196	120	320
GP-8	(12-13')	8/26/2010	ND (310)	ND (310)	ND (310)	1,300	1,300	ND (310)	1,765	806	498	85.8	1,390
GP-8	(17-18')	8/26/2010	ND (4.1)	ND (4.1)	ND (4.1)	ND (12)	ND (8.3)	ND (4.1)	12	7.74	137	102	247
GP-11	(12.5-13')	9/1/2010	ND (7.0)	3.3 J	16.7	158	124	34.4	182	1,860	362	90.2	2,312
GP-12	(7-8')	9/1/2010	ND (700)	ND (700)	662 J	4,540	4,070	473 J	5,902	2,510	663	141	3,314
GP-12	(12-13')	9/1/2010	3.7 J	1.4 J	11.6	108	88.7	19.0	125	2,260	379	88.1	2,727
GP-13	(8-9')	9/1/2010	823 J	9,940	2,250	24,300	19,700	4,610	37,313	575	14	6.25	596
GP-15	(4-5')	9/1/2010	9,590	176 J	18,000	143,000	143,000	ND (320)	170,766	5,320	408	78.7	5,807
GP-15	(9.5-10')	9/1/2010	6.7	ND (4.0)	15.3	120	119	1.5 J	144	4.77 J	ND (3.8)	ND (3.8)	9
GP-19	(5.5-6.5')	9/2/2010	ND (13)	ND (13)	ND (13)	ND (39)	ND (26)	ND (13)	ND	ND (15)	11.7	ND (4.2)	21
GP-23	(6-7')	9/2/2010	4.0 J	ND (4.5)	ND (4.5)	52.0	52.0	ND (4.5)	61	ND (5.6)	27.2	22.8	53
GP-25	(7-8')	9/2/2010	ND (6.1)	ND (6.1)	ND (6.1)	ND (18)	ND (12)	ND (6.1)	ND	ND (8.3)	ND (4.0)	ND (4.0)	ND

Notes:

1282 = Concentration exceeds the applicable NMOCD standard.

1. Sample GP-27 (6'-7') is a duplicate of Sample GP-23 (6'-7').
2. "ND" indicates that the analyte was not detected above the reporting limit (shown in parentheses).
3. 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.
4. "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.
5. "BGS" = below ground surface.
6. "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	Drilling Contractor <u>Vironex, Inc.</u>	Logged By <u>D. Heneman (LTE)</u>	Northing <u>2092403.5</u>
	Drilled by <u>G. Grenier</u>	Completion Date <u>August 26, 2010</u>	Easting <u>2727399.0</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>8.75' August 26, 2010</u>

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

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				CL		
2.4			GP-2 (15-16)		(15' - 16') silty clay, 30% silt, medium plasticity, soft, moderately stained, black/gray, some Fe staining, saturated	
16				ML		
1.6						
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
19	0.0					
20	0.0					
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	Drilling Contractor <u>Vironex, Inc.</u>	Logged By <u>D. Heneman (LTE)</u>	Northing <u>2092430.1</u>
	Drilled by <u>G. Grenier</u>	Completion Date <u>August 26, 2010</u>	Easting <u>2727426.9</u>
	Drill Rig <u>Geoprobe 6600</u>	Borehole Depth <u>20'</u>	Surface Elev. (ft) <u>5598.5</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>10' August 26, 2010</u>

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
0.0				ML	(0' - 0.3') NR	
1.0	0.0				(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	
2.0	0.0					
3.0	0.0	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	
4.0	0.0					
5.0	0.0					
6.0	NR				(5' - 6.5') NR	
7.0	0.0				(6.5' - 7.1') 7.5 YR 5/4 brown sandy silt, poorly sorted, 10% med, 10% fine, 10% coarse sand, 70% fine silt	
8.0	0.0	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
9	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	
10	0.0					Saturated at 10'
11	0.0				(10' - 11.7') 7.5 YR 4/3 brown sandy silt to clayey sand, 70% silt, 20% med-coarse sand, 10% fine sand	
12	0.4			CL		
13	1.4	5/5				Heavily stained, strong HC odor 12.4' - 18.6'
14	106.0				(11.7' - 15') sand clay mixture, 60% low plasticity clay, soft, 20% med-coarse sand, 20% find sand, minor silt; 12.4' - 15' heavily oil stained, strong HC odor	
15	761.0		GP-3 (14-15)	ML		
16	684.0		GP-3 (15-16)	CH		
17	232.0				(15' - 15.5') sandy silt, saturated, 75% silt, 20% med-find sand, 5% coarse sand, heavily stained black, strong odor	
18	21.7	5/5			(15.5' - 16') sand-clay mixture, croxy (sic) med plasticity, sort, minor sand - med gr.	
					(16' - 16.75') sand clay mixture, 60% clay, 20% med sand, 20% fine sand, heavily stained black, strong odor, clay med plasticity, soft	
					(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	Drilling Contractor <u>Vironex, Inc.</u>	Logged By <u>D. Heneman (LTE)</u>	Northing <u>2092448.0</u>
	Drilled by <u>G. Grenier</u>	Completion Date <u>August 26, 2010</u>	Easting <u>2727448.2</u>
	Drill Rig <u>Geoprobe 6600</u>	Borehole Depth <u>20'</u>	Surface Elev. (ft) <u>5598.4</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>15' August 26, 2010</u>

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			(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			GP-4 (13-14)		(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			GP-4 (16-17)		(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	Drilling Contractor <u>Vironex, Inc.</u>	Logged By <u>D. Heneman (LTE)</u>	Northing <u>2092369.0</u>
	Drilled by <u>G. Grenier</u>	Completion Date <u>August 26, 2010</u>	Easting <u>2727412.7</u>
	Drill Rig <u>Geoprobe 6600</u>	Borehole Depth <u>15'</u>	Surface Elev. (ft) <u>5596.4</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>5' August 26, 2010</u>

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	5/5			(10' - 14') 7.5 YR 5/4 brown sandy silt, poorly sorted, 70% silt, 20% med-coarse sand, 10% fine sand	
13	0.0					
14	0.0			CL		
15	0.0				(14' - 15') silty clay with minor sand component, 20% silt, 10% sand, 70% clay, low plasticity, soft	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	
1.0				ML		
2.0		5/5			(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						
4.0						
5.0					(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)	
6.0						
7.0						
8.0		5/5				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						
17.8					(8.7' - 10') fat clay, very tight, minor staining, color is a mix of brown/gray, high plasticity	
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				
13				CH		strong HC odor
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
19	1.7			ML		gray staining 18.5' - 19.4' (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'
20	2.5					
21						
22						
23						
24						
25						
26						
27						
28						

Borehole Log



Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-8
 Project No. 1009594.0

Drilling	Drilling Contractor <u>Vironex, Inc.</u>	Logged By <u>D. Heneman (LTE)</u>	Northing <u>2092428.2</u>
	Drilled by <u>G. Grenier</u>	Completion Date <u>August 26, 2010</u>	Easting <u>2727465.2</u>
	Drill Rig <u>Geoprobe 6600</u>	Borehole Depth <u>20'</u>	Surface Elev. (ft) <u>5597.8</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>13' August 26, 2010</u>

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				gray staining could be due to reduction of organic material; presence of some minor roots
8					(7.2' - 9.2') fat clay, tight, high plasticity, stained gray, no odor	

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						
11.6						
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
19	2.8				(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
20	0.0					
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	
2	0.0			ML	(1.2' - 1.3') sandy top soil, minor roots	
3	0.0	3.8/5			(1.3' - 4.4') 7.5 YR 5/6 sandy silt, 70% silt, 20% fine sand, 10% med-coarse sand, poorly sorted, dry	
4	0.0			CL	(4.4' - 5') silty-sandy clay, low plasticity, 10% silt, 10% sand, 80% clay, hard, damp, minor roots	
5	0.0			ML	(5' - 6.1') NR	
6	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	
7	0.0	3.9/5			(7.3' - 9') 7.5 YR 5/6 strong brown, poorly sorted sandy silt, 80% silt, 20% med-fine sand	
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						
12		5/5			(14.2' - 15') 7.5 YR 4/4 sandy silt, 85% silt, 15% med-fine sand, poorly sorted, saturated	No Lab Samples
0.0						
13						
0.0						
14				ML		
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
				CH		
	NR				(0' - 0.75') NR	
1	1.0				(0.75' - 1') 2.5 Y 5/3 light olive brown high plasticity clay, damp	
	1.7					
2		4.25/5				
	1.2					
3					(1' - 5') light olive brown poorly sorted coarse SAND, 60% coarse, 20% med, 20% fine, dry, roots, Fe staining	
	0.9					
4						
	1.8					
5						
	1.3					
6						
	1.2					
7		5/5				
	1.7					
8						

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

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	
9	0.9					Saturated at 9'	
10	1.2				(5' - 15') light olive brown coarse SAND, saturated, 60% coarse, 30% fines, 10% med, varying mineralogy, no structure		
11	0.6						
12	1.6						
13	1.8	5/5					
14	1.3						
15	1.9						
16							
17							
18							
							No Lab Samples

Borehole Log



Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-11
 Project No. 1009594.0

Drilling	Drilling Contractor <u>Vironex, Inc.</u>	Logged By <u>A. Ager (LTE)</u>	Northing <u>2092306.3</u>
	Drilled by <u>G. Grenier</u>	Completion Date <u>September 01, 2010</u>	Easting <u>2727449.5</u>
	Drill Rig <u>Geoprobe 7822DT</u>	Borehole Depth <u>15'</u>	Surface Elev. (ft) <u>5595.7</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>10' September 01, 2010</u>

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
0				SW		
1	NR				(0' - 1.5') NR	
2	NR					
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'	Perched water table 6'
7	1.4					
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')	
9						
38.2						
10					(9' - 11.5')	Saturated at 10'
399.0						
11						
180.0				CL	(11.5' - 12.25')	
12						
1050.0	5/5		GP-11 (12-13)	SW	(12.25' - 13')	
13				CL	(13' - 15')	
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	Drilling Contractor <u>Vironex, Inc.</u>	Logged By <u>A. Ager (LTE)</u>	Northing <u>2092311.3</u>
	Drilled by <u>G. Grenier</u>	Completion Date <u>September 01, 2010</u>	Easting <u>2727463.7</u>
	Drill Rig <u>Geoprobe 7822DT</u>	Borehole Depth <u>15'</u>	Surface Elev. (ft) <u>5594.8</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>11.5' September 01, 2010</u>

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
1	NR			SM	(0' - 1') NR	
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	
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	
4	0.8			SC	(3.75' - 4.25') dark gray clayey sand, dry, med-fine sand component,	
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
6	NR				(5' - 6') NR	
7	4.5				(6' - 7.5') GLEY 2.5 N black clayey sand, damp, med sand content	
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	
				CL		HC odor

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						
NR					(10' - 11') NR	
11						
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						
1620.0		4/5	GP-12 (12-13)	CH	(12' - 12.5') GLEY 1 4/N v. dark gray coarse sand as above	Strong HC odor; sheen on water
13				ML	(12.5' - 12.75') GLEY 1 5/5 GY greenish gray clay, high plasticity, wet	
6.8				SW	(12.75' - 13.5') greenish gray sandy silt, saturated, poorly sorted, 5% coarse, 10% fine, 5% med	
14						
3.8					(13.5' - 15') dark greenish gray med sand, poorly sorted, saturated, 30% coarse, 70% med	
15						
16						
17						
18						

Borehole Log



Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-13
 Project No. 1009594.0

Drilling	Drilling Contractor <u>Vironex, Inc.</u>	Logged By <u>A. Ager (LTE)</u>	Northing <u>2092328.4</u>
	Drilled by <u>G. Grenier</u>	Completion Date <u>September 01, 2010</u>	Easting <u>2727493.1</u>
	Drill Rig <u>Geoprobe 7822DT</u>	Borehole Depth <u>15'</u>	Surface Elev. (ft) <u>5594.7</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>10.5' September 01, 2010</u>

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

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					SW	
65.0				(9.5' - 10') GLEY 1 2.5/5 GY greenish black coarse sand as above, damp		
10				(10' - 10.5') NR		
14.0	NR			(10.5' - 11') 2.5 Y 5/2 grayish brown saturated coarse sand, poorly sorted, 80% coarse as above, sub-rounded		
2.9				(11' - 11.5') GLEY 3/N v. dark gray		
12				(11.5' - 12') very coarse sand		
0.3	4.5/5			CH	(12' - 13.5') 2.5 Y 5/4 light olive gray high plasticity clay, damp	
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	Drilling Contractor <u>Vironex, Inc.</u>	Logged By <u>A. Ager (LTE)</u>	Northing <u>2092338.2</u>
	Drilled by <u>G. Grenier</u>	Completion Date <u>September 01, 2010</u>	Easting <u>2727515.9</u>
Samples	Drill Rig <u>Geoprobe 7822DT</u>	Borehole Depth <u>15'</u>	Surface Elev. (ft) <u>5593.3</u>
	Drilling Method <u>Dual Tube</u>	Borehole Dia. <u>2"</u>	
	Sample Method <u>5' Dual Tube</u>	Sample Interval <u>Continuous</u>	DTP (bgs) _____ DTW (bgs) <u>13' September 01, 2010</u>

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
1	NR			SM	(0' - 2') NR	
2	1.4	3/5			(2' - 3.25') 2.5 Y 4/3 olive brown silty sand, dry, 10% fines, 60% med, roots	
3	1.6			CH	(3.25' - 4.25') olive brown high plasticity clay, dry	
4	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)	
5	NR			CL	(5' - 6.25') NR	
6	1.5				(6.25' - 7') 2.5 Y 5/3 light olive brown sandy clay, wet, 20% fines	
7	1.6	3.75/5			(7' - 7.75') same clay, 5% fines	
8				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	
13	2.2	3.5/5		CL	(11.75' - 12.25') 2.5 Y 6/2 light brownish gray, high plasticity clay, dry	
14	2.0			SW	(12.25' - 13') sandy clay, wet	Saturated at 13'
15	1.8			CH	(13' - 14') light brownish gray coarse sand, poorly sorted 60% coarse, 20% med, 20% fines, saturated	
16					(14' - 15') light brownish gray, high plasticity clay, wet	No Lab Samples
17						
18						

Borehole Log



Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-15
 Project No. 1009594.0

Drilling	Drilling Contractor <u>Vironex, Inc.</u>	Logged By <u>A. Ager (LTE)</u>	Northing <u>2092300.3</u>
	Drilled by <u>G. Grenier</u>	Completion Date <u>September 01, 2010</u>	Easting <u>2727491.2</u>
	Drill Rig <u>Geoprobe 7822DT</u>	Borehole Depth <u>13.25'</u>	Surface Elev. (ft) <u>5591.8</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>9.3' September 01, 2010</u>

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
1	NR			CL	(0' - 2') NR	
2					(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	
3	1.3	3/5		SC/CL	(2.5' - 3.75') GLEY 1 4/10 clayey sand or sandy clay, wet, 40% med sand, 10% fine sand, 50% clay	Slight HC odor
4	348.0				(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	
5	1740.0		GP-15 (4-5)	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'	
6	415.0					Perched water at 6.5' is likely from ditch (dry clay beneath)
7	78.0					
8	110.0	5/5		CH	(7.4' - 7.6') GLEY 1 3/5 GY gray sandy clay (<5% sand), DRY	
				SC		
					(7.6' - 8.3') GLEY 1 4/10 Y d. greenish gray clayey sand, 40% coarse, 20% med, 10% fine, 10% clay, damp	
	7.3			SW		

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
9	4.3				(8.3' - 8.75') GLEY 1 2.5/10 GY greenish black, poorly sorted med sand, damp, sub-rounded	Saturated at 9.3'
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	
10	82.0		GP-15 (9.5-10)		(9.3' - 11') GLEY 1 3/1 Y coarsening upward, v. coarse at 11', saturated at 9.3	
11	17.0			CH		
12	3.8	3.25/3.25			(11' - 13.25') GLEY 1 4/10 y d. greenish gray, high plasticity clay, saturate	TD = 13.25'
13	1.3					
13	0.8					
14						
15						
16						
17						
18						

Borehole Log



Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-16
 Project No. 1009594.0

Drilling	Drilling Contractor <u>Vironex, Inc.</u>	Logged By <u>A. Ager (LTE)</u>	Northing <u>2092315.8</u>
	Drilled by <u>G. Grenier</u>	Completion Date <u>September 01, 2010</u>	Easting <u>2727505.1</u>
	Drill Rig <u>Geoprobe 7822DT</u>	Borehole Depth <u>15'</u>	Surface Elev. (ft) <u>5591.7</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>5.25' September 01, 2010</u>

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

Borehole Log



Client El Paso Corporation
Project Jaquez Site

Borehole ID GP-18
Project No. 1009594.0

Drilling	Drilling Contractor <u>Vironex, Inc.</u>	Logged By <u>A. Ager (LTE)</u>	Northing <u>2092262.4</u>
	Drilled by <u>G. Grenier</u>	Completion Date <u>September 01, 2010</u>	Easting <u>2727441.9</u>
	Drill Rig <u>Geoprobe 7822DT</u>	Borehole Depth <u>15'</u>	Surface Elev. (ft) <u>5591.9</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>6.75' September 01, 2010</u>

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
1	NR			SM	(0' - 2') NR	
2		3/5			(2' - 3') 2.5 Y 5/3 light olive brown silty sand, dry, roots, 30% coarse sand, 10% med, 10% fines	
3					(3' - 3.5') light olive brown, silty sand, dry, roots, no coarse component, 60% fine, 10% med, large root at 3.5'	
4				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					(6' - 6.5') very coarse sand, poorly sorted, subangular	Saturated at 6.75
8		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
9	1.5					
10	2.5					
11	2.0				(6.5' - 15') 2.5 Y 5/3 light olive brown, coarse sand, poorly sorted, 60% coarse, 20% fines, 20% med	
12	2.5					
13	1.4	5/5				
14	1.8					
15	1.4					
16						
17						
18						

No Lab Samples

Borehole Log



Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-19
 Project No. 1009594.0

Drilling	Drilling Contractor <u>Vironex, Inc.</u>	Logged By <u>A. Ager (LTE)</u>	Northing <u>2092289.1</u>
	Drilled by <u>G. Grenier</u>	Completion Date <u>September 02, 2010</u>	Easting <u>2727492.2</u>
	Drill Rig <u>Geoprobe 7822DT</u>	Borehole Depth <u>10'</u>	Surface Elev. (ft) <u>5586.6</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>5' September 02, 2010</u>

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
1	NR			ML	(0' - 2') NR	
2				CL	(2' - 2.5') 7.5 YR 4/4 brown sandy silt, organic (black) staining, 30% fines, damp	
3	0.0	3/5'		CL	(2.5' - 3.25') brown sandy clay, wet	
4	2.2			SW	(3.25' - 4.5') 7.5 YR 3/2 dark brown, low plasticity clay, roots, organic staining (black), wet	
5	0.2			SW	(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		GP-19 (5.5-6.5)	CL	(5' - 7.75') 2.5 Y 6/2 light brownish gray coarse sand, saturated "soupy", p. sorted, 60% coarse, 20% med, 10% fines, subangular	
7	0.0			CL		
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
9	0.0				(7.75' - 9.75') light brownish gray sandy clay, 20% fines, 5% coarse, saturated, various interbedded w/fat clay layers (<1" thick)	
10	0.0			CH	(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	Drilling Contractor <u>Vironex, Inc.</u>	Logged By <u>A. Ager (LTE)</u>	Northing <u>2092299.2</u>
	Drilled by <u>G. Grenier</u>	Completion Date <u>September 02, 2010</u>	Easting <u>2727518.7</u>
	Drill Rig <u>Geoprobe 7822DT</u>	Borehole Depth <u>15'</u>	Surface Elev. (ft) <u>5585.8</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'</u> <u>September 02, 2010</u>

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
1	NR			SM	(0' - 1.5') NR	
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	
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
4	0.8			CL	(3.5' - 5') light olive brown, wet sandy clay (10% fines), low plasticity	
5	1.5					
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'	
7	1.6					Saturated at 7'
8	2.5	5/5'		ML	(7.25' - 7'6") 2.5 Y 6/4 light yellowish brown, sandy silt, wet	
				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
9	1.3			SW	(8.75' - 10') poorly sorted sand, 60% coarse, 20% med, 20% fines, saturated, subangular, minor clay content, light yellowish brown	No Lab Samples
10	1.7			CH		
11	2.1			SM	(10' - 11.25') 2/5 Y 6/4 light yellowish brown, high plasticity clay, damp	
12	0.1					
13	1.6	5/5'			(111.25' - 15') 2.5' 2.5 Y 4/4 olive brown, fine silty sand, saturated, 20% fine content (soupy)	
14	0.4					
15	1.4					
16						
17						
18						

Borehole Log



Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-23
 Project No. 1009594.0

Drilling	Drilling Contractor <u>Vironex, Inc.</u>	Logged By <u>A. Ager (LTE)</u>	Northing <u>2092222.7</u>
	Drilled by <u>G. Grenier</u>	Completion Date <u>September 02, 2010</u>	Easting <u>2727492.4</u>
	Drill Rig <u>Geoprobe 7822DT</u>	Borehole Depth <u>15'</u>	Surface Elev. (ft) <u>5587.2</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>8.5' September 02, 2010</u>

DEPTH (ft)	PID	RECOV	LAB SAMPLE	ASTM CLASS	SOIL / ROCK DESCRIPTION	REMARKS
	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	
	0.2	4.25/5'			(2' - 3') dry, more roots, white staining, near roots	
3	0.0				(3' - 4') damp again	
4	0.0			CL	(4' - 5') brown sandy clay, med to fine content (30%), damp	
5				SW	(5' - 6') NR	
6	215.0				(6' - 6.125') 2.5 Y 5/2 grayish brown, poorly sorted med sand, 80% med, 20% fines, subangular, damp	Likely fill material
7	48.6	4/5'	GP-23 (6-7); GP-23 (6-7) Blind Duplicates		(6.25' - 7.5') GLEY 1 3/N v. dark gray, fining upward sand, primarily coarse content, damp, 6.75' - 7.5' saturated	6.7' to 7.5' is 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
9	0.0					Saturated at 8.5'
10	0.0					
11	4.0				(8.5' - 11.5') saturated, coarse sand, dark gray, 80% coarse, 10% med, 10% fines, 8.5' saturated	
12	0.0			SM		
13	0.0	5/5'				
14	0.0				(11.5' - 15') alternating dark gray to black layers of coarse sand to silty sand, saturated	
15	0.0					
16						
17						
18						

Borehole Log



Client El Paso Corporation
 Project Jaquez Site

Borehole ID GP-24
 Project No. 1009594.0

Drilling	Drilling Contractor <u>Vironex, Inc.</u>	Logged By <u>A. Ager (LTE)</u>	Northing <u>2092240.2</u>
	Drilled by <u>G. Grenier</u>	Completion Date <u>September 02, 2010</u>	Easting <u>2727509.8</u>
	Drill Rig <u>Geoprobe 7822DT</u>	Borehole Depth <u>15'</u>	Surface Elev. (ft) <u>5585.3</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>6.75' September 02, 2010</u>

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	
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	Likely fill material

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				(9.5' - 10') GLEY 1 3/N v. dark gray med sand, saturated	
12	1.1			SP/SM		
13	0.3	5/5'			(10' - 13.75') GLEY 1 3/N v. dark gray alternating (thinly banded) coarse sands and silty sands, saturated	
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	Drilling Contractor <u>Vironex, Inc.</u>	Logged By <u>A. Ager (LTE)</u>	Northing <u>2092255.7</u>
	Drilled by <u>G. Grenier</u>	Completion Date <u>September 02, 2010</u>	Easting <u>2727537.1</u>
	Drill Rig <u>Geoprobe 7822DT</u>	Borehole Depth <u>10'</u>	Surface Elev. (ft) <u>5584.6</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>6.25' September 02, 2010</u>

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
9	0.5			(Patterned)		
10	0.4					
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	Drilling Contractor <u>LT Environmental, Inc.</u>	Logged By <u>A. Ager (LTE)</u>	Northing <u>2092227.6</u>
	Drilled by <u>A. Ager</u>	Completion Date <u>September 01, 2010</u>	Easting <u>2727518.9</u>
Samples	Drill Rig <u>-</u>	Borehole Depth <u>8'</u>	Surface Elev. (ft) <u>5585.3</u>
	Drilling Method <u>Hand Auger</u>	Borehole Dia. <u>2"</u>	
Sample Method <u>Grab</u>			Sample Interval <u>Continuous</u>
			DTP (bgs) _____
			DTW (bgs) <u>5.83' September 01, 2010</u>

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	(2' - 3') strong brown 7.5 YR 5/6 very fine sandy silt, well sorted/mod, 15% fine sand, 85% silt, damp	
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					(4' - 5') brown 7.5 YR 4/4 same as above, possible organic concentration	
8					(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'	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: M1
 Client: MWH Date: 6/10/2010 Time: 12:38
 Project Manager: Julie Linn, RG Sampler's Name: Julie Linn, RG

Measuring Point: TOC Depth to Water: 2.98 ft Depth to Product: 0 ft
 Well Diameter: 4" Total Depth: 15.37 ft Product Thickness: 0 ft
 Water Column Height: 12.39 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
12.39 x 0.65	8.05x 3		24.15 gal

Time (military)	pH (su)	SC (us)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. gal	Comments/Flow Rate
12:45	7.00	224	70.5				1.25	clear
	6.87	225	66.7				2.5	orangish particles
	6.83	226	63.0				3.75	greyish particles
	6.80	227	58.6				5	greyish particles
12:56	7.05	221	56.3				9	bailing dry
Final:								
12:56	7.05	221	53.2				9	bailing dry

COMMENTS:

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

Water Disposal: Rio Vista

Sample ID: M1 Sample Time: 12:56

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: 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 Depth to Product: _____ ft
 Well Diameter: 4" Total Depth: 15.06 ft Product Thickness: _____ ft
 Water Column Height: 12.43 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	8.07x 3		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: Jaquez Location: Jaquez Well No: M5
 Client: MWH Date: 6/10/2010 Time: 15:02
 Project Manager: Julie Linn, RG Sampler's Name: Julie Linn, RG

Measuring Point: TOC Depth to Water: 2.77 ft Depth to Product: 0 ft
 Well Diameter: 4" Total Depth: 15.04 ft Product Thickness: 0 ft
 Water Column Height: 12.27 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
12.27 x 0.65	7.98x 3		23.94 gal

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: M6
 Client: MWH Date: 6/10/2010 Time: 16:18
 Project Manager: Julie Linn, RG Sampler's Name: Julie Linn, RG

Measuring Point: TOC Depth to Water: 6.04 ft Depth to Product: 0 ft
 Well Diameter: 4" Total Depth: 8.6 ft Product Thickness: 0 ft
 Water Column Height: 2.56 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
2.56 x 0.65	1.66x 3		4.98 gal

Time (military)	pH (su)	SC (us)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. gal	Comments/Flow Rate
16:21	6.95	1673	62.2				0.52	slightly grey
	6.97	1844	59.9				0.79	slightly grey w/fuel odor
16:32	7.03	1942	59.0				1.05	slightly grey w/fuel odor
Final:								
16:32	7.03	1942	59				1.05	slightly grey w/fuel odor

COMMENTS: Roots

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

Water Disposal: Rio Vista

Sample ID: M6 Sample Time: 16:32

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	grey & 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	7.26x 3		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-4
 Client: MWH Date: 6/10/2010 Time: 9:00
 Project Manager: Julie Linn, RG Sampler's Name: Julie Linn, RG

Measuring Point: TOC Depth to Water: 11.36 ft Depth to Product: 0 ft
 Well Diameter: 4" Total Depth: 22.23 ft Product Thickness: 0 ft
 Water Column Height: 10.87 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
10.87 x .65	7.06x 3		21.18 gal

Time (military)	pH (su)	SC (us)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. gal	Comments/Flow Rate
9:00	6.84	317	57.4				1.25	clear
	6.84	355	55.2				2.5	slightly tan
	6.96	342	53.6				3.75	slightly tan
	7.03	402	53.1				5	greyish
	7.18	399	53.6				10	grey-black
	7.27	517	54.9				12.5	grey-black
	7.31	540	53.4				13.5	clear
	7.26	541	55.9				15	clear
9:23	7.29	545	53.8				15.25	Clear
Final:								
9:23	7.29	544	55.8				18	clear

COMMENTS:

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

Water Disposal: Rio Vista

Sample ID: R4 Sample Time: 9:23

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 150150

0818 arrive @ Jaquez

0830 Set up on R4 (4" well diameter)

TD 22.23' B Tot PVC

0857 DTW 11.36

	pH	Temp (°F)	Cond (µs)	Vol. purged (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	greyish
	7.18	53.6	399 µs	10.0 gal	grey-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 Tot Note - Roots in well

DTW 9.43' B Tot PVC

	pH	Temp (°F)	Cond (µs)	Vol purged	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	
0945	6.77	58.5	275	4 gallons	Bailing Dry

0945 Sample R6

0952 on site R1 (4" well diameter)

TD well 25.10' BTCL PVC

0955 DTW 12.22' BTCL PVC

	pH	Temp °F	Cond (µs)	Vol purged	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	" clear
	6.31	54.5	433	25.00 gal	"
				27.00 gal	

1026 collect Sample R1

46

1035 on site R2 (4" well diameter) 113

1039 Bottom of well 22.11' BT& PVC
DTW 10.94' BT& PVC 11

pH	cond (µs)	Temp (°F)	Volume	Comments
6.92	1377	56.3	1.25 gal	clear
6.93	1435	52.7	2.50 gal	slightly cloudy
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	↓ starting to Bail Dry
7.09	1047	54.5	13.00 gal	
7.22	938	53.4	13.5 gal	

1058 sample R2

1102 on site R3 (4" well diameter) 12

Bottom of well 22.18' BT& PVC

1103 DTW 11.83' BT& PVC 12

pH	cond (µs)	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	

1127 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
7.09	62.6	320	2 liter	orange & cloudy
7.06	58.1	322	3 liter	
7.02	55.8	326	4 liter	grey & cloudy
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	52.2	317	6.0 gallon	
7.02	51.4	317	6.5 gallon	

1238 Sample M7

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	orange-ish
	6.83	63.0	226	3.75	grey-ish 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	
7.48	68.5	449	3.75	
7.25	64.6	500	5.0 gal	
7.34	56.5	481	10.0 gal	↓ 2 gal - dark grey
7.43	54.9	462	12.5 gal	↓ bailing dry

1453 sample M4

1502 at M5 (4" well Diameter)

pH	Temp	conductivity (us)	volume (gal)	comments
7.51	69.8	241	1.25	clear
6.90	61.5	300	2.50	↓
6.82	56.8	325	3.75	Slightly gray
6.77	54.5	312	5.0 gal	
6.73	52.9	297	10.0 gal	more clear
6.68	52.5	361	15.0 gal	↓
6.72	51.8	379	20.0 gal	more dark grey
6.76	52.7	386	24.0 gal	more clear

1520 sample M5

50

1532 at M2 (4" well diameter)

pH	Temp (°F)	Cond (µs)	Volume (gallons)	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	flakes/mud
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 od
7.03	59.0	1942	4 liters	fuel odor & pebbles

1632 sample M6

1646 Iv Jaquer

1725 arrive @ office 150234

6/11/10

51

0745 Iv office 150234

0828 arrive @ Jaquez site 150257

Ambient air survey - Nothing detected meter read 0.0 ppm throughout site north of canal

0924 Set up on SB-1 36°45' 01.478 N

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' 00.694 N 107°49' 06.499 W

	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 Setup 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

1201 $36^{\circ}44'59.607''N$ $107^{\circ}49'06.974''W$ 1202 Sample^{SO₂} @ 1' PID 0.0

1206 Sample SB-5 @ 2' PID 0.0 saturated

1208 Set up on SB-6 Soil Sample

1209 $36^{\circ}44'59.452''N$ $107^{\circ}49'06.842''W$

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 Jayuez Soil Sampling

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'	22.7
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 Jaquez 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 Jaquez residence per John Jaquez

1829 lv Jaquez site

1906 arrive @ office 150286



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 blue ink that reads "Julie Linn". The signature is written in a cursive, flowing style.

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, 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	R1
F74410-3	06/11/10	16:25 JL	06/15/10	AIR	Air	AMBIENT



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: PASSIVE 4	
Lab Sample ID: F74410-1	Date Sampled: 06/11/10
Matrix: AIR - Air	Date Received: 06/15/10
Method: EPA TO-3	Percent Solids: n/a
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 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: R1		Date Sampled: 06/11/10
Lab Sample ID: F74410-2		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	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
 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:

- Certification Exceptions
- Chain of Custody

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: F74410 CLIENT: MWH PROJECT: ?
 DATE/TIME RECEIVED: 6/15/10 9:00 {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 N/A 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 CEL Galishe REVIEWER SIGNATURE/DATE 6/15/10

NF 10/09

RECEIPT CONFIRMATION 100609 (2).xls

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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	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

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%

4.2.1
4

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 ppmv	DUP Q	Q	RPD	Limits
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.

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 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

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: R4	
Lab Sample ID: T54504-1	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	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

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Client Sample ID: R6		Date Sampled: 06/10/10
Lab Sample ID: T54504-2		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	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

Client Sample ID: R1		
Lab Sample ID: T54504-3		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	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	
Lab Sample ID: T54504-4	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	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

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

Run #1	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 #1	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	
Lab Sample ID: T54504-6	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	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

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	
Lab Sample ID: T54504-8	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	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

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

Client Sample ID: M4	
Lab Sample ID: T54504-10	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	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

Client Sample ID: M5		
Lab Sample ID: T54504-11		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	F026599.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	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

Client Sample ID: M2	
Lab Sample ID: T54504-12	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	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

Client Sample ID: TRIP BLANK		
Lab Sample ID: T54504-14		Date Sampled: 06/10/10
Matrix: AQ - Trip Blank 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	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

GC/MS Volatiles

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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	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%

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	Results	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%

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%

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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%

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 ug/l	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
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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 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
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 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: 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.

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

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 8260B	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	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	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: 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 M SW846 3550B		
Project: MWHCODE: San Juan River Basin Program		

	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							

	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

Report of Analysis

32
3

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

32
3

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

	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							

	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

Report of Analysis

32
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		

	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							

	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	
Lab Sample ID: T54517-3	Date Sampled: 06/11/10
Matrix: SO - Soil	Date Received: 06/15/10
Method: SW846 8260B	Percent Solids: 80.4
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

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

	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							

	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
 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 8015 M SW846 3550B		
Project: MWHCODE: San Juan River Basin Program		

	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							

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

Run #	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							

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

	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							

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

	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							

	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
 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

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 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

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

Summary of Discrepancies:

TECHNICIAN SIGNATURE/DATE: Daniel Ruddleston 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:

How to handle forms and sample management

4.1
4

SAMPLE RECEIPT LOG

JOB #: T54517 DATE/TIME RECEIVED: 6-15-10 1300
 CLIENT: MWH INITIALS: ORA

COOLER#	SAMPLE ID	FIELD ID	DATE	MATRIX	VOL	BOTTLE #	LOCATION	PRESERV	PH
1	1	SB 3-5	6-11-10 1028	SO	402	1	2-76	① 2 3 4 5 6 7 8	<2 >12
↓	1	SB 3-5	↓ 1028	↓	↓	2	VR	① 2 3 4 5 6 7 8	<2 >12
↓	2	SB 9-4	↓ 1312	↓	↓	1	2-76	① 2 3 4 5 6 7 8	<2 >12
↓	2	SB 9-4	↓ 1312	↓	↓	2	VR	① 2 3 4 5 6 7 8	<2 >12
↓	3	SB 11-32	↓ 1405	↓	↓	1	2-76	① 2 3 4 5 6 7 8	<2 >12
↓	3	SB 11-32	↓ 1405	↓	↓	2	VR	① 2 3 4 5 6 7 8	<2 >12
↓	4	SB 6-1	↓ 1211	↓	↓	1	2-76	① 2 3 4 5 6 7 8	<2 >12
↓	4	SB 6-1	↓ 1211	↓	↓	2	VR	① 2 3 4 5 6 7 8	<2 >12
<i>ORA 6-15-10</i>									
								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
								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



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: 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%

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	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%

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%

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%

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	Spike Q 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%

5.3.2
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: 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%

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%

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

7



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 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: 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

- 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

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

Run #1	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 #1	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'	
Lab Sample ID: T58817-1	Date Sampled: 08/26/10
Matrix: SO - Soil	Date Received: 08/27/10
Method: SW846 8015	Percent Solids: 83.2
Project: MWHCODE: San Juan River Basin Program	

	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							

	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

3.1
3

Client Sample ID: GP-7-15'-16'	
Lab Sample ID: T58817-1	Date Sampled: 08/26/10
Matrix: SO - Soil	Date Received: 08/27/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 83.2
Project: MWHCODE: San Juan River Basin Program	

	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							

	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
 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'	
Lab Sample ID: T58817-2	Date Sampled: 08/26/10
Matrix: SO - Soil	Date Received: 08/27/10
Method: SW846 8260B	Percent Solids: 82.4
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'	
Lab Sample ID: T58817-2	Date Sampled: 08/26/10
Matrix: SO - Soil	Date Received: 08/27/10
Method: SW846 8015	Percent Solids: 82.4
Project: MWCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0001646.D	10	08/31/10	AT	n/a	n/a	GBB97
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.11 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	305	70	4.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	70%		46-127%		
98-08-8	aaa-Trifluorotoluene	115%		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

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

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 #1	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 #1	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
 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 14' -16'	
Lab Sample ID: T58817-3	Date Sampled: 08/26/10
Matrix: SO - Soil	Date Received: 08/27/10
Method: SW846 8015	Percent Solids: 73.0
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
 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 14' -16'	
Lab Sample ID: T58817-3	Date Sampled: 08/26/10
Matrix: SO - Soil	Date Received: 08/27/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 73.0
Project: MWHCODE: San Juan River Basin Program	

	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							

	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
 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 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'	
Lab Sample ID: T58817-4	Date Sampled: 08/26/10
Matrix: SO - Soil	Date Received: 08/27/10
Method: SW846 8015	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	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

3.4
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	

	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							

	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
 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-8 12' -13'	
Lab Sample ID: T58817-5	Date Sampled: 08/26/10
Matrix: SO - Soil	Date Received: 08/27/10
Method: SW846 8260B	Percent Solids: 76.0
Project: MWHCODE: San Juan River Basin Program	

Run #	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							

Run #	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

Client Sample ID: GP-8 12' -13'	
Lab Sample ID: T58817-5	Date Sampled: 08/26/10
Matrix: SO - Soil	Date Received: 08/27/10
Method: SW846 8015	Percent Solids: 76.0
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
3

Client Sample ID: GP-8 12' -13'	
Lab Sample ID: T58817-5	Date Sampled: 08/26/10
Matrix: SO - Soil	Date Received: 08/27/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 76.0
Project: MWHCODE: San Juan River Basin Program	

	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							

	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

Client Sample ID: GP-8 17' -18'	
Lab Sample ID: T58817-6	Date Sampled: 08/26/10
Matrix: SO - Soil	Date Received: 08/27/10
Method: SW846 8260B	Percent Solids: 84.5
Project: MWHCODE: San Juan River Basin Program	

Run #1	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 #1	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
3

Client Sample ID: GP-8 17' -18'	
Lab Sample ID: T58817-6	Date Sampled: 08/26/10
Matrix: SO - Soil	Date Received: 08/27/10
Method: SW846 8015	Percent Solids: 84.5
Project: MWCODE: San Juan River Basin Program	

	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							

	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
 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'	
Lab Sample ID: T58817-6	Date Sampled: 08/26/10
Matrix: SO - Soil	Date Received: 08/27/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 84.5
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

Client Sample ID: GP-4 8' -9'		
Lab Sample ID: T58817-7		Date Sampled: 08/26/10
Matrix: SO - Soil		Date Received: 08/27/10
Method: SW846 8260B		Percent Solids: 90.7
Project: MWHCODE: San Juan River Basin Program		

Run #1	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 #1	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

37
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

37
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
 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-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

Client Sample ID: GP-4 16'-17'	
Lab Sample ID: T58817-8	Date Sampled: 08/26/10
Matrix: SO - Soil	Date Received: 08/27/10
Method: SW846 8015	Percent Solids: 79.8
Project: MWCODE: San Juan River Basin Program	

	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							

	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
 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'	
Lab Sample ID: T58817-8	Date Sampled: 08/26/10
Matrix: SO - Soil	Date Received: 08/27/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 79.8
Project: MWHCODE: San Juan River Basin Program	

	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							

	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

Client Sample ID: GP-4 13'-14'	
Lab Sample ID: T58817-9	Date Sampled: 08/26/10
Matrix: SO - Soil	Date Received: 08/27/10
Method: SW846 8260B	Percent Solids: 83.6
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
 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-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	

	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							

	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
 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-4 13'-14'	
Lab Sample ID: T58817-9	Date Sampled: 08/26/10
Matrix: SO - Soil	Date Received: 08/27/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 83.6
Project: MWHCODE: San Juan River Basin Program	

	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							

	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

Client Sample ID: GP-3 15'-16'	
Lab Sample ID: T58817-10	Date Sampled: 08/26/10
Matrix: SO - Soil	Date Received: 08/27/10
Method: SW846 8260B	Percent Solids: 79.2
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

Client Sample ID: GP-3 15' -16'	
Lab Sample ID: T58817-10	Date Sampled: 08/26/10
Matrix: SO - Soil	Date Received: 08/27/10
Method: SW846 8015	Percent Solids: 79.2
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0001634.D	10	08/30/10	AT	n/a	n/a	GBB96
Run #2 ^a	BB0001694.D	10	09/01/10	AT	n/a	n/a	GBB100

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.25 g	5.0 ml	100 ul
Run #2	5.25 g	5.0 ml	100 ul

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	887	73	4.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	169% ^b	166% ^b	46-127%
98-08-8	aaa-Trifluorotoluene	203% ^b	201% ^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

Client Sample ID: GP-3 15' -16'	
Lab Sample ID: T58817-10	Date Sampled: 08/26/10
Matrix: SO - Soil	Date Received: 08/27/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 79.2
Project: MWHCODE: San Juan River Basin Program	

	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							

	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

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
 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'		
Lab Sample ID: T58817-11		Date Sampled: 08/26/10
Matrix: SO - Soil		Date Received: 08/27/10
Method: SW846 8015		Percent Solids: 74.3
Project: MWHCODE: San Juan River Basin Program		

	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							

	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'	
Lab Sample ID: T58817-11	Date Sampled: 08/26/10
Matrix: SO - Soil	Date Received: 08/27/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 74.3
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

Client Sample ID: GP-2 11'-12'	
Lab Sample ID: T58817-12	Date Sampled: 08/26/10
Matrix: SO - Soil	Date Received: 08/27/10
Method: SW846 8260B	Percent Solids: 85.2
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

Client Sample ID: GP-2 11'-12'	
Lab Sample ID: T58817-12	Date Sampled: 08/26/10
Matrix: SO - Soil	Date Received: 08/27/10
Method: SW846 8015	Percent Solids: 85.2
Project: MWHCODE: San Juan River Basin Program	

	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							

	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
 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-2 11'-12'	
Lab Sample ID: T58817-12	Date Sampled: 08/26/10
Matrix: SO - Soil	Date Received: 08/27/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 85.2
Project: MWHCODE: San Juan River Basin Program	

	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							

	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

Client Sample ID: GP-2 (0-5')		
Lab Sample ID: T58817-13		Date Sampled: 08/26/10
Matrix: SO - Soil		Date Received: 08/27/10
Method: SW846 8260B		Percent Solids: 86.5
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

Client Sample ID: GP-2 (0-5')	
Lab Sample ID: T58817-13	Date Sampled: 08/26/10
Matrix: SO - Soil	Date Received: 08/27/10
Method: SW846 8015	Percent Solids: 86.5
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

Client Sample ID: GP-2 (0-5')	
Lab Sample ID: T58817-13	Date Sampled: 08/26/10
Matrix: SO - Soil	Date Received: 08/27/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 86.5
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

Client Sample ID: 260810TB02	
Lab Sample ID: T58817-14	Date Sampled: 08/26/10
Matrix: SO - Trip Blank Soil	Date Received: 08/27/10
Method: SW846 8260B	Percent Solids: n/a
Project: MWHCODE: San Juan River Basin Program	

Run #1	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 #1	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

Client Sample ID: 260810TB02	
Lab Sample ID: T58817-14	Date Sampled: 08/26/10
Matrix: SO - Trip Blank Soil	Date Received: 08/27/10
Method: SW846 8015	Percent Solids: n/a
Project: MWHCODE: San Juan River Basin Program	

	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							

	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
 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

SAMPLE RECEIPT LOG

JOB #: T58817 DATE/TIME RECEIVED: 8-27-10 0930
 CLIENT: MWH Americas INITIALS: DRA

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

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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%

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	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%

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	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%

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%

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

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%

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	Spike Q 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%

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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%

5.3.2
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
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: 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%

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%

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

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%

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.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	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%

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%

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.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	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%

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%

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%

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.D1		08/30/10	AT	n/a	n/a	GBB96
T58836-4MSD	BB0001621.D1		08/30/10	AT	n/a	n/a	GBB96
T58836-4	BB0001619.D1		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	mg/kg	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%

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.D1		08/31/10	AT	n/a	n/a	GBB99
T58920-5AMSD	BB0001659.D1		08/31/10	AT	n/a	n/a	GBB99
T58920-5A	BB0001657.D1		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	mg/kg	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%

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.D1		09/01/10	AT	n/a	n/a	GBB100
T59027-1MSD	BB0001688.D1		09/01/10	AT	n/a	n/a	GBB100
T59027-1	BB0001685.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	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%

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 mg/kg	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 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: 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	
Lab Sample ID: T58848-4	Date Sampled: 08/26/10
Matrix: AQ - Equipment Blank	Date Received: 08/28/10
Method: SW846 8260B	Percent Solids: n/a
Project: MWHCODE: San Juan River Basin Program	

Run #1	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 #1	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
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		
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
 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: EQUIPMENT RINSE	
Lab Sample ID: T58848-4	Date Sampled: 08/26/10
Matrix: AQ - Equipment Blank	Date Received: 08/28/10
Method: SW846 8015 M SW846 3510C	Percent Solids: n/a
Project: MWHCODE: San Juan River Basin Program	

	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							

	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 #1	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 #1	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

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 8015		
Project: MWHCODE: San Juan River Basin Program		

	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							

	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
 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 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 # **T58848**

Client / Reporting Information		Project Information										Requested Analyses										Matrix Codes		
Company Name MWH Americas		Project Name Jaquez										<div style="display: flex; flex-direction: column; align-items: center;"> BTEX 8021 TPH 8015 8260 </div>										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-Tip Blank		
Street Address 1801 California, Ste 290		Street Jaquez																						
City State Zip Denver CO 80202		Billing Information (if different from Report to) Company Name																						
Project Contact Ted Smith		Project #																						
Phone # Fax # 303-291-2276		Client Purchase Order #																						
Sampler(s) Name(s) Devon H		Project Manager Ashley Ayer																						
Accutest Sample #	Field ID / Point of Collection	Date	Time	Sampled By	Matrix	# of bottles	HCl	NH ₄ H	ZANADH	HNO ₃	H ₂ SO ₄	HNO ₂	HNO ₃	NO ₂	NO ₃	DI Water	MEDH	TSP	NaHCO ₃	ENCORE	OTHER	LAB USE ONLY		
1	GP-2 11-12'	8/26/10	16:00	DH	SO	2																		
2	GP-2 15-16'	8/26/10	16:30	DH	SO	2																		
3	GP-2 9-10'	8/26/10	15:40	DH	SO	2																		
4	Equipment Rinse	8/26/10	17:10	DH	SO	2																		
5	Field Blank	8/26/10	18:20	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 <small>Emergency & Rush TIA data available VIA Lablink</small>		Approved By (Accutest PM): / Date: _____ <input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> TRRP <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> EDD Format <input type="checkbox"/> FULT1 (Level 3+4) <input type="checkbox"/> Other _____ <input type="checkbox"/> REDT1 (Level 3+4) <input type="checkbox"/> Commercial "C" <small>Commercial "A" = Results Only Commercial "B" = Results + QC Summary Commercial "C" = Results + QC & Surrogate Summary</small>																						
Sample Custody must be documented below each time samples change possession, including courier delivery.																								
Relinquished by Sampler: 1	Date Time: 14:00 8/27/10	Received By: 1	Relinquished By: 2	Date Time: 1050 8-28-10	Received By: 2																			
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4																			
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	<input type="checkbox"/> Intact Preserved where applicable <input type="checkbox"/> Not Intact <input type="checkbox"/> Cooler Temp. 2.3°C																				

4.1 4

T58848: Chain of Custody

Page 1 of 3

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 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 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

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: Juneil Hudalleto 8-28-10

INFORMATION AND SAMPLE LABELING VERIFIED BY: _____

CORRECTIVE ACTIONS

Client Representative Notified: _____ Date: _____
 By Accutest Representative: _____ Via: Phone Email
 Client Instructions: _____

I:\mwalkert\forms\samplemanagement SM023 Revised 8/11/10



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		40Z	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		40Z	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

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%

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



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%

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%

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%

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%

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%



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%

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



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 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

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3

Client Sample ID: GP-19 (5.5-6.5')	
Lab Sample ID: T59243-1	Date Sampled: 09/02/10
Matrix: SO - Soil	Date Received: 09/03/10
Method: SW846 8260B	Percent Solids: 76.6
Project: MWHCODE: San Juan River Basin Program	

Run #1	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 #1	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
 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-19 (5.5-6.5')	
Lab Sample ID: T59243-1	Date Sampled: 09/02/10
Matrix: SO - Soil	Date Received: 09/03/10
Method: SW846 8015	Percent Solids: 76.6
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
 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-19 (5.5-6.5')	
Lab Sample ID: T59243-1	Date Sampled: 09/02/10
Matrix: SO - Soil	Date Received: 09/03/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 76.6
Project: MWHCODE: San Juan River Basin Program	

	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							

	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

32
3

Client Sample ID: GP-25 (7-8')	
Lab Sample ID: T59243-2	Date Sampled: 09/02/10
Matrix: SO - Soil	Date Received: 09/03/10
Method: SW846 8260B	Percent Solids: 82.6
Project: MWHCODE: San Juan River Basin Program	

Run #1	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 #1	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
 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-25 (7-8')	
Lab Sample ID: T59243-2	Date Sampled: 09/02/10
Matrix: SO - Soil	Date Received: 09/03/10
Method: SW846 8015	Percent Solids: 82.6
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

32
3

Client Sample ID: GP-25 (7-8')	
Lab Sample ID: T59243-2	Date Sampled: 09/02/10
Matrix: SO - Soil	Date Received: 09/03/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 82.6
Project: MWHCODE: San Juan River Basin Program	

	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							

	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	
Lab Sample ID: T59243-3	Date Sampled: 09/02/10
Matrix: AQ - Water	Date Received: 09/03/10
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	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

Client Sample ID: GP-23 RINSE BLANK	
Lab Sample ID: T59243-3	Date Sampled: 09/02/10
Matrix: AQ - Water	Date Received: 09/03/10
Method: SW846 8015	Percent Solids: n/a
Project: MWHCODE: San Juan River Basin Program	

	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							

	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
 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	
Lab Sample ID: T59243-3	Date Sampled: 09/02/10
Matrix: AQ - Water	Date Received: 09/03/10
Method: SW846 8015 M SW846 3510C	Percent Solids: n/a
Project: MWHCODE: San Juan River Basin Program	

	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							

	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
 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:	TRIP BLANK #1 09-02-1010	
Lab Sample ID:	T59243-5	Date Sampled: 09/01/10
Matrix:	AQ - Trip Blank Water	Date Received: 09/03/10
Method:	SW846 8260B	Percent Solids: n/a
Project:	MWHCODE: San Juan River Basin Program	

Run #1	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 #1	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		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 8015		
Project: MWHCODE: San Juan River Basin Program		

	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							

	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
 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-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')	
Lab Sample ID: T59243-6	Date Sampled: 09/01/10
Matrix: SO - Soil	Date Received: 09/03/10
Method: SW846 8015	Percent Solids: 80.3
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')	
Lab Sample ID: T59243-6	Date Sampled: 09/01/10
Matrix: SO - Soil	Date Received: 09/03/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 80.3
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
 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-15 (9.5-10')		
Lab Sample ID: T59243-7		Date Sampled: 09/01/10
Matrix: SO - Soil		Date Received: 09/03/10
Method: SW846 8260B		Percent Solids: 86.7
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

Client Sample ID: GP-15 (9.5-10')		
Lab Sample ID: T59243-7		Date Sampled: 09/01/10
Matrix: SO - Soil		Date Received: 09/03/10
Method: SW846 8015		Percent Solids: 86.7
Project: MWHCODE: San Juan River Basin Program		

	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							

	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
 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

37
3

Client Sample ID: GP-15 (9.5-10')	
Lab Sample ID: T59243-7	Date Sampled: 09/01/10
Matrix: SO - Soil	Date Received: 09/03/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 86.7
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
 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

38
3

Client Sample ID: GP-11 (12.5-13')	
Lab Sample ID: T59243-8	Date Sampled: 09/01/10
Matrix: SO - Soil	Date Received: 09/03/10
Method: SW846 8260B	Percent Solids: 83.5
Project: MWHCODE: San Juan River Basin Program	

Run #1	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 #1	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')	
Lab Sample ID: T59243-8	Date Sampled: 09/01/10
Matrix: SO - Soil	Date Received: 09/03/10
Method: SW846 8015	Percent Solids: 83.5
Project: MWHCODE: San Juan River Basin Program	

	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							

	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

3.8
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 M SW846 3550B		
Project: MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF201059.D	1	09/04/10	HD	09/03/10	OP15901	GIF1088
Run #2							

	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)	362	3.9	3.2	mg/kg	
	TPH (> C28-C40)	90.2	3.9	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	84%		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
3

Client Sample ID: GP-12 (12-13')	
Lab Sample ID: T59243-9	Date Sampled: 09/01/10
Matrix: SO - Soil	Date Received: 09/03/10
Method: SW846 8260B	Percent Solids: 83.7
Project: MWHCODE: San Juan River Basin Program	

Run #1	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 #1	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

3.9
3

Client Sample ID: GP-12 (12-13')	
Lab Sample ID: T59243-9	Date Sampled: 09/01/10
Matrix: SO - Soil	Date Received: 09/03/10
Method: SW846 8015	Percent Solids: 83.7
Project: MWHCODE: San Juan River Basin Program	

	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							

	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')	
Lab Sample ID: T59243-9	Date Sampled: 09/01/10
Matrix: SO - Soil	Date Received: 09/03/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 83.7
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

Client Sample ID: GP-12 (7-8')		
Lab Sample ID: T59243-10		Date Sampled: 09/01/10
Matrix: SO - Soil		Date Received: 09/03/10
Method: SW846 8260B		Percent Solids: 79.1
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
 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-12 (7-8')	
Lab Sample ID: T59243-10	Date Sampled: 09/01/10
Matrix: SO - Soil	Date Received: 09/03/10
Method: SW846 8015	Percent Solids: 79.1
Project: MWHCODE: San Juan River Basin Program	

	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							

	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

Client Sample ID: GP-12 (7-8')	
Lab Sample ID: T59243-10	Date Sampled: 09/01/10
Matrix: SO - Soil	Date Received: 09/03/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 79.1
Project: MWHCODE: San Juan River Basin Program	

	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							

	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

Client Sample ID: GP-13 (8-9')		
Lab Sample ID: T59243-11		Date Sampled: 09/01/10
Matrix: SO - Soil		Date Received: 09/03/10
Method: SW846 8260B		Percent Solids: 76.4
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

Client Sample ID: GP-13 (8-9')		
Lab Sample ID: T59243-11		Date Sampled: 09/01/10
Matrix: SO - Soil		Date Received: 09/03/10
Method: SW846 8015		Percent Solids: 76.4
Project: MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE056789.D	40	09/08/10	AT	n/a	n/a	GEE2913
Run #2							

	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)	575	300	18	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	95%		46-127%		
98-08-8	aaa-Trifluorotoluene	102%		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-13 (8-9')	
Lab Sample ID: T59243-11	Date Sampled: 09/01/10
Matrix: SO - Soil	Date Received: 09/03/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 76.4
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
 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 (6-7')		
Lab Sample ID: T59243-12		Date Sampled: 09/02/10
Matrix: SO - Soil		Date Received: 09/03/10
Method: SW846 8260B		Percent Solids: 86.0
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

Client Sample ID: GP-23 (6-7')	
Lab Sample ID: T59243-12	Date Sampled: 09/02/10
Matrix: SO - Soil	Date Received: 09/03/10
Method: SW846 8015	Percent Solids: 86.0
Project: MWHCODE: San Juan River Basin Program	

	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							

	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

Client Sample ID: GP-23 (6-7')	
Lab Sample ID: T59243-12	Date Sampled: 09/02/10
Matrix: SO - Soil	Date Received: 09/03/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 86.0
Project: MWHCODE: San Juan River Basin Program	

	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							

	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

Client Sample ID: GP-27 (6-7')		
Lab Sample ID: T59243-13		Date Sampled: 09/02/10
Matrix: SO - Soil		Date Received: 09/03/10
Method: SW846 8260B		Percent Solids: 85.3
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')	
Lab Sample ID: T59243-13	Date Sampled: 09/02/10
Matrix: SO - Soil	Date Received: 09/03/10
Method: SW846 8015	Percent Solids: 85.3
Project: MWHCODE: San Juan River Basin Program	

Run #	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							

Run #	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
 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')	
Lab Sample ID: T59243-13	Date Sampled: 09/02/10
Matrix: SO - Soil	Date Received: 09/03/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 85.3
Project: MWHCODE: San Juan River Basin Program	

	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							

	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
 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:	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

Client Sample ID:	TRIP BLANK	
Lab Sample ID:	T59243-15	Date Sampled: 09/02/10
Matrix:	SO - Trip Blank Soil	Date Received: 09/03/10
Method:	SW846 8015	Percent Solids: n/a
Project:	MWHCODE: San Juan River Basin Program	

	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							

	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
 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 Dr. Ste 150 Houston, TX 77036
 TEL: 713-271-4700 FAX: 713-271-4770
 www.accutest.com

FED/EX Tracking # 873170209271
 Accutest Quote #
 Bottle Order Control #
 Accutest Job # T59243

Client / Reporting Information		Project Information				Requested Analyses												Matrix Codes												
Company Name MWH Americas		Project Name Jaquez				<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);"> 80% include m.p.c. BTEX 82600 Kyle GRD - 8015/5035 DRD - 8015 </div> <div> Matrix Codes DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OJ - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank </div> </div>												LAB USE ONLY												
Street Address 1801 California St. Ste 2900		Street		Billing Information (if different from Report to)																										
City State Zip Denver CO 80202		City State		Company Name																										
Project Contact Jed Smith		Project #		Street Address																										
Phone # Fax # 303 291 2270		Client Purchase Order #		City State Zip																										
Sampler(s) Name(s) Phone # Ashley Ager 970 385 1016		Project Manager Ashley Ager		Attention:																										
Accutest Sample #	Field ID / Point of Collection	Date	Time	Sampled By	Matrix	# of bottles	HQI	NACH	ZANADH	HN03	HSC04	NDW08	MEDH	TSP	NH0304	ENCORE	OTHER													
1	GP-19 (5.5-6.5')	9-2-10	08:20	AA	SO	5												4	✓											
2	GP-25 (7-8')	9-2-10	11:45	AA	SO	5												4	✓											
3	GP-25 (7-8') MS	9-2-10	11:50	AA	SO	5												4	✓											
4	GP-25 (7-8') MSD	9-2-10	11:55	AA	SO	5												4	✓											
5	GP-23 Rinse Blank	9-2-10	09:43	AA	WW	5	3					2							✓											
6	Field Blank	9-2-10	09:30	AA	WW	3	3												✓											
7	Trip Blank #1 09-02-2010	9-1-10	09:00	AA	WW	2	2												✓											

Turnaround Time (Business days)		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 <small>Emergency & Rush T/A data available VIA Lablink</small>		Approved By (Accutest PM): / Date:		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> TRRP <input checked="" type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> EDD Format <input type="checkbox"/> FULT1 (Level 3+4) <input type="checkbox"/> Other _____ <input type="checkbox"/> REDT1 (Level 3+4) <input type="checkbox"/> Commercial "C" <small>Commercial "A" = Results Only Commercial "B" = Results + QC Summary Commercial "C" = Results + QC & Surrogate Summary</small>		

Sample Custody must be documented below each time samples change possession, including courier delivery.					
Relinquished by Sampler: Ashley Ager	Date Time: 9-2-10/1503	Received By: 1	Relinquished By: Felix	Date Time: 9:15	Received By: 2
Relinquished by Sampler:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by:	Date Time:	Received By: 5	Custody Seal #	<input type="checkbox"/> Intact Preserved where applicable On Ice Cooler Temp. <input type="checkbox"/> Not Intact <input type="checkbox"/> 22.6 °C	

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: -0.5°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

- 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 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

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 1
 ② Sample # 17 received as Trip Blank #2 09-02-2010 (Water Trip Blank) Customer made Cooler 2
 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: _____

l:\mwalker\form\samplemanagement SM023 Revised 8/11/10



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	2	3	4	<2	>12
	1	GP-19 (5.5-6.5')	9-2-10 820	S	402	1	2-61	5	2	3	4	<2	>12
	1				Encore	2-5	VR	5	2	3	4	<2	>12
	2	GP-25 (7-8')	1145		402	1	2-61	5	2	3	4	<2	>12
	2				Encore	2-5	VR	5	2	3	4	<2	>12
	2	GP-25 (7-8')ms	1150		402	6	2-61	5	2	3	4	<2	>12
	2				Encore	2-10	VR	5	2	3	4	<2	>12
	2	GP-25-(7-8')ms	1155		402	11	2-61	5	2	3	4	<2	>12
	2				Encore	2-15	VR	5	2	3	4	<2	>12
	3	GP-23 Rinse Blank	9-2-10 945	W	LAB	1-2	1-A	5	2	3	4	<2	>12
	3	"			40	3-5	VR	5	2	3	4	<2	>12
	4	Field Blank	930		40	1-3	VR	5	2	3	4	<2	>12
✓	5	Trip Blank #1091210	9-1-10 930	WTR	40ml	1-2	VR	5	2	3	4	<2	>12
2	6	GP-15 (4-5')	9-1-10 1425	S	402	1	2-61	5	2	3	4	<2	>12
	6	"			Encore	2-5	VR	5	2	3	4	<2	>12
	7	GP 15 (9.5-10')	1455		402	1	2-61	5	2	3	4	<2	>12
	7	"			Encore	2-5	VR	5	2	3	4	<2	>12
	8	GP 11 (7.5-13')	1541		402	1	2-61	5	2	3	4	<2	>12
	8	"			Encore	2-5	VR	5	2	3	4	<2	>12
	9	GP 12 (12-15')	1630		402	1	2-61	5	2	3	4	<2	>12
	9	"			Encore	2-5	VR	5	2	3	4	<2	>12
✓	10	GP 12 (7.8')	1635		402	1	2-61	5	2	3	4	<2	>12
✓	10	"			Encore	2-5	VR	5	2	3	4	<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

T59243: Chain of Custody

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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	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%

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

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	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	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%

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	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%

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	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%

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%

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%

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%

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.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	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%

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%

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%

5.3.3
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	Spike Q 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%

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%

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%	42-123%
98-08-8	aaa-Trifluorotoluene	99%	51-130%

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.DI		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%

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%

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%

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.DI		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 mg/l	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
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
T59243-2MS	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%

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	mg/kg	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%

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%

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 mg/kg	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



VIA FedEx

September 2, 2011

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

**RE: Jaquez Site Excavation Report and Case Closure Request
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 *Soil Excavation Report* for the above-referenced site. The report presents the results of the site excavation and restoration work conducted during December 2010 through March 2011.

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

Sincerely,

A handwritten signature in black ink, appearing to read "jed smith".

Jed Smith, MWH, on behalf of

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

cc: Buddy Shaw, BP
John Jaquez
Brandon Powell, NMOCD-Aztec
Carroll Crawford, Bloomfield Irrigation District

Enclosures: as stated

Prepared for:



El Paso Tennessee Pipeline Company
2 North Nevada
Colorado Springs, Colorado 80903

**SOIL EXCAVATION REPORT
JAQUEZ COM. C#1 AND JAQUEZ COM. E#1
SAN JUAN COUNTY, NEW MEXICO**

September 2011

Prepared by:

MWH - Denver
1801 California St., Suite 2900
Denver, Colorado 80202
(303) 291-2222

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------------------------	---------------------

- | | |
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1.0 INTRODUCTION

1.1 PURPOSE OF THIS REPORT

This report has been prepared by MWH Americas, Inc. (MWH) on behalf of El Paso Tennessee Pipeline Company (EPTPC) to describe soil excavation and site restoration activities performed between December 2010 and March 2011 at the Jaquez Com C#1 and Jaquez Com E#1 Site in New Mexico (i.e., Jaquez Site or Site). The Site is located in Township 29N, Range 9W, Section 6, in San Juan County as shown in **Figure 1, Site Location**.

The site layout and outline of areas which were previously excavated (1993) at the site are shown on **Figure 2, Pre-Excavation Site layout**. The limits of the 2010 - 2011 excavation and locations of confirmation samples are shown on **Figure 3, 2010 – 2011 Excavation Limits and Sample Locations**. The 2010 – 2011 excavation generally extended to a depth of approximately one foot below static water level and the perimeter outline drawn to represent the top of the ground surface at the edge of the excavation. As shown on **Figure 4, Cross Section A-A'**, depths to static water in the northern portion of the excavation area approach 18 feet while a depth to static water level of 6 - 7 feet is more typical for the Garden area south of Citizens Ditch.

1.2 SITE REMEDIATION HISTORICAL OVERVIEW AND 2010 BP/AMOCO RELEASE

In the Spring and Summer of 1993, petroleum hydrocarbon impacted soils were delineated and excavated to the extent possible without disturbing Citizens Ditch. The 1993 excavation areas are depicted on **Figure 2, Pre-Construction Site Layout**. The excavation area north of Citizens Ditch was terminated approximately 30 feet from the water's edge, and the southern excavation area was limited to the Garden area and did not encroach upon the southern ditch embankment. It was clear at the time that impacts remained between the two excavation areas and beneath Citizens Ditch. Between 1993 and 2005, various in-situ remediation techniques were implemented in order to mitigate the remaining impacts of concern to New Mexico Oil Conservation Division (NMOCD). This 1993 work addressed all the NMOCD and landowner concerns.

In March 2010, EPTPC was notified that a release had occurred from the Jaquez C#1 gathering line owned and operated by BP America Production Company (BP), where this line crossed the southern embankment of Citizens Ditch. Following initial emergency response activities, an on-site meeting was held between various stakeholders. As a result, EPTPC initiated groundwater, soil, and air sampling activities to assess the extent of the new and historical petroleum hydrocarbon impacts at the Site. A report titled *2010 Groundwater, Soil, and Air Sampling Report* was submitted to the NMOCD in November 2010. A work plan was then prepared and submitted to the NMOCD on December 7, 2010 describing plans for excavation and off-site disposal of residual petroleum impacted soils. This work plan was revised and re-submitted on December 8, 2010 to address NMOCD reviewer verbal comments. Site excavation commenced on December 15, 2010.

2.0 SUMMARY OF 2010 – 2011 EXCAVATION AND DISPOSAL ACTIVITIES

The following paragraphs summarize the excavation activities performed at the site between December 15, 2010 and February 28, 2011. Paul & Son Construction, Inc. of Bloomfield, New Mexico served as the general contractor; and LT Environmental Inc. (LTE) provided environmental oversight, field screening of soils, and confirmation sample collection. Appendices which have been prepared to document various aspects of the field effort include:

2.1 EXCAVATION, DISPOSAL, AND SITE RESTORATION ACTIVITIES

Excavation and Sampling – Between December 2010 and March 2011, approximately 16,231 cubic yards (i.e., “yards”) of impacted soil was excavated and transported for disposal at Envirotech’s NMOCD-permitted landfarm located south of Bloomfield, New Mexico along U.S. Highway 550. Additional “clean” overburden soils were excavated, field screened, temporarily stockpiled, and then returned to the excavation as backfill. The remaining backfill material was imported by the contractor from clean off-site borrow areas.

To assess the required extent of the excavation and to determine which soils required off-site disposal, site personnel used a 10.6 electron volt (eV) photoionization detector (PID), PetroFLAG™ test kits, and visual and olfactory inspection. Details on the standard field screening procedures are provided below in **Section 3.1, Field Screening**. Petroleum impacted soils were generally excavated to a depth of approximately one foot below the static water level or as required by the field screening procedures. The LTE field geologist would initially use visual and PID screening to direct the excavation contractor and to segregate soils for stockpiling or off-site disposal. At the point where it appeared that the excavation had reached un-impacted soil, composite samples were collected from the excavation sidewalls. Samples of soil and groundwater (when seepage was present) were also collected from the floor in each working section of the excavation.

The approximate confirmation sample locations and the excavation footprint are shown on **Figure 3, 2010 – 2011 Excavation Limits and Sample Locations**. Details regarding the individual grab sample aliquots that were composited are documented in **Appendix A-1, Soil Excavation Oversight Field Forms**. Well over 200 physical locations on the excavation sidewalls and floor were sampled and screened over the course of the project. The soil sample locations shown on **Figure 3, 2010 – 2011 Excavation Limits and Sample Locations**, represent the approximate midpoint of the soil aliquots composited for each laboratory confirmation sample. As mentioned above, the composite samples were first field-analyzed for TPH via a PetroFLAG™ test kit. When the field screening and observations indicated that the sample would likely meet the TPH clean-up level, the composite sample was submitted for laboratory analysis of gasoline range organics (GRO) and diesel range organics (DRO) via USEPA SW-846 Method 8015B; and benzene, toluene, ethylbenzene, and xylene isomers (BTEX) via USEPA SW-846 Method 8021. Groundwater seepage samples were analyzed for BTEX via USEPA SW-846 Method 8021. Results of the laboratory analyses are presented on **Table 1, Summary of Soil Confirmation Sampling Results**, and **Table 2, Summary of Confirmation Groundwater**

Sampling Results. The analytical reports are included in **Appendix D-1, Laboratory Reports – Soil and Groundwater.**

The applicable cleanup standards for soil are 100 mg/kg, 50 mg/kg, and 10 mg/kg for TPH, BTEX, and benzene, respectively. These values are in accordance with the publication entitled *Guidelines for Remediation of Leaks, Spills and Releases* (NMOCD August 1993). The applicable groundwater standards are those established by the New Mexico Water Quality Control Commission (NMWQCC). At the Jaquez site, the applicable standards for the constituents of concern are 10 ug/L, 750 ug/l, 750 ug/L, and 620 ug/L, for benzene, toluene, ethylbenzene, and total xylenes, respectively.

Significantly impacted soils from the excavation were staged on a constructed pad before being loaded on dump trucks for off-site disposal. The 300-ft. by 340-ft. pad was constructed by placing an HDPE liner on the ground and then covering it with a thin lift of crusher fines. The crusher fines protected the liner from puncture and allowed equipment to move over it during the staging and loading activities. Upon completion of the excavation, the crusher fines were removed and transported to the nearby Envirotech land farm.

Following disposal of the stockpile and removal of the crusher fines, the HDPE liner was cut and rolled up into pieces for transportation and disposal. Approximately 1 to 3 yards of residual topsoil was adhered to the bottom of the liner. A scrape sample of the residual soil was collected on March 21, 2011 and analyzed for GRO and DRO via USEPA SW-846 Method 8015B; and BTEX via USEPA SW-846 Method 8021. As shown in **Appendix D-2, Laboratory Reports – Liner Scrape Samples**, all analytes were reported below detection limits. Based upon these laboratory results and in accordance with New Mexico Administrative Code 19.15.35.8, EPTPC requested permission and received NMOCD approval to dispose of the HDPE liner in the San Juan Regional County Landfill (SJCRL). The final waste profile and acceptance letter are included in **Appendix C-4, Waste Profile and Acceptance Documents.** The liner was transported to the SJCRL by Paul and Son Construction, Inc.

Use of Vacuum Trucks to Remove Groundwater - Vacuum trucks were used to remove groundwater seeping into the excavation in areas containing significant hydrocarbon impacts. Use of vacuum trucks allowed for deeper excavation where needed. The bill of lading forms for each vacuum truck load are provided in **Appendix C-2, Bill of Lading Forms for Groundwater.**

Backfill, Compaction, and Seeding - Paul and Son Construction, Inc. backfilled the excavation area outside of Citizens Ditch to grade using stockpiled overburden and clean imported soil. Backfilling proceeded per normal industry standard of care and formal compaction testing was not required. The disturbed portion of the Site was seeded per landowner requirements.

The Bloomfield Irrigation District (BID) monitored and directed the reconstruction activities associated with Citizens Ditch. Construction materials were imported by Paul and Son Construction, Inc. and were emplaced and compacted to the satisfaction of the BID.

2.2 NORTH AREA “LEFT-IN-PLACE” SOILS

Significant petroleum hydrocarbon impacts were observed in the excavation sidewall north of the Jaquez property boundary. These impacts extend off-site to the north in an area which could not be further excavated due to the presence of an old trailer (i.e., apparently an old mobile home) and the adjacent property owner’s stated desire to not move it. These left-in-place impacted soils are located along a 50-foot section of the excavation sidewall just in front of the old trailer (see **Figure 3**, *2010-2011 Excavation Limits and Sample Locations* and **Appendix A-5**, *Documentation of Soils Left-In-Place*).

Within the 50-foot section of the north sidewall, there were two impacted soil lenses visible. One, at the west edge, was small and only about 1-foot thick. The other is approximately 25 feet long and approximately 3.5 feet thick at its maximum. A photograph and a field sketch of the impacted soil lenses are included in **Appendix A-5**. The photo is looking east along the northern excavation sidewall and shows the 3.5 foot thick lens. Bad headspace screening of the most highly impacted soils from the 3.5’ thick lens detected an organic vapor concentration of 3,815 ppmv.

In order to further delineate the extent of the impacted soil, four borings (BH-3, BH-4, BH-5, and BH-6) were advanced using a hand auger in locations surrounding the trailer. Boring BH-3 was located at the front of the trailer and due north of the east edge of the 50’ section. There was no evidence of significant hydrocarbon impacts in this borehole. The second borehole, BH-4, was located at the front of the trailer and due north of the highly impacted soil lens sample. Groundwater was encountered at 15 feet bgs in boring BH-4, and slightly impacted soil was observed at depths of 12 feet and 17 feet bgs. The 12-foot depth soil was sampled and was found to meet the cleanup standards. Field screening of the deeper, saturated soil showed a minimal level of impact (i.e., 1.6 - 18 ppmv bag headspace vapors and 3.2 ppm TPH) and a sample was not submitted for laboratory analysis. Two additional boreholes, BH-5 and BH-6, advanced respectively at the southwest corner and behind the trailer, showed no evidence of petroleum impacts. The soil borings provided the intended delineation of the remaining impacts that could not physically be excavated. The volume of the impacted soils left-in-place in the vicinity of the northern excavation sidewall is approximately 30 yds³. The volume calculations are provided in **Appendix A-5**, *Documentation of Soils Left-In-Place*.

As shown on **Figure 5**, *Confirmation Samples Exceeding NMOCD/NMWQCC Standards*, the laboratory analyses of the two impacted lenses visible along the northern excavation face (i.e., sample locations Jaquez-111 and Jaquez-113) indicated that maximum TPH concentrations did exceed the NMOCD TPH standard of 100 mg/kg (see **Table 1**, *Summary of Confirmation Soil Sampling Results*); the BTEX results also slightly exceeded the NMOCD standard of 50 mg/kg in one of the soil lens samples, Jaquez-111(17)-021011, which exhibited a total BTEX concentration of 62.22 mg/kg.

2.3 STANDARDS EXCEEDANCES IN SOIL AND GROUNDWATER SAMPLES

In addition to the impacted soils left-in-place along the northern excavation boundary, exceedances of NMOCD and NMWQCC standards were observed in the following soil confirmation sample locations:

1. Jaquez 66(9)-010511 Soil From Excavation Sidewall
2. Jaquez 143(7)-021611 Soil From Excavation Floor
3. Jaquez 133(GW)-021611 Groundwater from the Excavation Floor
4. Jaquez GW1-North-121710 Groundwater from the Excavation Floor

Figure 5, *Confirmation Samples Exceeding NMOCD/NMWQCC Standards* summarizes all confirmation sample locations and analytes exceeding the NMOCD or NMWQCC standards.

The exceedances along the northern boundary indicate that there were slightly elevated levels of residual TPH and BTEX present at the time of the excavation. It is currently understood that the groundwater BTEX result in this area (i.e., sample Jaquez-GW1-NORTH-121710) was likely the result of seepage from impacted soils that were later removed when the excavation face was advanced to the north across the property boundary. The nearby excavation floor confirmation soil samples did not exceed NMOCD standards. It is expected that the potential groundwater BTEX impacts associated with the 30 yards of left-in-place impacted soil along the northern boundary are minimal and extremely localized. The groundwater monitoring network, which was last sampled in June 2010, did not detect groundwater BTEX exceedances north of Citizens Ditch prior to the excavation activities. These data were consistent with other historic groundwater sampling results in the north area.

At the north end of the Garden area, south of Citizens Ditch, an isolated excavation floor sample, Jaquez-143(7)-021611, exceeded the NMOCD standard for TPH and exhibited detectable, but acceptable, concentrations of BTEX constituents. A groundwater seepage sample collected southeast of this floor sample location exceeded the NMWQCC standards for benzene and total xylenes. The location of these impacts is near the area of monitor well M-4, which showed newly-elevated levels of benzene and total xylenes in June 2010 subsequent to the upgradient release from the BP gathering line.

3.0 FIELD METHODS

The follow sections document the field screening and sampling procedures involved in the excavation oversight activities. These procedures were in accordance with the excavation work plan submitted to the NMOCD on December 8, 2010.

3.1 FIELD SCREENING

As the excavation proceeded, visual and olfactory inspections were performed to identify significantly impacted soils. At the point where it appeared that the excavation had reached un-impacted soil, soil samples were collected via excavator bucket. The individual samples in a given area were composited and field-analyzed for TPH via a PetroFLAG™ test kit. When the field screening indicated that the sample would meet the TPH clean-up level, then the sample was submitted for laboratory analysis of TPH and BTEX. Otherwise, additional excavation was performed and the field screening process repeated.

Additional field screening was conducted on clean overburden soils. These soils were verified as clean first through visual and olfactory observation, and secondly through measurement of bag headspace organic vapor concentrations. Representative grab samples from the clean overburden were placed into Ziploc® (or similar) storage bags and allowed to equilibrate for at least 10 minutes. Bag headspace organic vapor concentrations were measured with a field analyzer equipped with a 10.6 eV photoionization detector (PID). Stockpiled overburden soil was not used as backfill when the bag headspace organic vapor concentrations exceed 20 parts per million by volume (ppmv) – unless it was clear that the organic vapors were non-petroleum related (e.g., natural or amended organic content).

3.2 SOIL SAMPLING

The procedures listed below were followed during soil sampling:

- Confirmation soil samples were collected from the sidewalls and bottom of the excavation area as shown on **Figure 3, 2010 – 2011 Excavation Limits and Sample Locations**. Each sample was prepared from an equal-volume composite of 5 sample aliquots centered at the locations shown.
- Soil sample aliquots were collected using the excavator bucket. At least 4 to 6 inches of exposed soil were removed prior to collecting the sample to ensure a representative sample. An equal volume of each aliquot was composited in a Ziploc® (or similar) storage bag. A small portion of the composite sample was field screened as described earlier in Section 3.1.
- Each composite soil sample was promptly transferred to laboratory-supplied containers. The containers were filled to eliminate, as much as practicable, any headspace. Prior to capping, the jar threads were wiped to remove excess soil. Samples were labeled, placed in an ice filled cooler, and maintained at $4^{\circ}\pm 2^{\circ}\text{C}$ until received by the laboratory for analysis.

- Sample containers were labeled with the Site name, date, sample designation, sample depth, project name, collector's name, time of collection, and parameters to be analyzed.
- Sample designations included the Site name, location, center-point sample depth (in feet) and date. For example, the following sample designation was used for an excavation floor sample from Location 1, sample depth of 14 feet, and sample date of December 15, 2010:

Jaquez-1(14)-121510

- Sample locations, including all sample aliquots, were clearly marked on a Site map of the excavation. The aliquot depths were also noted on the excavation map.
- Soil sampling field forms were prepared for all soil samples collected and are included in **Appendix A-3, Soil and Groundwater Sampling Forms**. Details of the soil sample depth(s) and a description of the soil sample (moisture, texture, color, odor, etc) were recorded.

3.3 GROUNDWATER SAMPLING

When significant seepage into the excavation precluded the collection of floor soil samples, groundwater samples were collected and analyzed for BTEX by EPA SW-846 Method 8021B.

3.4 GENERAL PROTOCOLS

This section presents a discussion of documentation procedures, location identification, sampling methods, and other procedures performed as part of the field work.

3.4.1 Documentation Procedures

The field environmental scientist/geologist maintained a field logbook and prepared daily field reports (see **Appendix A-2, Field Log Book Entries**). At the end of each field day, reports were dated and signed by the field person who performed the work.

Daily field reports include:

- Date
- Name and location of the work activities
- Weather conditions
- Personnel and visitors on Site
- Field screening results
- Sample locations and methods (including sampling equipment), time of sample collection, and sample depths
- Samples submitted to the laboratory for analyses
- Photograph numbers and descriptions (when applicable)
- Schematic drawings of sample locations
- Any deviations from the Work Plan

- Other relevant observations as the field work progresses
- Problems and corrective actions

3.4.2 Utility Identification

Prior to the excavation, calls were made to New Mexico One Call to verify utility clearance and to notify the operator.

3.4.3 Sample Labeling

A sample label was placed on each sample container submitted for analysis and included the project name and location, sample designation (including depth interval, when appropriate), date and time of collection, preservative (when applicable), sampler's initials, and required analyses. Sample designations are presented in Section 3.2.

3.4.4 Chain-of-Custody

A project-specific chain-of-custody (COC) form was completed and accompanied each sample cooler. The COC form included project identification, project location, sample designation, analysis type, and shipping account information. In addition, entries were made on the COC to provide the sample collection date and time, sample depth, signature of the persons relinquishing and receiving samples, and the status of the samples upon receipt by the laboratory. The COC form was completed in duplicate.

All samples were transported by field personnel and via a commercial carrier (e.g., FedEx Priority Service). The signed airbills and COC forms are included in **Appendix A-4, Chain of Custody and Shipping Forms**.

3.4.5 Sample Handling and Shipping

All laboratory samples were shipped or transported in coolers containing ice and maintained at $4^{\circ}\pm 2^{\circ}\text{C}$. Each cooler contained a sealed temperature blank. Upon receipt, the laboratory recorded the temperature of the blank on the COC form. All samples were either hand delivered or shipped via a commercial carrier. Sampling personnel prepared air-courier waybill identification labels in strict accordance with the U.S. Department of Transportation procedures.

3.4.6 Sample Packing

Sample containers were placed in clean protective foam or bubble pack sleeves. The caps of all sample bottles were checked for tightness to prevent sample leakage during transport. Care was taken to prevent over-tightening and breakage of bottle caps. Sample containers were immediately placed on ice in a waterproof hard plastic ice chest. Samples were stored and shipped on ice to maintain the samples at $4^{\circ}\pm 2^{\circ}\text{C}$. Sufficient packing material was placed in each ice chest to minimize the potential for sample bottles to shift and become damaged or

broken during shipment. Packing material may include bubble pack or foam material. The drain plug on the shipping container was closed and sealed on the inside and outside with duct tape.

Sampling personnel inventoried the sample bottles from the Site prior to shipment to verify that all samples listed on the COC form were present. All bottles collected from a specific sample interval were packed and shipped together in the same shipping container.

The originals of the COC forms were sealed in a waterproof plastic bag and placed inside the shipping container prior to sealing of the container. The cooler was taped shut using strapping tape over the hinges and custody seals placed across the top and sides of the cooler lid. Clear tape was placed over the custody seals to prevent inadvertent damage during shipping.

3.4.7 Equipment Decontamination

Prior to collecting any sample and between sampling locations, all sampling equipment was decontaminated using a non-phosphate detergent (e.g., Alconox). Where feasible, equipment was disassembled to permit adequate cleaning of the internal portions of the equipment.

3.4.8 Investigation-Derived Waste

Waste PPE generated during the field investigation, including latex gloves, Tyvek suits, etc. were disposed in standard industrial “dumpsters.” When the equipment or PPE was grossly contaminated, it was decontaminated before disposal.

3.4.9 Field Equipment Calibration Procedures

Field personnel used a PetroFLAG™ test kit for soil sample TPH screening. A PID was also used to detect the presence of organic vapors and to assist with screening the clean overburden soils. These instruments were calibrated prior to use according to the manufacturer specifications. The instrument calibration was checked at the beginning of each day of use and any time meter drift is suspected. All calibration information was recorded on the daily field records included in **AppendixA-1, Soil Excavation Oversight Field Forms.**

3.5 LABORATORY TESTING

Soil samples were collected and analyzed in a laboratory for the following parameters:

- BTEX by EPA SW-846 Method 8021B
- TPH (GRO, DRO, and ORO) by EPA SW-846 Method 8015 (Modified)

Groundwater samples, when collected in lieu of confirmatory excavation floor soil samples (see Section 3.3), were analyzed in a laboratory for the following parameters:

- BTEX by EPA SW-846 Method 8021B

4.0 SUMMARY AND RECOMMENDATIONS

The following sections briefly summarize the excavation activities completed at the Jaquez site between December 15, 2010 and February 28, 2011 and provide recommendations relative to the impacts left-in-place.

4.1 SUMMARY

As described in this Excavation Report, approximately 16,231 cubic yards of exempt exploration and production petroleum impacted soil was removed from the Jaquez site and disposed of at the Envirotech, Inc. NMOCD-permitted landfarm facility south of Bloomfield, New Mexico along U.S. Highway 550. Approximately 715 gallons of groundwater were also collected from the excavation using vacuum trucks and then transported to a disposal facility operated by Key Energy Services, Inc. After completing the excavation, a 300' by 340' HDPE liner used to construct a soil staging pad was characterized, profiled and accepted for disposal at the San Juan Regional County Landfill (SJCRL).

A total of 42 soil samples were collected as confirmation samples from the sidewalls or bottom of the excavation. Three additional soil samples (Jaquez 138(6)-021611, Jaquez 67(9)-010511, Jaquez 8(9)-1215110) were originally collected as confirmation samples but then replaced when the excavation was expanded. These three soil sampling results are not considered when comparing the confirmation sample results to the NMOCD regulatory standards. Three additional samples were collected from soil borings advanced via hand-auger in the vicinity of an old trailer on the adjacent property north of the Jaquez property.

Soil confirmation samples were analyzed for BTEX by EPA SW-846 Method 8021B and TPH (GRO, DRO, and ORO) by EPA SW-846 Method 8015 (Modified). As shown on **Table 1, Summary of Confirmation Soil Sampling Results**, exceedances of NMOCD standards were observed in samples:

1. Jaquez 66(9)-010511 Soil From Excavation Sidewall
2. Jaquez 113(12)-021011 Soil From Excavation Sidewall
3. Jaquez 111(17)-021011 Soil From Excavation Floor
4. Jaquez 143(7)-021611 Soil From Excavation Floor

Four groundwater samples were also collected from the bottom of the excavation during site construction. These samples were analyzed for BTEX using EPA Method 8021B. Exceedances of the New Mexico Water Quality Control Commission (NMWQCC) standards were observed in samples:

1. Jaquez 133(GW)-021611
2. Jaquez GW1-North-121710

Figure 5, Confirmation Samples Exceeding NMOCD/NMWQCC Standards summarizes all confirmation sample locations and analytes exceeding the NMOCD or NMWQCC standards.

Impacted soils observed along the northern most sidewall of the excavation had to be left-in-place as further excavation onto adjacent property was not possible. The remaining volume of the impacted soils along the northern excavation boundary was estimated to be 30 yards. This estimate was based on observations of soil staining in the northern excavation sidewall, analyses of samples Jaquez 111(17)-021011 and Jaquez BH-4(12)-021111, along with additional data obtained from the advancement of soil borings B-3 through B-6.

Upon completion of the excavation, the area outside of Citizens Ditch was backfilled to grade using a combination of native stockpiled overburden and clean imported soil. Backfilling proceeded per normal industry standard of care and formal compaction testing was not required. The disturbed portion of the Site was seeded per landowner requirements.

The Bloomfield Irrigation District (BID) monitored and directed the reconstruction activities associated with Citizens Ditch. Construction materials were provided by Paul and Sons Construction emplaced, and compacted to the satisfaction of the BID.

4.2 RECOMMENDATIONS

EPTPC has the following recommendations regarding the Jaquez Site:

- The re-emergence of groundwater impacts in the Jaquez Garden area following the 2010 BP release should be addressed by BP under a new case number. As described in EPTPC's November 2010 site investigation report and documented in numerous historic monitoring reports, EPTPC's monitoring data had demonstrated the achievement of the groundwater closure criteria as of the end of 2005.
- EPTPC has conducted two major soil excavations, implemented in-situ remediation technologies (nutrient injection and air sparging-soil vapor extraction), and monitored this site for nearly two decades. It is EPTPC's opinion that it has mitigated, to the extent possible, the hydrocarbon impacts to soil related to its former pit. EPTPC has also addressed the related groundwater impacts. EPTPC respectfully requests closure of its NMOCD case at this active gas production site.

TABLE 1

SUMMARY OF CONFIRMATION SOIL SAMPLING RESULTS
EL PASO CORPORATION - JAQUEZ SITE
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Soil Sample	Sample Type	Depth (feet bgs)	Date	Analytical Parameter											
				Benzene (ug/kg)	Ethylbenzene (ug/kg)	m,p-Xylene (ug/kg)	o-Xylene (ug/kg)	Toluene (ug/kg)	Total Xylenes (ug/kg)	Total BTEX (ug/kg)	TPH-GK0 (C6-C10) (mg/kg)	TPH (C10-C28) (mg/kg)	TPH (>C28-C40) (mg/kg)	Total TPH (mg/kg)	
NMOC Standard				10,000	NA	NA	NA	NA	NA	NA	50,000	100	100	100	100
JAQUEZ-1(14)-121510	Excavation Floor	14	15-Dec-10	<4.4	<4.4	<8.7	<4.4	<4.4	<13	nd	<7.3	42.7	<4.1	42.7	
JAQUEZ-111(17)-021011	Excavation Floor	17	10-Feb-11	<530	2,680.0	22,300.0	6,560.0	1,780.0	28,900.0	62,220.0	1,230.0	1,740.0	506.0	3,476.0	
JAQUEZ-113(12)-021011	Excavation Sidewall	12	10-Feb-11	<270	2,760.0	4,370.0	2,110.0	1,490.0	6,470.0	17,200.0	166.0	253.0	52.9	471.9	
JAQUEZ-114(9)-021111	Excavation Floor	9	11-Feb-11	<4.5	<4.5	<9.1	<4.5	<4.5	<14	nd	<6.7	<4.0	<4.0	0.0	
JAQUEZ-115(4)-021111	Excavation Sidewall	4	11-Feb-11	<4.4	<4.4	<8.7	<4.4	<4.4	<13	nd	<6.5	<4.0	<4.0	0.0	
JAQUEZ-12(14)-121610	Excavation Sidewall	14	16-Dec-10	<4.0	<4.0	<8.1	<4.0	<4.0	<12	nd	<6.4	25.9	<4.0	25.9	
JAQUEZ-124(9)-021311	Excavation Sidewall	9	13-Feb-11	<4.2	<4.2	<8.5	<4.2	<4.2	<13	nd	<5.7	<3.7	<3.7	0.0	
JAQUEZ-132(6)-021411	Excavation Sidewall	6	14-Feb-11	<4.5	<4.5	<9.0	<4.5	<4.5	<13	nd	<6.6	<4.0	<4.0	0.0	
JAQUEZ-143(7)-021611	Excavation Floor	7	16-Feb-11	2,070.0	2,080.0	13,000.0	3,120.0	366.0	16,100.0	36,736.0	844.0	50.9	16.1	911.0	
JAQUEZ-148(12)-021711	Excavation Sidewall	12	17-Feb-11	<4.2	<4.2	<8.5	<4.2	<4.2	<13	nd	<6.0	<3.8	<3.8	0.0	
JAQUEZ-157(7)-021811	Excavation Floor	7	18-Feb-11	<4.7	<4.7	<9.4	<4.7	<4.7	<14	nd	<7.7	<4.3	<4.3	0.0	
JAQUEZ-16(14)-121710	Excavation Floor	14	17-Dec-10	<4.6	<4.6	<9.3	<4.6	<4.6	<14	nd	<6.3	14.2	<3.9	14.2	
JAQUEZ-169(6.5)-021811	Excavation Sidewall	6.5	18-Feb-11	<4.9	<4.9	<9.8	<4.9	<4.9	<15	nd	<7.0	<4.1	<4.1	0.0	
JAQUEZ-17(14)-121910	Excavation Floor	14	19-Dec-10	<4.4	<4.4	<8.8	<4.4	<4.4	<13	nd	<6.5	8.8	<4.0	8.8	
JAQUEZ-174(5)-021811	Excavation Sidewall	5	18-Feb-11	<4.1	<4.1	<8.2	<4.1	<4.1	<12	nd	<5.8	<3.9	6.4	6.4	
JAQUEZ-178(5.5)-021811	Excavation Sidewall	5.5	18-Feb-11	<4.4	<4.4	<8.9	<4.4	<4.4	<13	nd	<6.2	<4.0	<4.0	0.0	
JAQUEZ-179(10)-021811	Excavation Floor	10	18-Feb-11	4.8	9.6	44.4	14.6	23.2	59.0	155.6	<7.5	45.1	16.4	61.5	
JAQUEZ-18(14)-122010	Excavation Floor	14	20-Dec-10	<4.5	<4.5	<9.1	<4.5	<4.5	<14	nd	<6.7	<4.1	<4.1	0.0	
JAQUEZ-19(15)-122110	Excavation Floor	15	20-Dec-10	<5.0	<5.0	<10	<5.0	<5.0	<15	nd	<7.0	<4.3	<4.3	0.0	
JAQUEZ-199(25)-022111	Excavation Sidewall	25	21-Feb-11	<4.7	<4.7	<9.3	<4.7	<4.7	<14	nd	<7.0	<4.1	<4.1	0.0	
JAQUEZ-213(20.5)-022211	Excavation Floor	20	22-Feb-11	<4.8	<4.8	<9.5	<4.8	<4.8	<14	nd	<7.3	<4.2	<4.2	0.0	
JAQUEZ-219(17)-022211	Excavation Floor	17	22-Feb-11	<4.1	<4.1	<8.2	<4.1	<4.1	<12	nd	<6.9	<4.0	<4.0	0.0	
JAQUEZ-22(15)-122110	Excavation Floor	15	20-Dec-10	<4.5	<4.5	<9.0	<4.5	<4.5	<14	nd	<7.1	<4.2	<4.2	0.0	
JAQUEZ-220(10)-022211	Excavation Sidewall	10	22-Feb-11	<4.4	<4.4	<8.9	<4.4	<4.4	<13	nd	<6.4	<4.0	<4.0	0.0	
JAQUEZ-226(13)-022311	Excavation Floor	13	23-Feb-11	<4.9	<4.9	<9.8	<4.9	<4.9	<15	nd	<6.9	<4.2	<4.2	0.0	

TABLE 1

SUMMARY OF CONFIRMATION SOIL SAMPLING RESULTS
EL PASO CORPORATION - JAQUEZ SITE
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Soil Sample	Sample Type	Depth (feet bgs)	Date	Analytical Parameter											
				Benzene (ug/kg)	Ethylbenzene (ug/kg)	m,p-Xylene (ug/kg)	o-Xylene (ug/kg)	Toluene (ug/kg)	Total Xylenes (ug/kg)	Total BTEX (ug/kg)	TPH-GRO (C6-C10) (ug/kg)	TPH (C10-C28) (ug/kg)	TPH (>C28-C40) (ug/kg)	Total TPH (ug/kg)	
NMOC Standard				10,000	NA	NA	NA	NA	NA	NA	50,000	100	100	100	100
JAQUEZ-23(15)-122110	Excavation Floor	15	20-Dec-10	<4.8	<4.8	<9.6	<4.8	<4.8	<14	nd	<7.8	<4.2	<4.2	0.0	
JAQUEZ-232(19)-022311	Excavation Floor	19	23-Feb-11	<4.3	19.4	<8.7	6.7	<4.3	<13	26.1	<7.2	4.5	4.6	9.1	
JAQUEZ-24(15)-122110	Excavation Floor	15	20-Dec-10	<4.4	<4.4	<8.9	<4.4	<4.4	<13	nd	<6.7	<3.9	<3.9	0.0	
JAQUEZ-247(6)-022411	Excavation Sidewall	6	24-Feb-11	<4.4	<4.4	<8.8	<4.4	<4.4	<13	nd	<7.1	<4.1	<4.1	0.0	
JAQUEZ-248(8)-022411	Excavation Floor	8	24-Feb-11	<5.1	<5.1	13.0	6.1	<5.1	19.1	38.2	<7.7	<4.3	<4.3	0.0	
JAQUEZ-249(15)-022411	Excavation Floor	15	24-Feb-11	<4.2	26.1	11.8	13.6	<4.2	25.4	76.9	<6.2	<3.9	<3.9	0.0	
JAQUEZ-25(20)-122110	Excavation Floor	20	20-Dec-10	<4.6	<4.6	<9.2	<4.6	<4.6	<14	nd	<7.0	<4.1	<4.1	0.0	
JAQUEZ-264(22)-022511	Excavation Sidewall	22	25-Feb-11	<4.1	<4.1	<8.1	<4.1	<4.1	<12	nd	<6.7	<3.9	<3.9	0.0	
JAQUEZ-265(12.5)-022511	Excavation Sidewall	12.5	25-Feb-11	<4.2	<4.2	<8.3	<4.2	<4.2	<13	nd	<6.4	<3.9	<3.9	0.0	
JAQUEZ-279(7)-022811	Excavation Sidewall	7	28-Feb-11	<4.5	<4.5	<9.0	<4.5	<4.5	<13	nd	<6.9	<4.1	6.5	6.5	
JAQUEZ-280(16)-022811	Excavation Floor	16	28-Feb-11	<4.9	<4.9	<9.8	<4.9	<4.9	<15	nd	<7.3	<4.2	<4.2	0.0	
JAQUEZ-31(9)-122210	Excavation Sidewall	9	22-Dec-10	<4.4	<4.4	<8.8	<4.4	<4.4	<13	nd	<7.3	<4.2	<4.2	0.0	
JAQUEZ-32(11)-122210	Excavation Floor	11	22-Dec-10	<4.4	<4.4	<8.8	<4.4	<4.4	<13	nd	<6.8	<4.1	<4.1	0.0	
JAQUEZ-40(7)-010311	Excavation Sidewall	7	03-Jan-11	<4.6	<4.6	<9.1	<4.6	<4.6	<14	nd	<5.7	<3.8	4.5	4.5	
JAQUEZ-49(10)-010411	Excavation Sidewall	10	04-Jan-11	<4.8	<4.8	<9.7	<4.8	<4.8	<15	nd	<7.1	<4.2	<4.2	0.0	
JAQUEZ-55(9)-010411	Excavation Sidewall	9	04-Jan-11	<4.0	7.7	9.9	4.6	<4.0	14.5	36.7	<5.7	4.1	<3.6	4.1	
JAQUEZ-66(9)-010511	Excavation Sidewall	9	05-Jan-11	<260	1,620.0	19,100.0	7,040.0	3,540.0	26,100.0	57,400.0	600.0	286.0	38.0	924.0	
JAQUEZ-BH-1(16.25)-122310	Borehole Sample	16.25	23-Dec-10	<4.9	<4.9	<9.8	<4.9	<4.9	<15	nd	<7.5	<4.1	<4.1	0.0	
JAQUEZ-BH-2(16.5)-122310	Borehole Sample	16.5	23-Dec-10	<4.7	<4.7	<9.3	<4.7	<4.7	<14	nd	<7.7	<4.4	<4.4	0.0	
JAQUEZ-BH-4(12)-021111	Borehole Sample	12	11-Feb-11	<5.0	<5.0	38.2	16.4	<5.0	54.6	109.2	<7.2	6.1	10.2	16.3	
TRIP BLANK	Excavation Sidewall	NA	20-Dec-10	<4.0	<4.0	<8.0	<4.0	<4.0	<12	nd				0.0	
Sidewall Confirmation Samples Later Overexcavated															
JAQUEZ-138(6)-021611	Excavation Sidewall	6	16-Feb-11	7.9	4.7	36.6	12.6	<4.6	49.2	111	<6.7	<4.0	5.44	5.4	
JAQUEZ-67(9)-010511	Excavation Sidewall	9	05-Jan-11	<250	728	9250	2860	2030	12100	26968	255	129	17.6	401.6	
JAQUEZ-8(9)-121510	Excavation Sidewall	9	20-Dec-10	<4.9	11.3	<9.7	<4.9	<4.9	<15	11.3	27.5	65.4	21.6	114.5	

TABLE 1

SUMMARY OF CONFIRMATION SOIL SAMPLING RESULTS
 EL PASO CORPORATION - JAQUEZ SITE
 (Page 3 of 3)

Soil Sample	Sample Type	Depth (feet bgs)	Date	Analytical Parameter										
				Benzene (ug/kg)	Ethylbenzene (ug/kg)	m,p-Xylene (ug/kg)	o-Xylene (ug/kg)	Toluene (ug/kg)	Total Xylenes (ug/kg)	Total BTEX (ug/kg)	TPH-GRO (C6-C10) (mg/kg)	TPH (C10-C28) (mg/kg)	TPH (>C28-C40) (mg/kg)	Total TPH (mg/kg)
NMOCD Standard				10,000	NA	NA	NA	NA	NA	50,000	100	100	100	100

bgs Below ground surface

mg/kg Milligrams per kilogram

NA Not applicable

nd Not detected

ug/kg Micrograms per kilogram

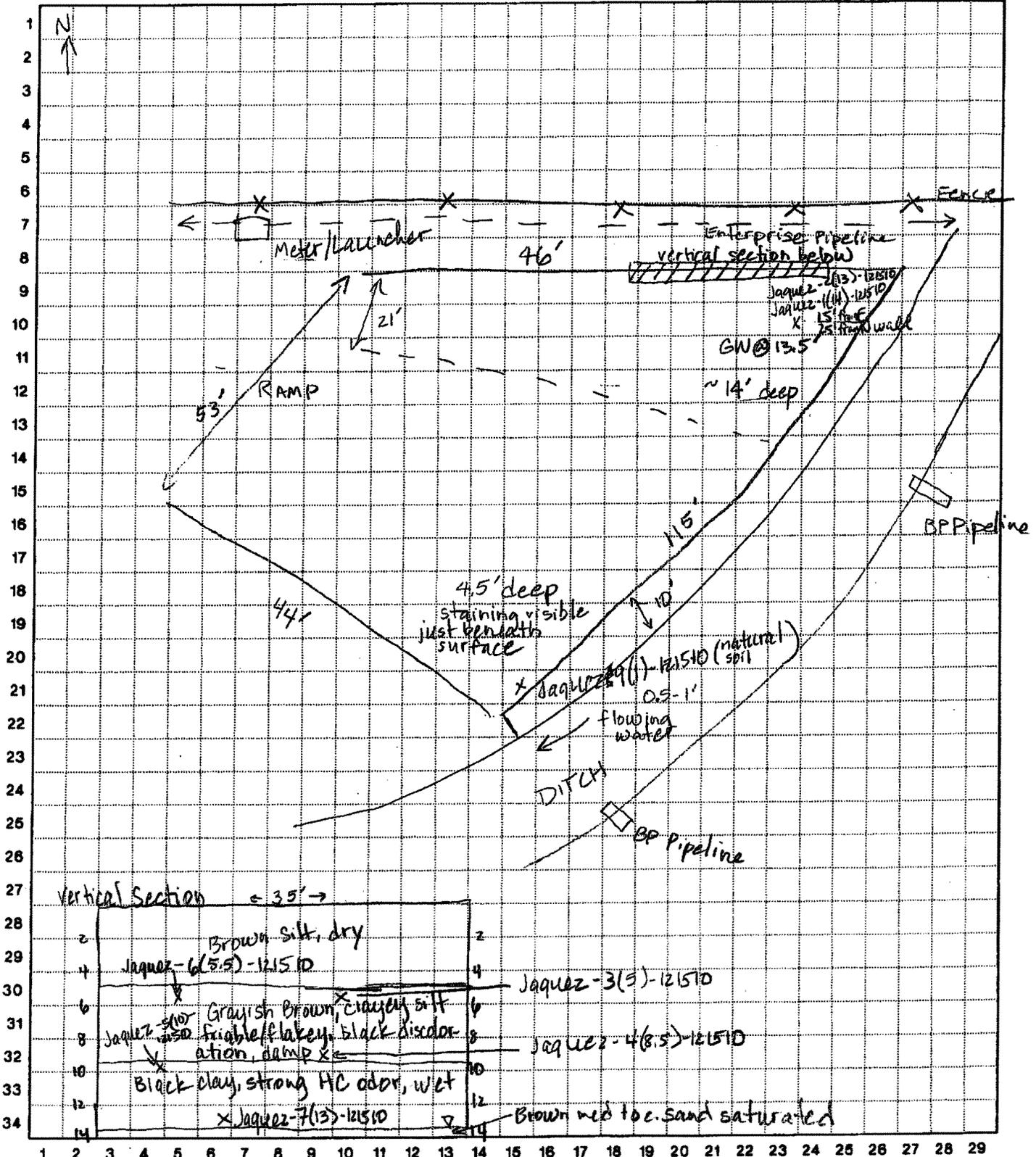
Analyte concentration exceeds NMOCD standard.



PROJECT Jaquez
 PROJECT MANAGER ALA
 JOB No. MW11005
 LOCATION Jaquez North of Ditch

DATE 12-15-10
 CONT. No.
 BY ALA CHK'D
 SHEET No. 1 OF 1

95LTC038 10/1997



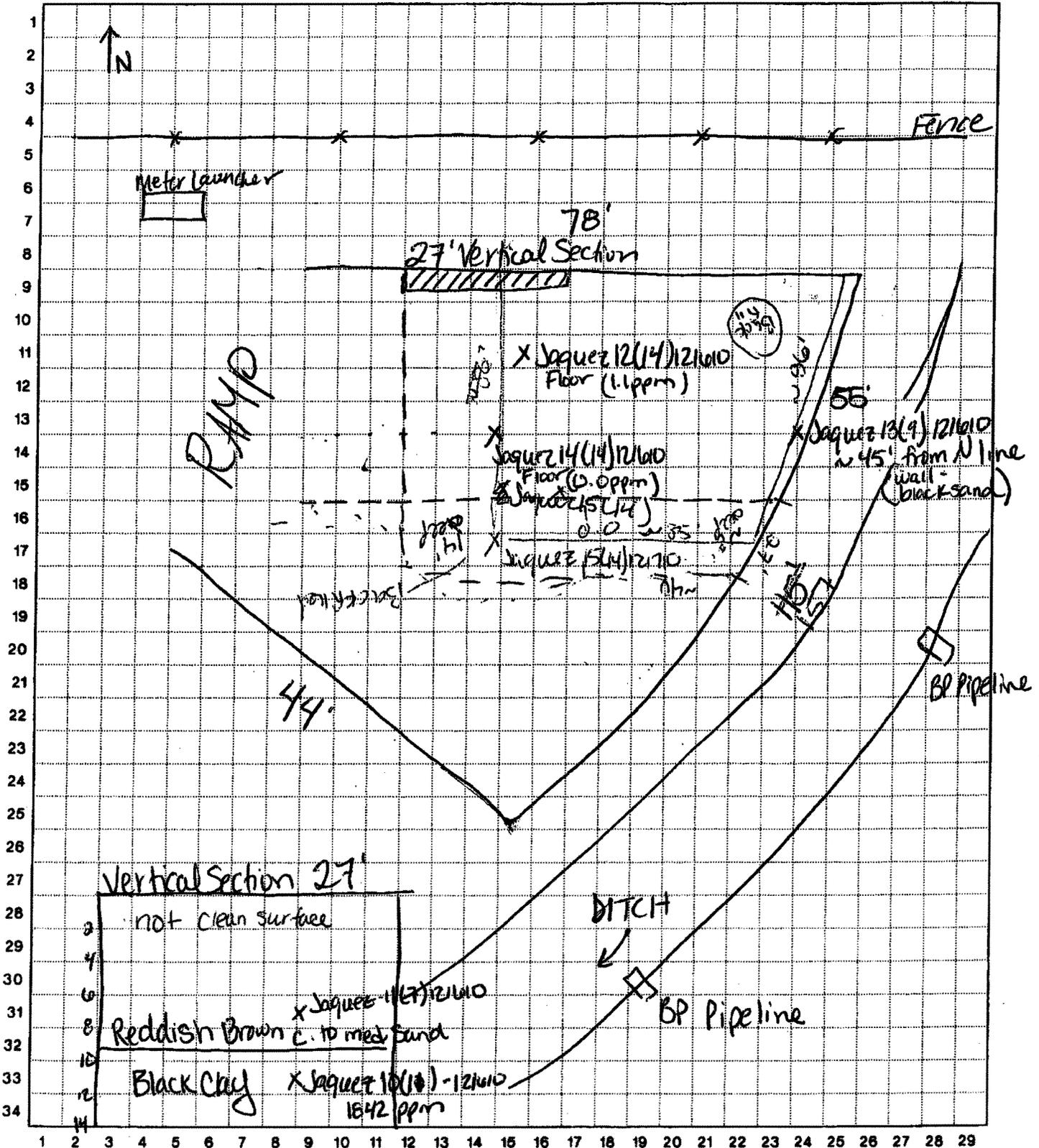
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29



PROJECT Jaquez
 PROJECT MANAGER Emily Ager
 JOB No. NWH1005
 LOCATION Jaquez

DATE 12-16-10
 CONT. No. _____
 BY _____ CHK'D _____
 SHEET No. 1 OF 1

94L70038 10/1997

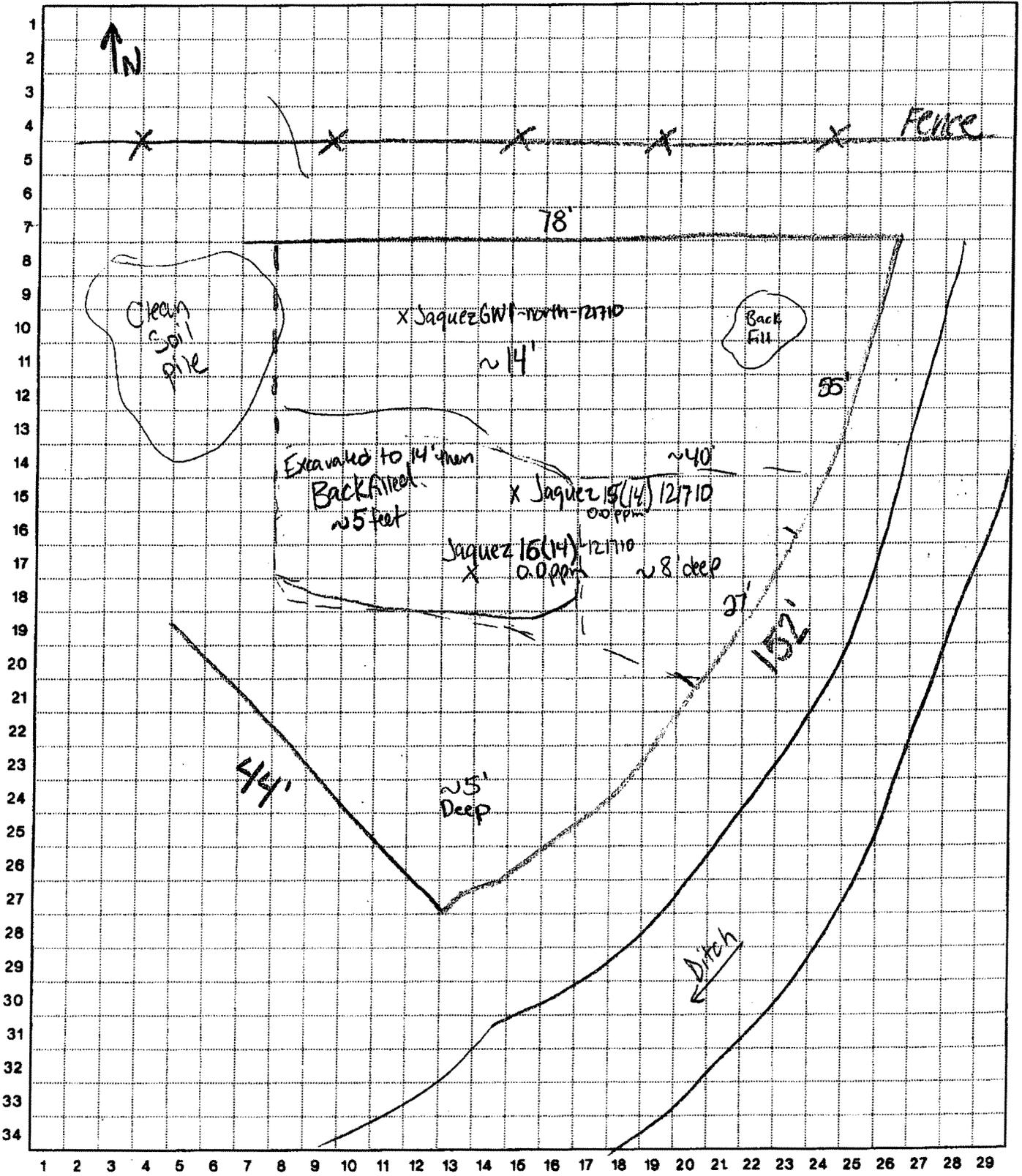




PROJECT Jaquez
PROJECT MANAGER Ashley dger
JOB No. MWH1005
LOCATION Jaquez

DATE 12/17/10
CONT. No. _____
BY _____ CHK'D _____
SHEET No. _____ OF _____

98LT0038 10/1997

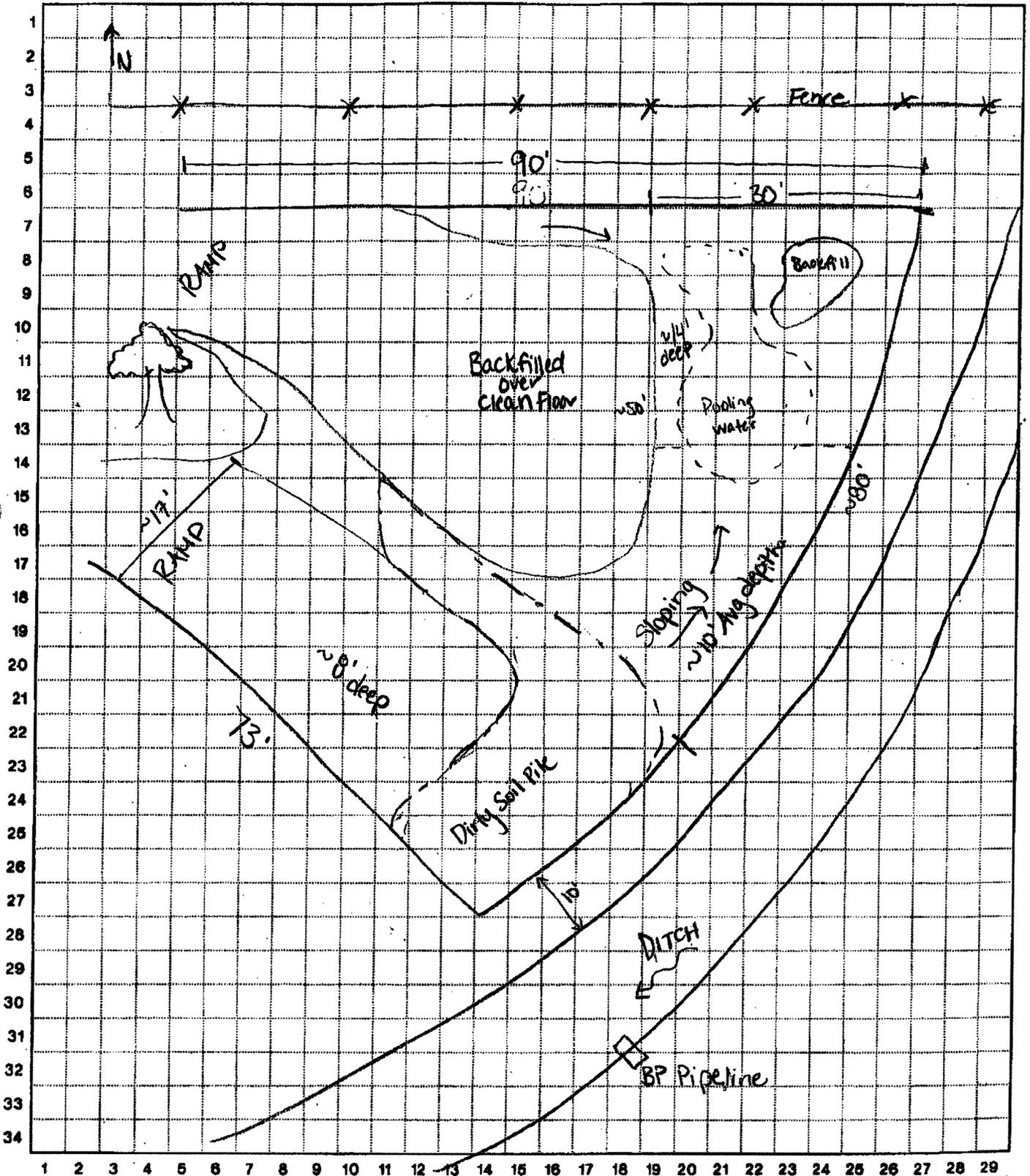




PROJECT Jagutz
PROJECT MANAGER Shirley Ager
JOB No. MNH 1005
LOCATION Jagutz

DATE 12-18-10
CONT. No. _____
BY Ronke Herms CHK'D _____
SHEET No. 1 OF 1

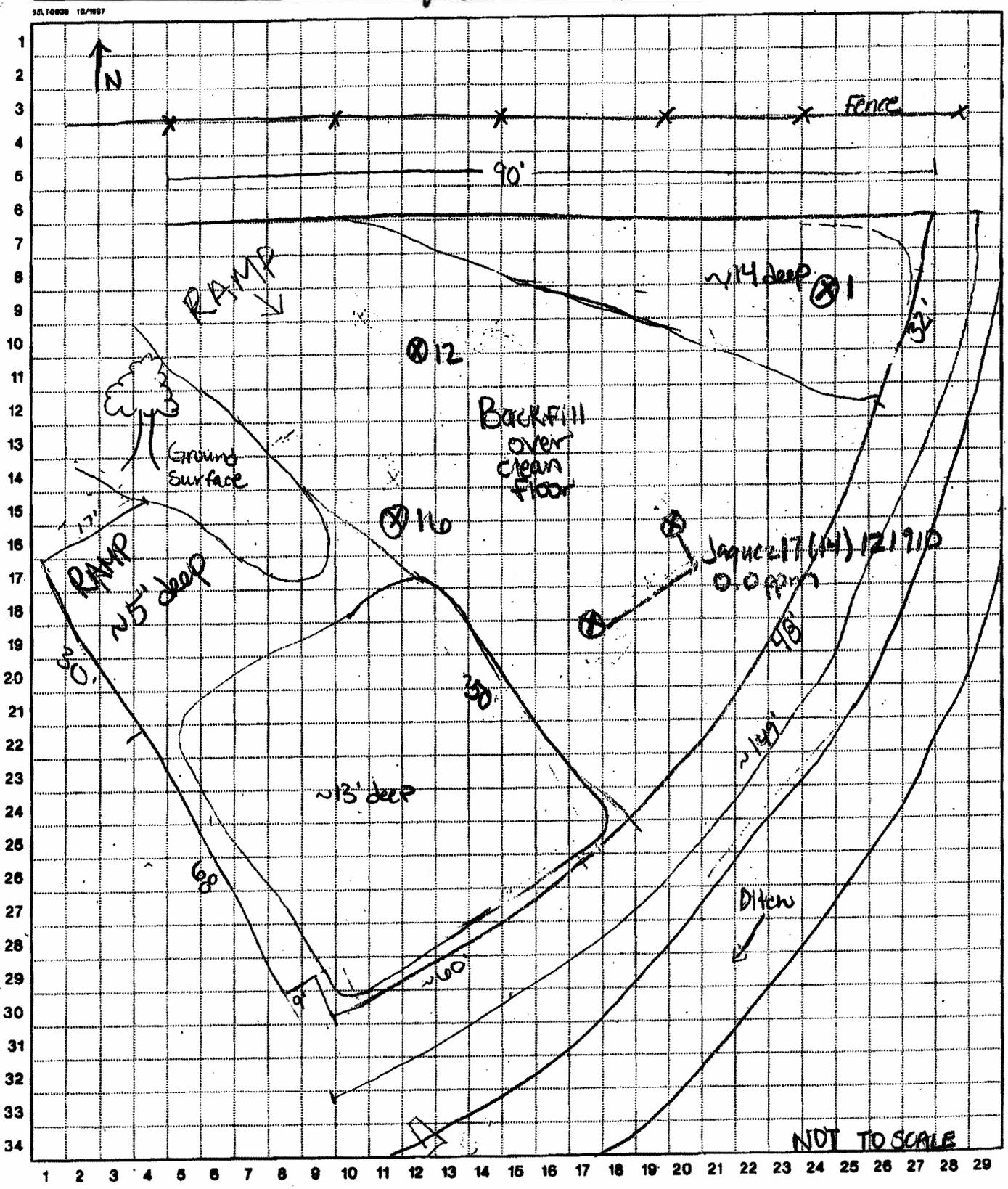
81170028 10/1007





PROJECT Jaquet
PROJECT MANAGER Ashley Ager
JOB No. MWH1005
LOCATION Jaquet

DATE 12-19-10
CONT. No. _____
BY Brooke Herb CHK'D _____
SHEET No. _____ OF _____

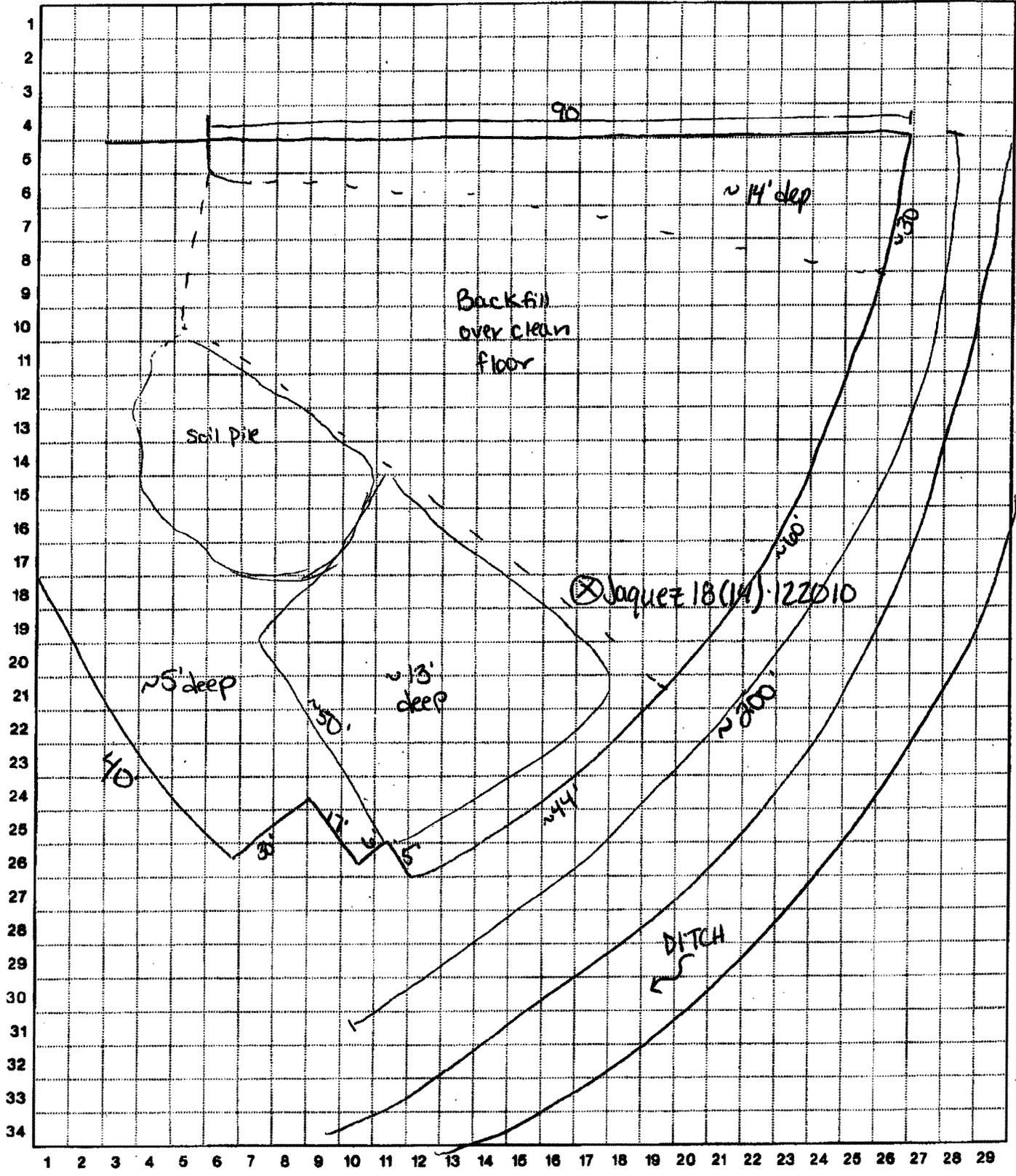




PROJECT Jaquez
PROJECT MANAGER Ashley Ager
JOB No. MWH 1005 J
LOCATION Jaquez

DATE 12/20/10
CONT. No. _____
BY Brodie Herb CHK'D _____
SHEET No. _____ OF _____

MSL 70039 10/1003

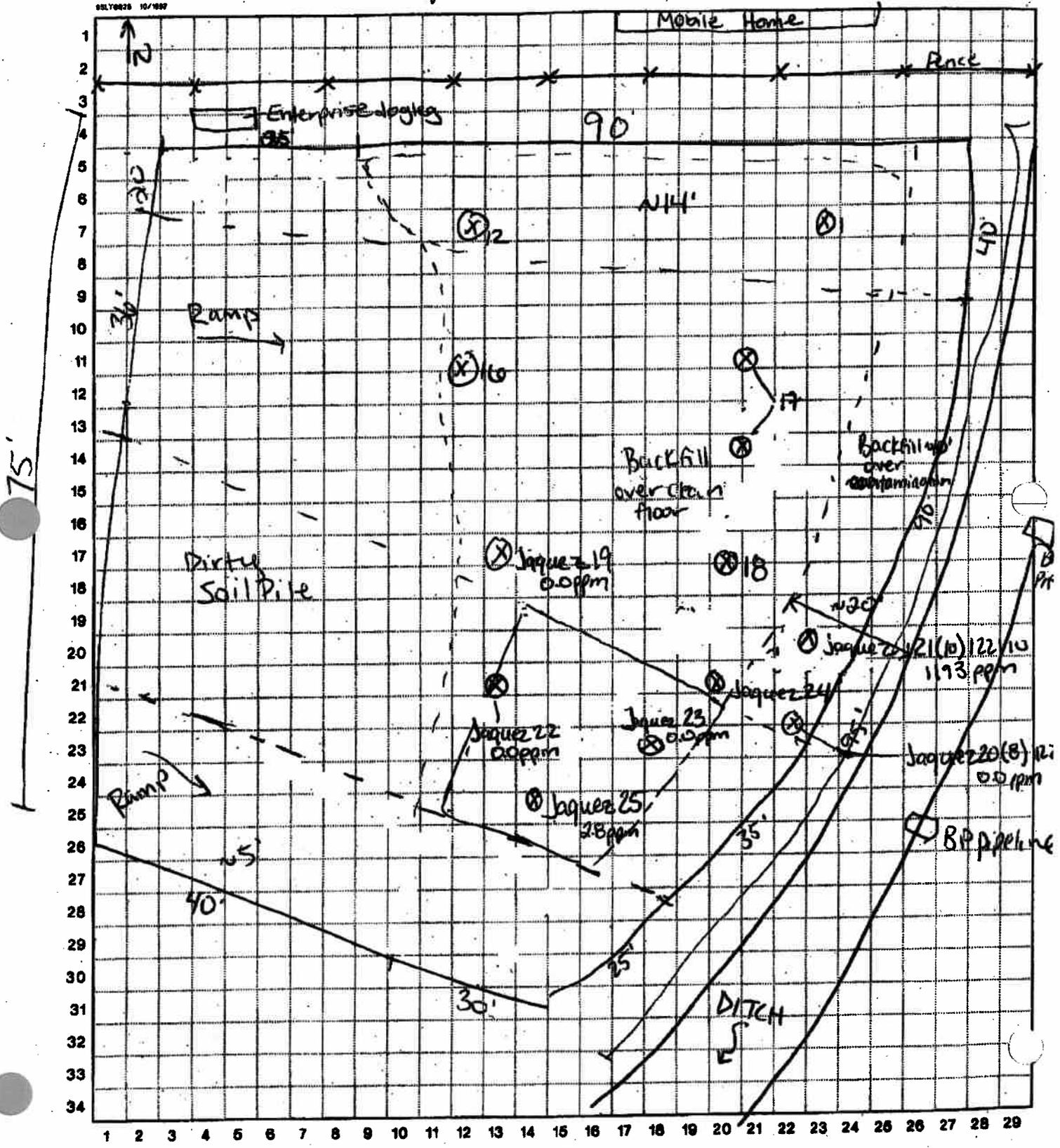




PROJECT Jaquez
PROJECT MANAGER Ashley Ager
JOB No. MWH1005
LOCATION Jaquez

DATE 12/21/10
CONT. No. _____
BY Brooke Herli CHK'D _____
SHEET No. 1 OF 1

08170023 10/1007

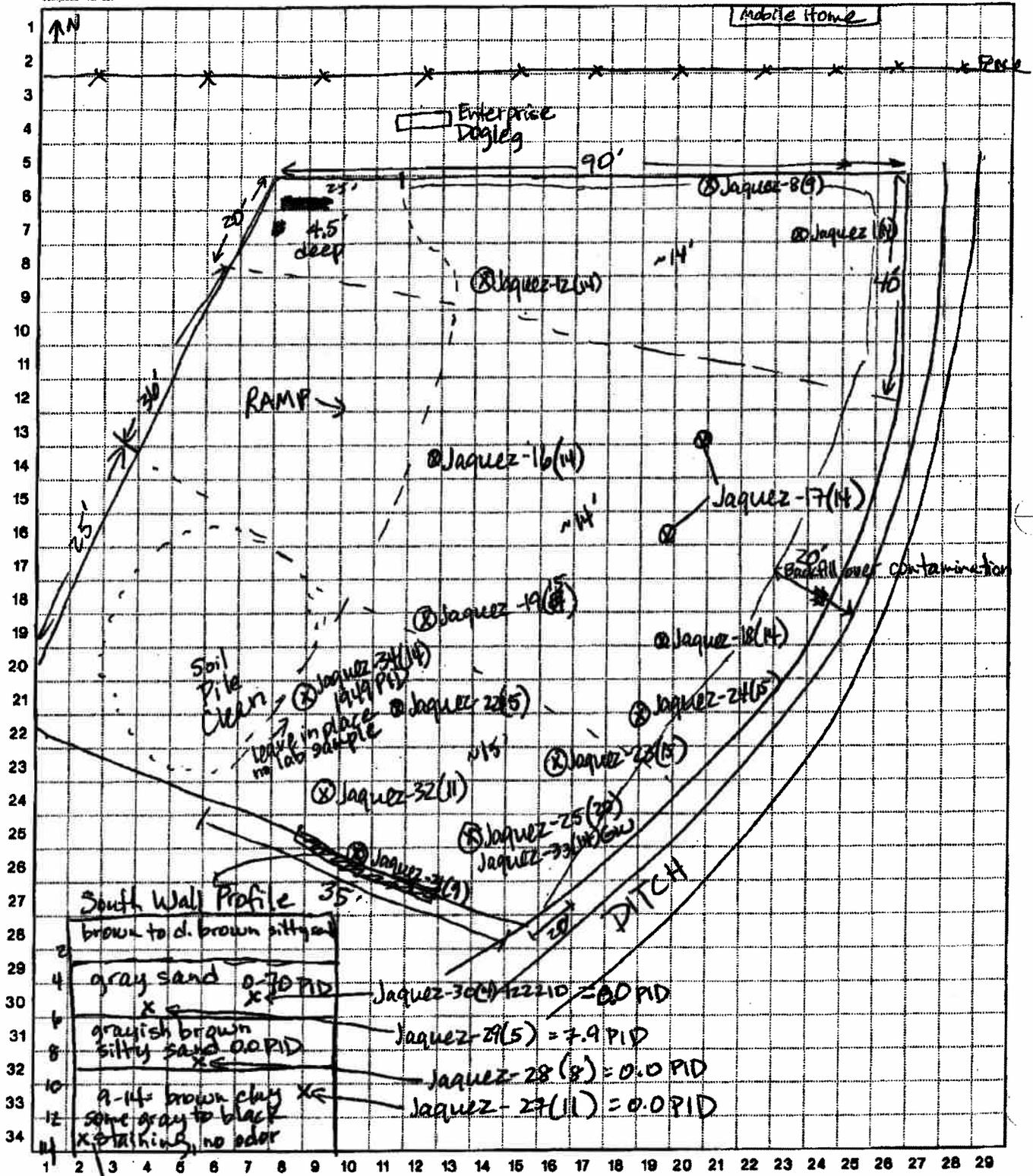




PROJECT JAQUEZ
 PROJECT MANAGER Ashley Ager
 JOB No. MWH 1005
 LOCATION Jaquez

DATE 12-22-10
 CONT. No. _____
 BY ALA CHK'D _____
 SHEET No. 1 OF 1

DL 70038 10/1007



South Wall Profile 35'

2	brown to d. brown silty sand
4	gray sand 0.70 PID
6	grayish brown silty sand 0.0 PID
10	9-14 brown clay
12	some gray to black
14	X PARTIALING, no odor

Jaquez-26(M) = 0.0 PID

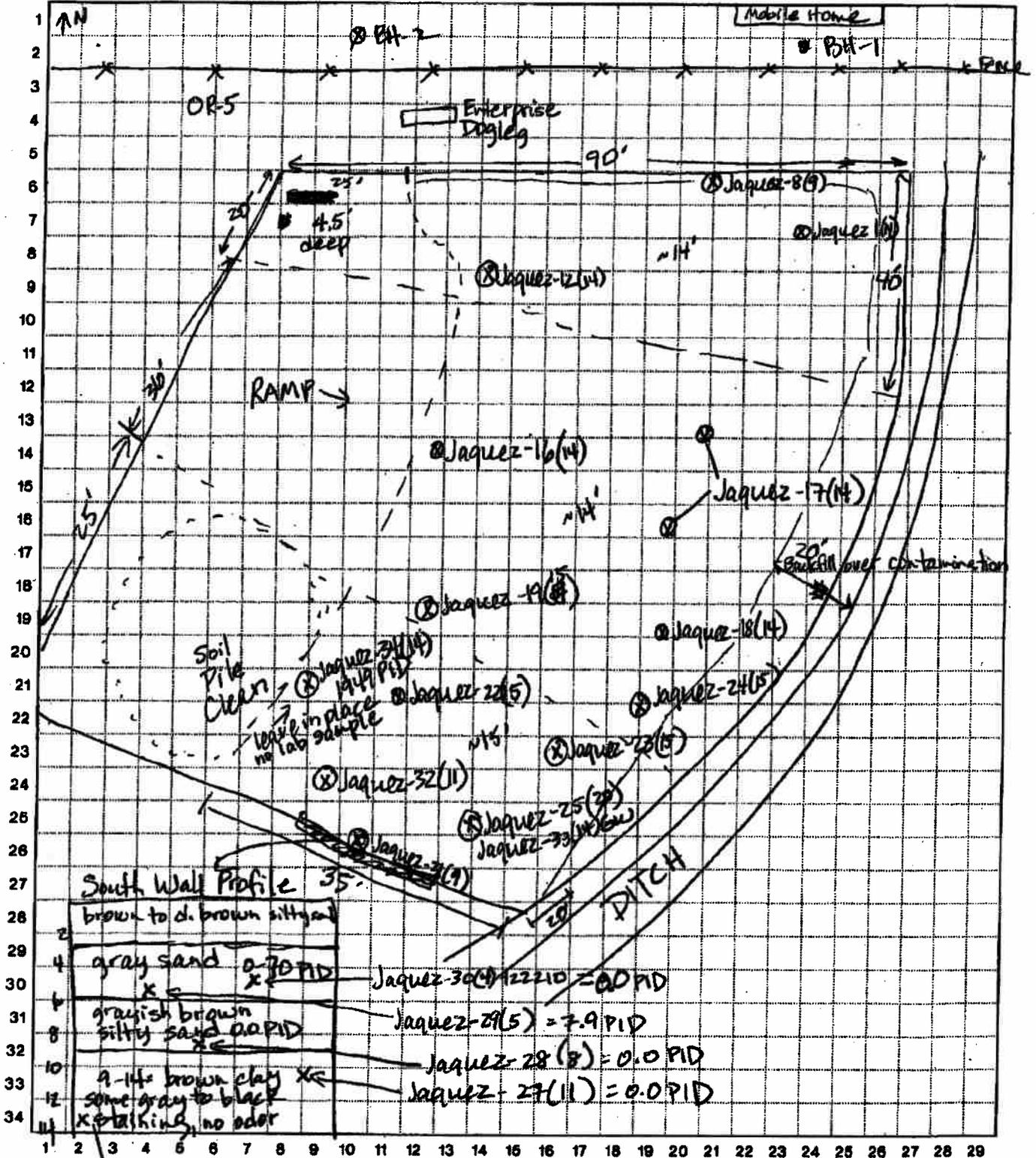
Rec: 18, 19, 22, 23, 25, 32



PROJECT Jaquez
 PROJECT MANAGER Ashley Ager
 JOB No. MWH 1005
 LOCATION Jaquez

DATE 12-22-10 / 12-23-10
 CONT. No. _____
 BY ALA CHK'D _____
 SHEET No. _____ OF 1

DLT0038 10/2007



South Wall Profile 35'

2	brown to d. brown silty sand
4	gray sand 0.7 PID
6	grayish brown silty sand 0.0 PID
10	9-14" brown clay
12	some gray to black
14	no striking, no odor

Jaquez-26(14) = 0.0 PID

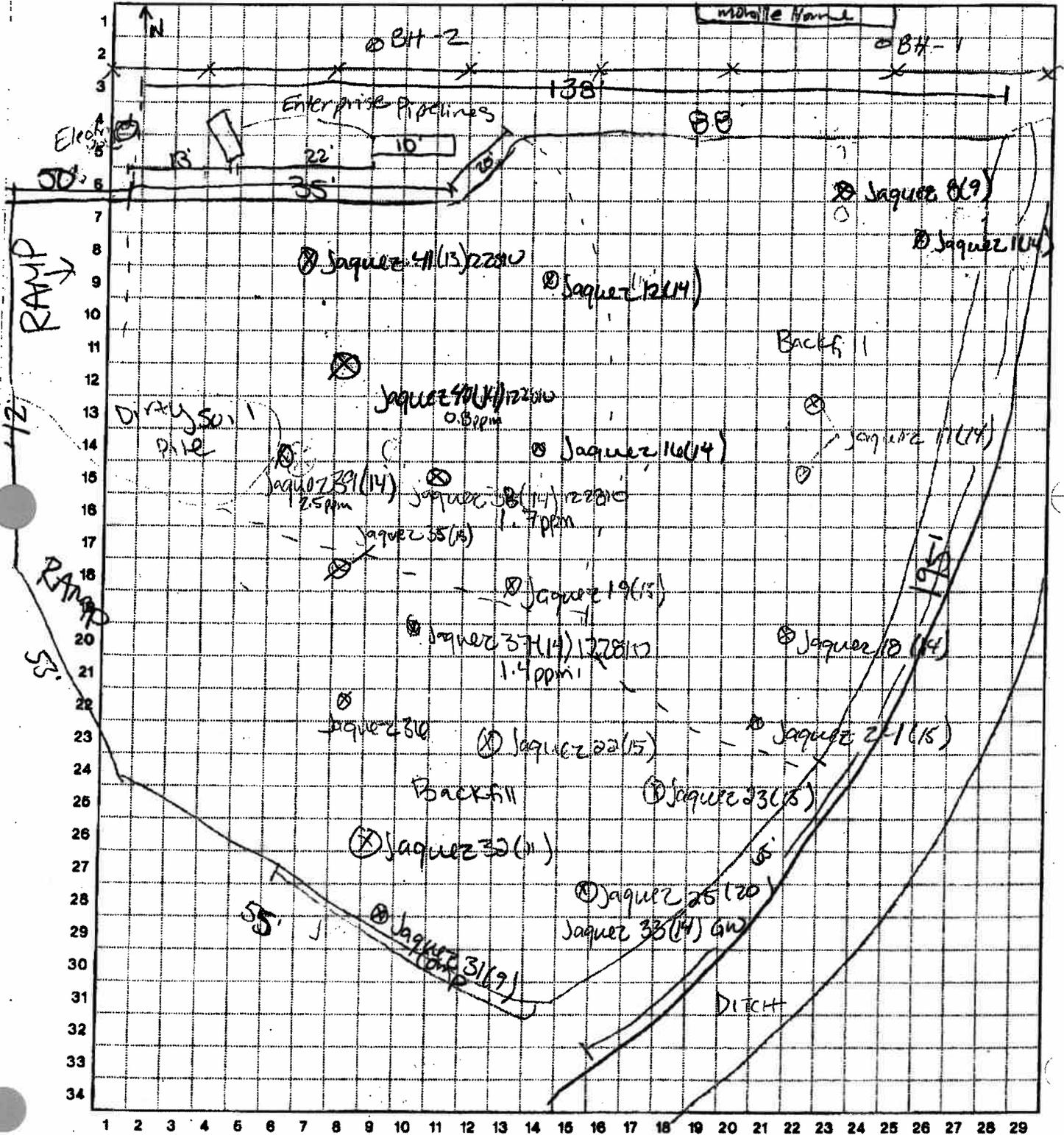
Rec: 18, 19, 22, 23, 25, 32



PROJECT Jaquie
PROJECT MANAGER Ashley Ager
JOB No. MWH 1005
LOCATION Jaquie

DATE 10-28-10
CONT. No. _____
BY BDH CHK'D _____
SHEET No. _____ OF _____

MHT008 10/10/07



Soil Excavation Oversight Field Form

Date: 1/4/2011 Time On-Site: 9:05 Time Off-Site: 1700
 Tailgate Safety Meeting? Y (Y/N) JSA? N/A (Y/N)
 One Call Completed? Y (Y/N) Lines Marked? Y (Y/N)
 Project Name: Jaquez
 Project Number: MWH 1005
 LTE Employee(s): Brooke Herb
 Site Name: Jaquez
 Others On-Site (contractors, regulators etc.): Sandy Pace & Louis (Paul) Sons, M&P Trucking
 Site Location (Lat & Long or T/R/S/Q/Q): 29N, 9W, 6
 Soil Disposal Location: Envirotek Vol. Excavated: 200 Vol. Off-Site: 120
 Water Encountered? Y (Y/N) Water Volume Removed: 80 bbls
 Water Disposal Location: Key Disposal



PID Screening Data: (Use 2nd Page if Needed)

Sample ID	Sample Location Description (ref. on sketch)	Depth	PID (ppm)
Jaquez-43(13)010411	West wall (middle North) Brown Sand	13'	4.2 ppm
Jaquez-44(6)-010411	West wall (further north) "	6.5'	8.2 ppm
Jaquez-45(15)-010411	West wall Brown Clayey Sand	8'	0.3 ppm
Jaquez-46(15)010411	West Wall - (bottom most) Brown @ North Wall	13.5'	0.3 ppm
Jaquez-47(12)010411	West Wall 12' brown sand (brown sand mixture)	12'	0.2 ppm
Jaquez-48(7)010411	West wall northern top brown sand	7'	0.0
Jaquez-49(10)010411	west wall composite for 10'	10'	0.8
Jaquez-50(4)010411	Top under electrical (North wall - western most)	4'	1.4
Jaquez-51(13)010411	Bottom North Wall (western most) Brown Sand	13'	4.0
Jaquez-52(9)010411	Black & Gray Sand Where 10" Anchors	9'	1175
Jaquez-53(8)010411	Brown Sand	8'	1.7
Jaquez-54(5)010411	Top Wall Brown Sand	5'	2.2
Jaquez-55(9)010411	North Wall (west 50') Composite	9'	37.8
Jaquez-56			

Sample Collection Data:

Sample ID	Time	Sample Depth	PID (ppm)	Sample Location Description (ref. on sketch)	Analyses	PF
Jaquez-49(10)010411	1446	10'	0.8	West Wall (north)	BTEX TPH	17
Jaquez-56(9)010411	1616	9'	37.8	North Wall Composite	BTEX TPH	72

Laboratory Name: Accutest Shipping Date: 1-6-11
 Shipping Method: Fedex Shipped by: Brooke Herb

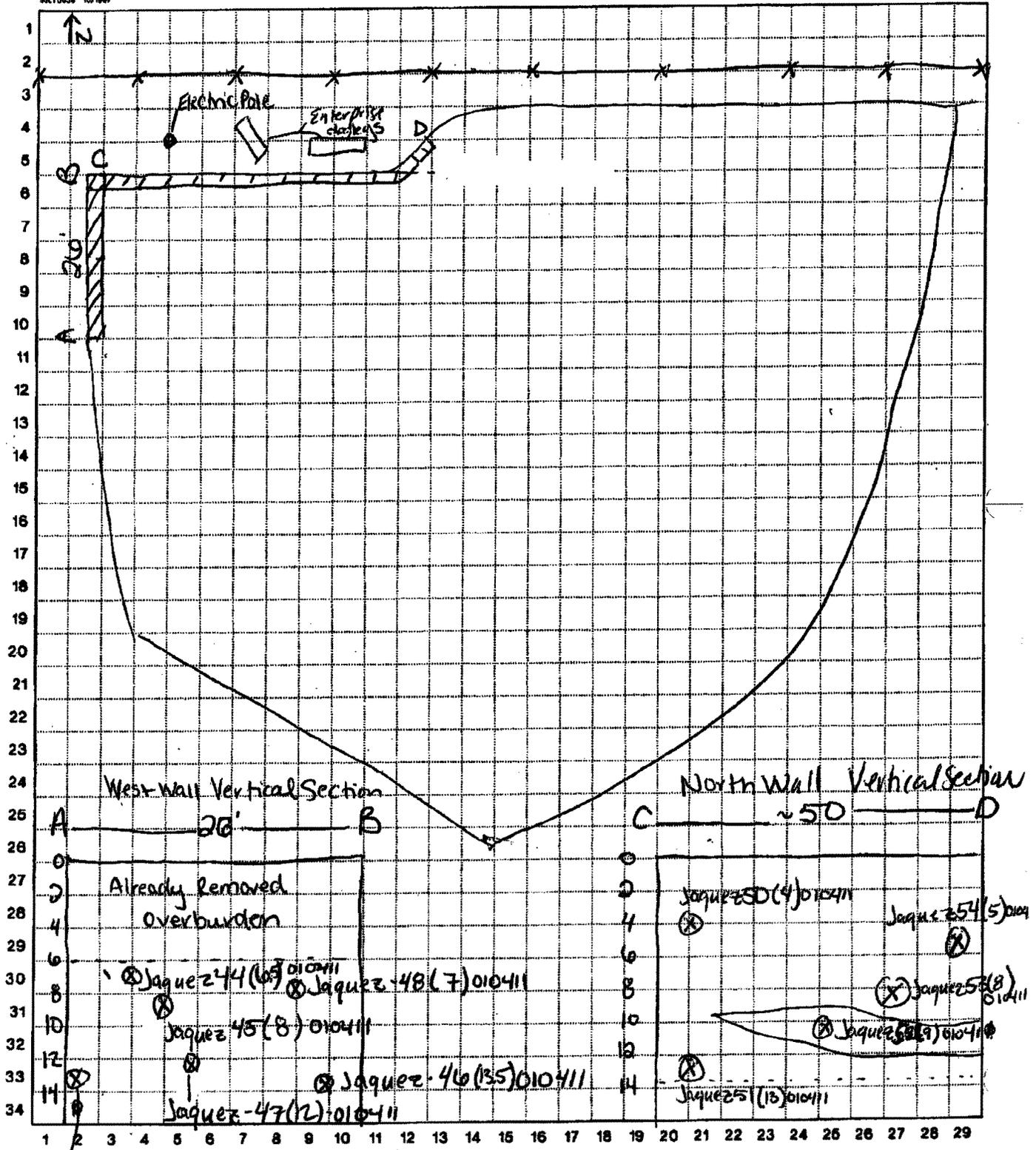




PROJECT Jaquez
PROJECT MANAGER Ashley Ager
JOB No. MWH 1005
LOCATION Jaquez

DATE January 4, 2011
CONT. No. _____
BY Brooke Herold CHK'D _____
SHEET No. _____ OF _____

94L7003 10/10/07



Jaquez-43(13)-010411

Soil Excavation Oversight Field Form

Date: 1/5/11 Time On-Site: 1043 Time Off-Site: 1808
 Tailgate Safety Meeting? Y (Y/N) ISA? N/A (Y/N)
 One Call Completed? Y (Y/N) Lines Marked? Y (Y/N)
 Project Name: Jaquez
 Project Number: MWH005
 LTE Employee(s): Brooke Herb
 Site Name: Jaquez
 Others On-Site (contractors, regulators etc.): Lou's
 Site Location (Lat & Long or T/R/S/Q/A): 29N, 9W, 6
 Soil Disposal Location: EnviroTech Vol. Excavated: 100 Vol. Off-Site: 150
 Water Encountered? Y (Y/N) Water Volume Removed: 0 - Able to control w/ backfill
 Water Disposal Location: Key disposal

PID Screening Data: (Use 2nd Page if Needed)

Sample ID	Sample Location Description (ref. on sketch)	Depth	PID (ppm)
Jaquez-56(10)010511	Northwall - Black Seam - Black gray Clay	10	2056
Jaquez-57(145)010511	Northwall - Below Contaminated Seam - Saturated	14.5	2.2
Jaquez-58(11)010511	Northwall - Black Gray Clay	11	2712
Jaquez-59(3)010511	Northwall - Top East - Brown Sand	3	0.6
Jaquez-60(6)010511	Northwall - Brown Sand	6	1.7
Jaquez-61(12)010511	Northwall - Black Sand	12	3320
Jaquez-62(3)010511	Northwall - Top Middle - Brown Sand	3	0.3
Jaquez-63(5)010511	Northwall - Brown Sand	5	1.0
Jaquez-64(11)010511	Northwall - Black Sandy clay	11	2017
Jaquez-65(8)010511	Northwall - Top of Black seam	8	2963
Jaquez-66(9)010511	Northwall - composite 56-60	9	1799
Jaquez-67(9)010511	Northwall - composite 61-65	9	3002

Sample Collection Data:

Sample ID	Time	Sample Depth	PID (ppm)	Sample Location Description (ref. on sketch)	Composite Analyses	DF
Jaquez-66(9)010511	1730	9'	1799	Northwall East Side	BTEX, TPH	2606
Jaquez-67(9)010511	1735	9'	3002	Northwall - Middle comp.	BTEX, TPH	4207

Laboratory Name: Accutest Shipping Date: 1-6-11
 Shipping Method: Fed ex Shipped by: Brooke Herb

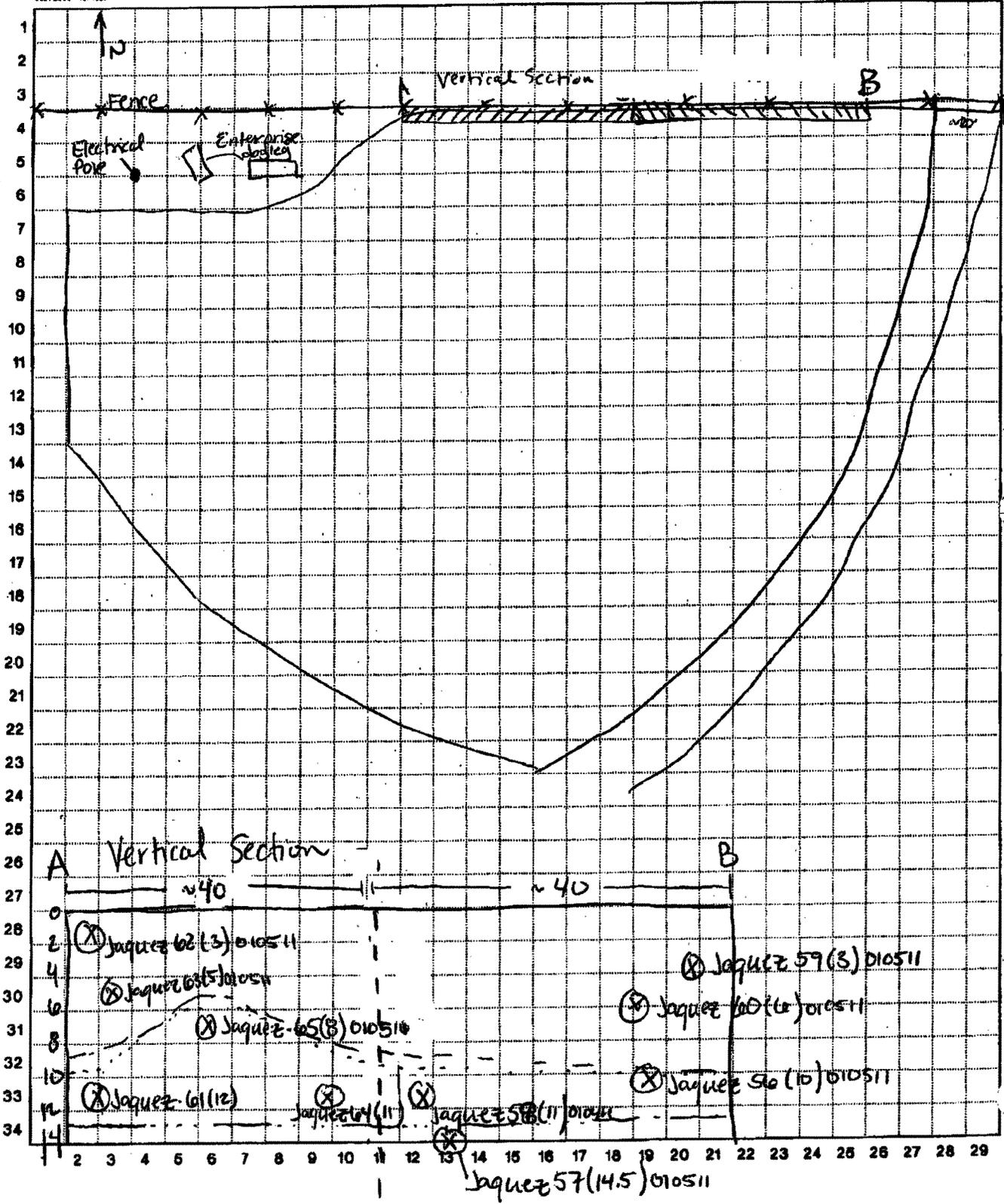




PROJECT Jaquez
PROJECT MANAGER Ashley Ager
JOB No. MWH 1005
LOCATION Jaquez

DATE 1/5/11
CONT. No. _____
BY BDH CHK'D _____
SHEET No. _____ OF _____

08/70038 10/1007



Soil Excavation Oversight Field Form

Date: 1/31/11 Time On-Site: 9:47 Time Off-Site: 15:00

Tailgate Safety Meeting? Y (Y/N) JSA? NA (Y/N)
 One Call Completed? Y (Y/N) Lines Marked? Y (Y/N)

Project Name: Jaquez
 Project Number: MWH 1005
 LTE Employee(s): Broke Hole
 Site Name: Jaquez

Others On-Site (contractors, regulators etc.): Jeff Blay, Nelson V. Sandy Baca

Site Location (Lat & Long or T/R/S/Q/Q): 29N, 9W, 10
 Soil Disposal Location: Envirotech Vol. Excavated: _____ Vol. Off-Site: 0
 Water Encountered? Y (Y/N) Water Volume Removed: None
 Water Disposal Location: Key Disposal

PID Screening Data: (Use 2nd Page if Needed)

Sample ID	Sample Location Description (ref. on sketch)	Depth	PID (ppm)	Retesting
East Pipeline - Start @ Elbow move to meter House				
Jaquez 68(3)013111	Sidewall near elbow - black sand patch	~3'	0.0 ppm	
Jaquez 69(4.5)013111	5-point composite of 0-50' from Elbow - Brown Sand	~4.5'	0.0 ppm	
Jaquez 70(4.5)013111	52' from Elbow - Black Sand immediately below pipe	~4.5'	0.0 ppm	
Jaquez 71(8)013111	52' from Elbow - Saturated Brown Sand	~8'	0.0 ppm	
Jaquez 72(4.5)013111	69' from Elbow - dark gray/black wet Sand	~4.5'	0.0 ppm	
Jaquez 73(8)013111	74' from Elbow - Brown Saturated Sand	~8'	0.0 ppm	
Jaquez 74(4.5)013111	110' from Elbow - just below pipe - gray sand	4.5'	0.0 ppm	
Jaquez 75(4.5)013111	130' from Elbow - Darker gray sand ^{more black}	4.5'	0.0 ppm	
Jaquez 76(4.5)013111	150' from Elbow - Black/gray Sand	4.5'	0.0 ppm	
Jaquez 77(4.5)013111	175' from Elbow - Gray Black Sand	4.5'	0.0 ppm	
Jaquez 78(4.5)013111	195' from Elbow - Gray/Black Sand	4.5'	0.0 ppm	
Jaquez 79(4.5)013111	221' from Elbow - Saturated Brownish gray Sand w/ HC odor	4.5'	101.0 ppm	130 ppm

Sample Collection Data:

Sample ID	Time	Sample Depth	PID (ppm)	Sample Location Description (ref. on)	Analyses

Laboratory Name: _____ Shipped by: _____
 Shipping Method: _____ Shipping Date: _____



Soil Excavation Oversight Field Form

Date: 1/31/11 Time On-Site: 947 Time Off-Site: 1500
 Tailgate Safety Meeting? _____ (Y/N) JSA? NA (Y/N)
 One Call Completed? _____ (Y/N) Lines Marked? _____ (Y/N)
 Project Name: Jaquez
 Project Number: MWH 1005
 LTE Employee(s): Brooke Herb
 Site Name: Jaquez
 Others On-Site (contractors, regulators etc.): Jeff Blag Nelson V Sandy B
 Site Location (Lat & Long or T/R/S/O/O): 29N, 9W, 10
 Soil Disposal Location: Envirotech Vol. Excavated: _____ Vol. Off-Site: 0
 Water Encountered? y (Y/N) Water Volume Removed: 0
 Water Disposal Location: Key Disposal

PID Screening Data: (Use 2nd Page if Needed)

Sample ID	Sample Location Description (ref. on sketch)	Depth	PID (ppm)	Petrolog
	WEST BP PIPELINE (From Meter House to Elbow)			
Jaquez 80(4.5)013111	10' from MH - Brown Sat Sand w/ Black Staining	4.5	0.0 ppm	
Jaquez 81(4.5)013111	17' from MH - Brown Sat Sand	4.5	0.0 ppm	
Jaquez 82(4.5)013111	37' from MH - Brown Sand	4.5	0.0 ppm	
Jaquez 83(4.5)013111	60' from MH - Brown Stained w gray/BK Sand	4.5	0.0 ppm	
Jaquez 84(4.5)013111	95' from MH - Dark Gray Sand - Sulfur smell	4.5	0.0 ppm	
Jaquez 85(4.5)013111	110' from MH - Dark Black Sand	4.5	75.4 ppm	
Jaquez 86(4.5)013111	133' from MH - Very strong sewage odor	4.5	0.0 ppm	
Jaquez 87(4.5)013111	155' from MH - Black clayey sand - Sheen on surface	4.5	129.8 ppm	192 ppm
Jaquez 88(4.5)013111	172' from MH - gray Black clayey sand	4.5	0.0 ppm	
Jaquez 89(4.5)013111	1910' from MH - Brown Sand minor Black Staining - Sample @ Elbow	4.5	910.5 ppm	

Sample Collection Data:

Sample ID	Time	Sample Depth	PID (ppm)	Sample Location Description (ref. on)	Analyses

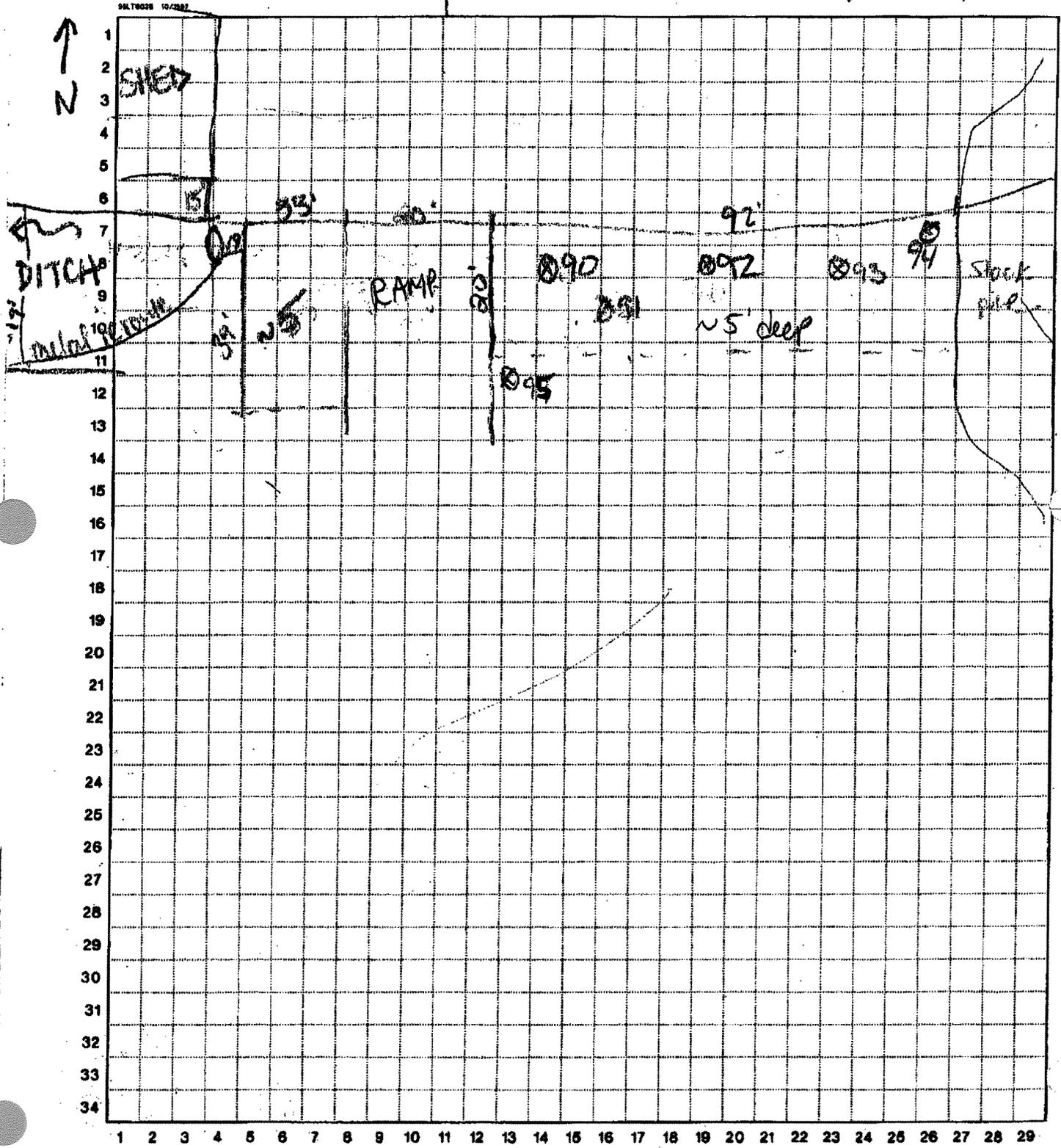
Laboratory Name: _____ Shipping Date: _____
 Shipping Method: _____ Shipped by: _____





PROJECT Agua
PROJECT MANAGER Wiley
JOB No. MWH1005
LOCATION Agua

DATE 2/2/11
CONT. No. _____
BY BT CHK'D _____
SHEET No. 1 OF 1

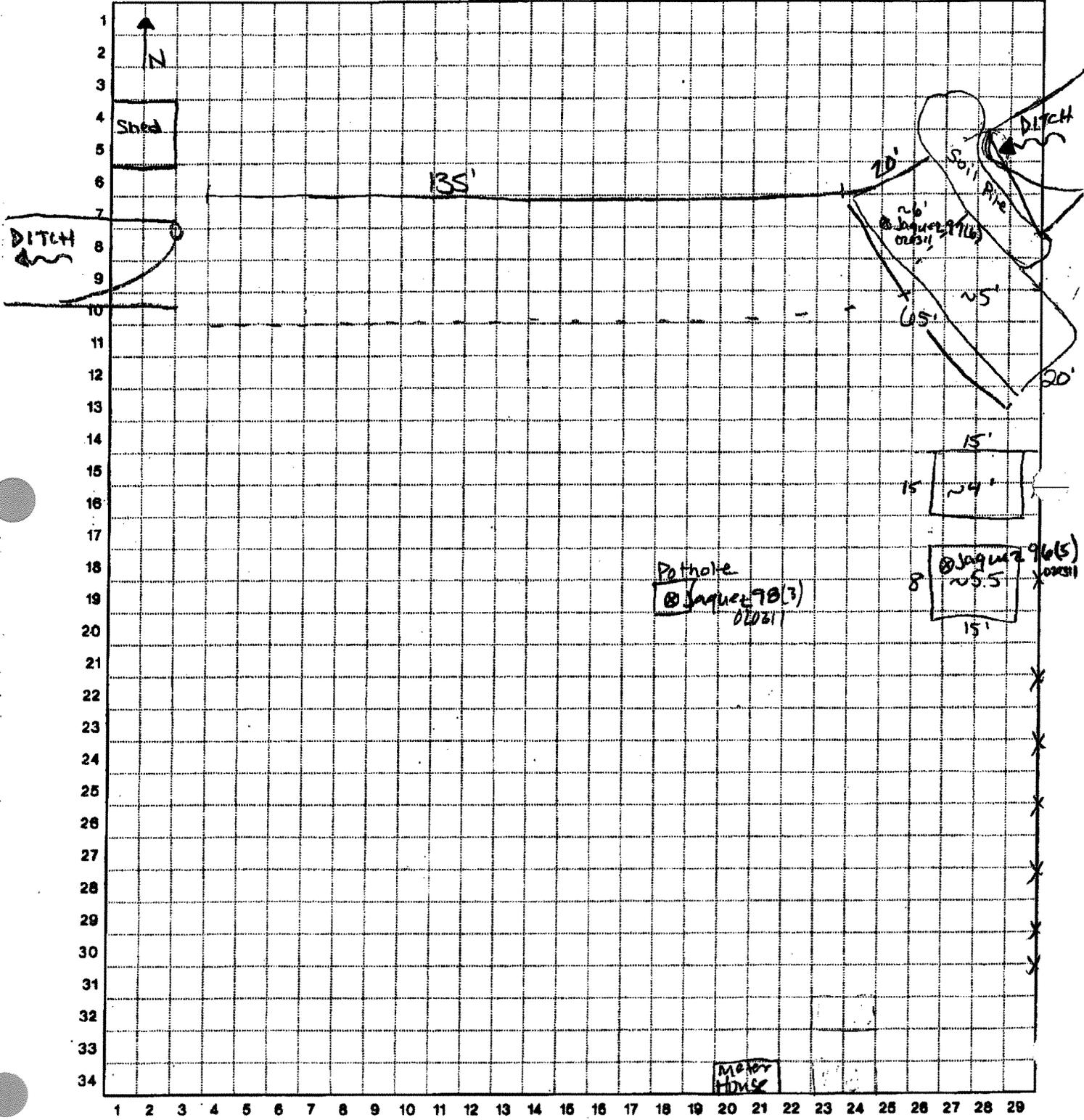




PROJECT Jaquez
PROJECT MANAGER ALA
JOB No. MWH1005
LOCATION Jaquez

DATE 2/3/2011
CONT. No. _____
BY BDH CHK'D _____
SHEET No. 1 OF 1

95L10028 10/10/07

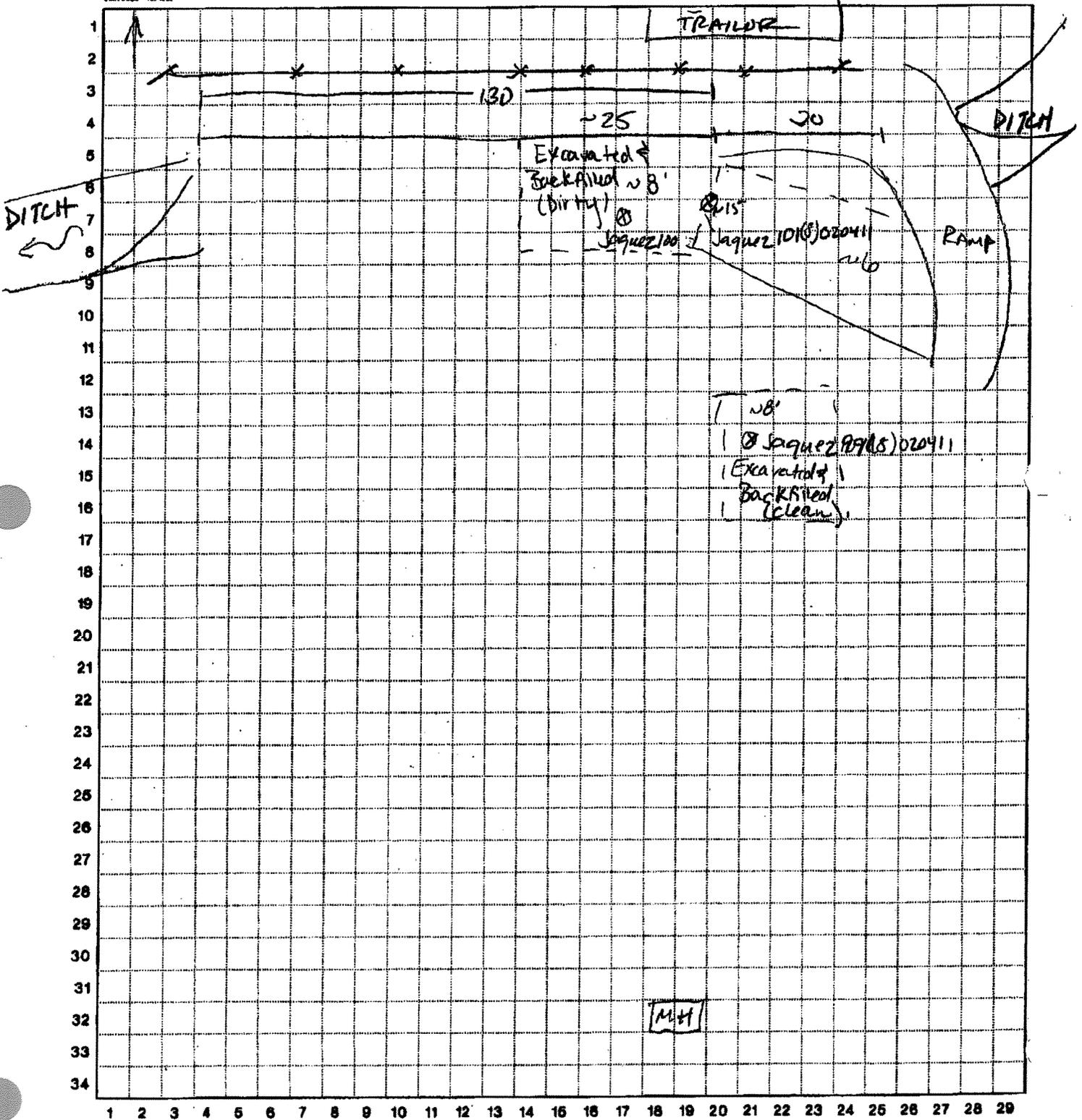




PROJECT Jaquez
PROJECT MANAGER ALA
JOB No. MWH1005
LOCATION Jaquez

DATE 2/4/2011
CONT. No. _____
BY BDH CHK'D _____
SHEET No. 1 OF 1

99.70028 10/98F

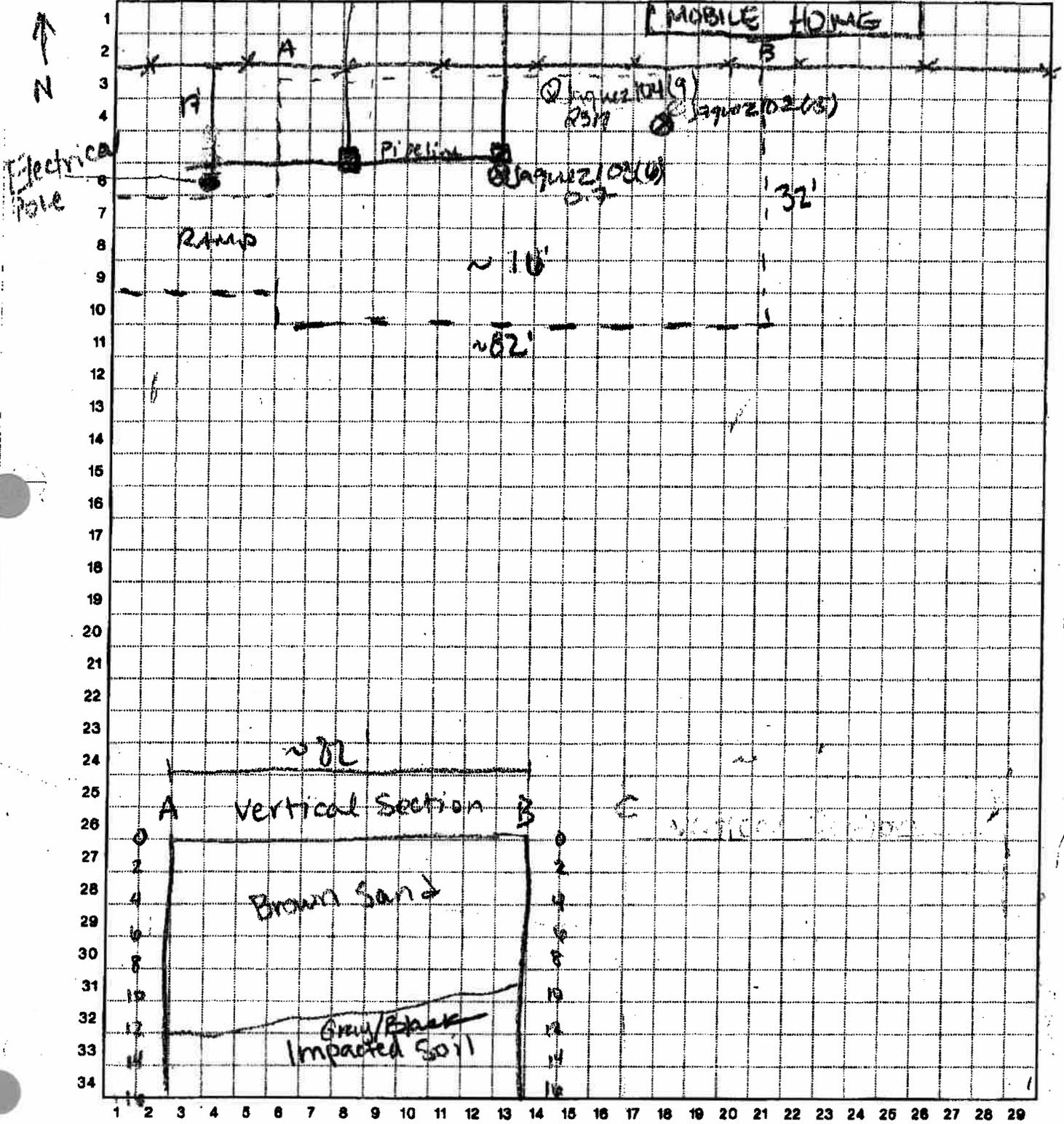




PROJECT Jaquez
PROJECT MANAGER ALA
JOB No. MWH1005
LOCATION Jaquez

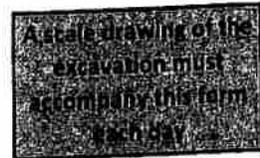
DATE 2/7/16
CONT. No. _____
BY BDH CHK'D _____
SHEET No. 1 OF 1

SLT0036 10/1997



Soil Excavation Oversight Field Form

Date: 2/10/2011 Time On-Site: 9:20 Time Off-Site: 1:25
 Tailgate Safety Meeting? Y (Y/N) JSA? NA (Y/N)
 One Call Completed? Y (Y/N) Lines Marked? Y (Y/N)
 Project Name: Jaquez
 Project Number: MWH 1005
 LTE Employee(s): Broke Herbo
 Site Name: Jaquez
 Others On-Site (contractors, regulators etc.): Arnold w/ Enterprise, Louis & Imery w/ Paul & Son's, Sandy Baca, Brandon Tawell
 Site Location (Lat & Long or T/R/S/Q/A): 29N, 9W, 6
 Soil Disposal Location: Envirotech Vol. Excavated: 550 Vol. Off-Site: ~200
 Water Encountered? N (Y/N) Water Volume Removed: NA
 Water Disposal Location: Key Disposal



PID Screening Data: (Use 2nd Page If Needed)

Sample ID	Sample Location Description (ref. on sketch)	Depth	PID (ppm)
Jaquez 105 (20) 021011	North Wall (West) Brown Sand West	~110	0.1 ppm
Jaquez 106 (20) 021011	Under West dog leg directly S of E-W running pipeline - looking to see if any got out off while backfilling - NO contamination	~20	0.0 ppm
Jaquez 107 (7) 021011	North Wall - 7 feet down directly below trailer door. Brown a little Gray Sand	~7	35.0 ppm
Jaquez 108 (15) 021011	N. Wall - 15' down directly below electric pole by trailer - Brown sand	~15	17.8 ppm
Jaquez 109 (10) 021011	N. wall E. of Electric pole Brown Sand	~10'	0.7 ppm
Jaquez 110 (16) 021011	N. Wall Near where contamination pinches out Brown Sand	~16'	0.3 ppm
Jaquez 111 (17) 021011	N. Wall Black/Gray AC Color Sand	~17'	3815 ppm
Jaquez 112 (20) 021011	Floor near n wall moist brown sand	~20'	66 ppm
Jaquez 113 (12) 021011	East Side of North Wall 5' point composite	~12'	1889 ppm
	↳ composite of 107, 108, 109, 110, 111		
	N Wall - small lens	21'	628 ppm

Did not ship

Sample Collection Data:

Sample ID	Time	Sample Depth	PID (ppm)	Sample Location Description (ref. on sketch)	Analyses	PF
Jaquez 105 (16) 021011	10:46	110'	0.1	Western N Wall	TPH, BTEX	10
Jaquez 113 (12) 021011	17:00	12'	1889	Eastern N Wall	TPH, BTEX	1002
Jaquez 111 (17) 021011	16:35	17'	3815	N Wall - black lens	TPH, BTEX	

Laboratory Name: AccuTest Shipping Date: 2-14-11 Shipped by: ALA
 Shipping Method: Fed Ex

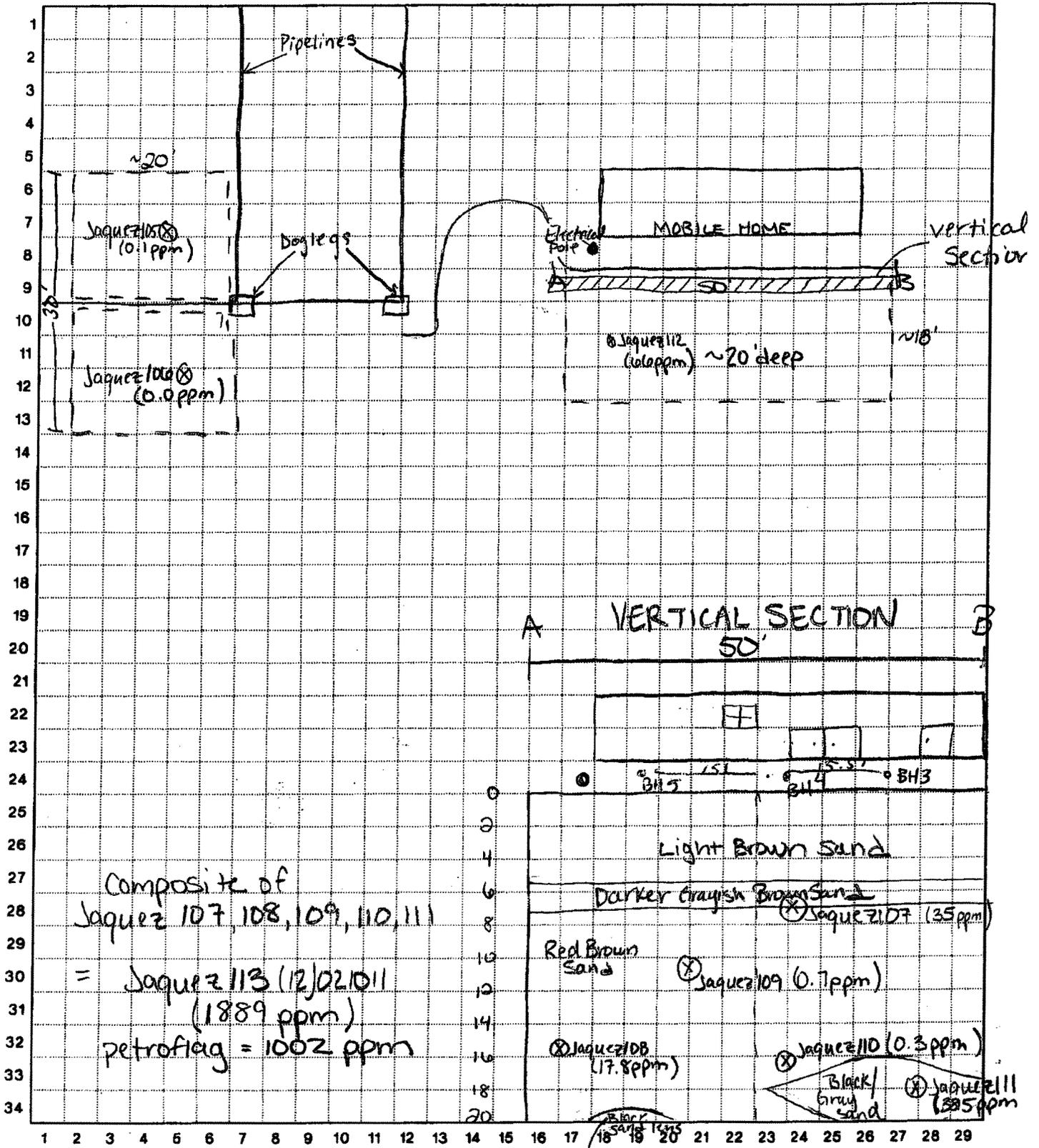
Brandon Tawell
505-320-0200



PROJECT Jaquez
PROJECT MANAGER ALA
JOB No. MWH 1005
LOCATION Jaquez

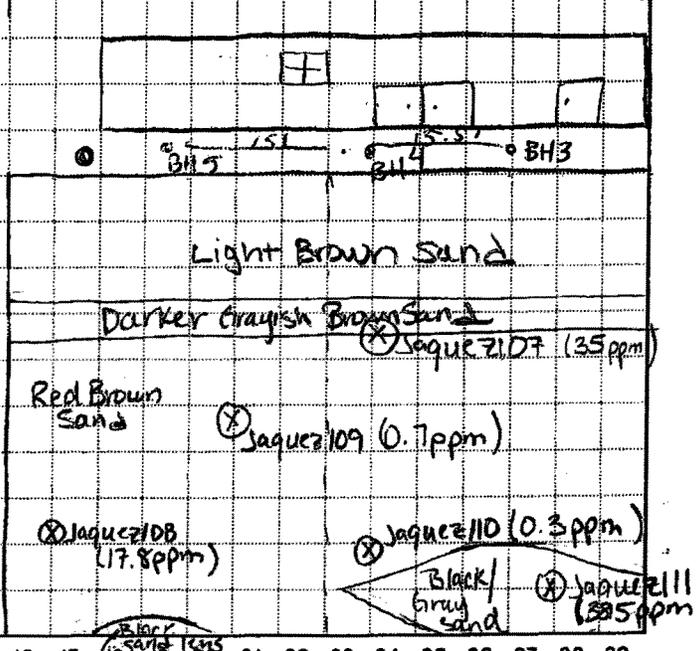
DATE 2/10/2011
CONT. No. _____
BY BDH CHK'D _____
SHEET No. _____ OF _____

95LTC028 10/097



Composite of
Jaquez 107, 108, 109, 110, 111
= Jaquez 113 (12) 02.10.11
(1889 ppm)
petroflag = 1002 ppm

A VERTICAL SECTION B
50'



Contamination ~ 3.5' at thickest

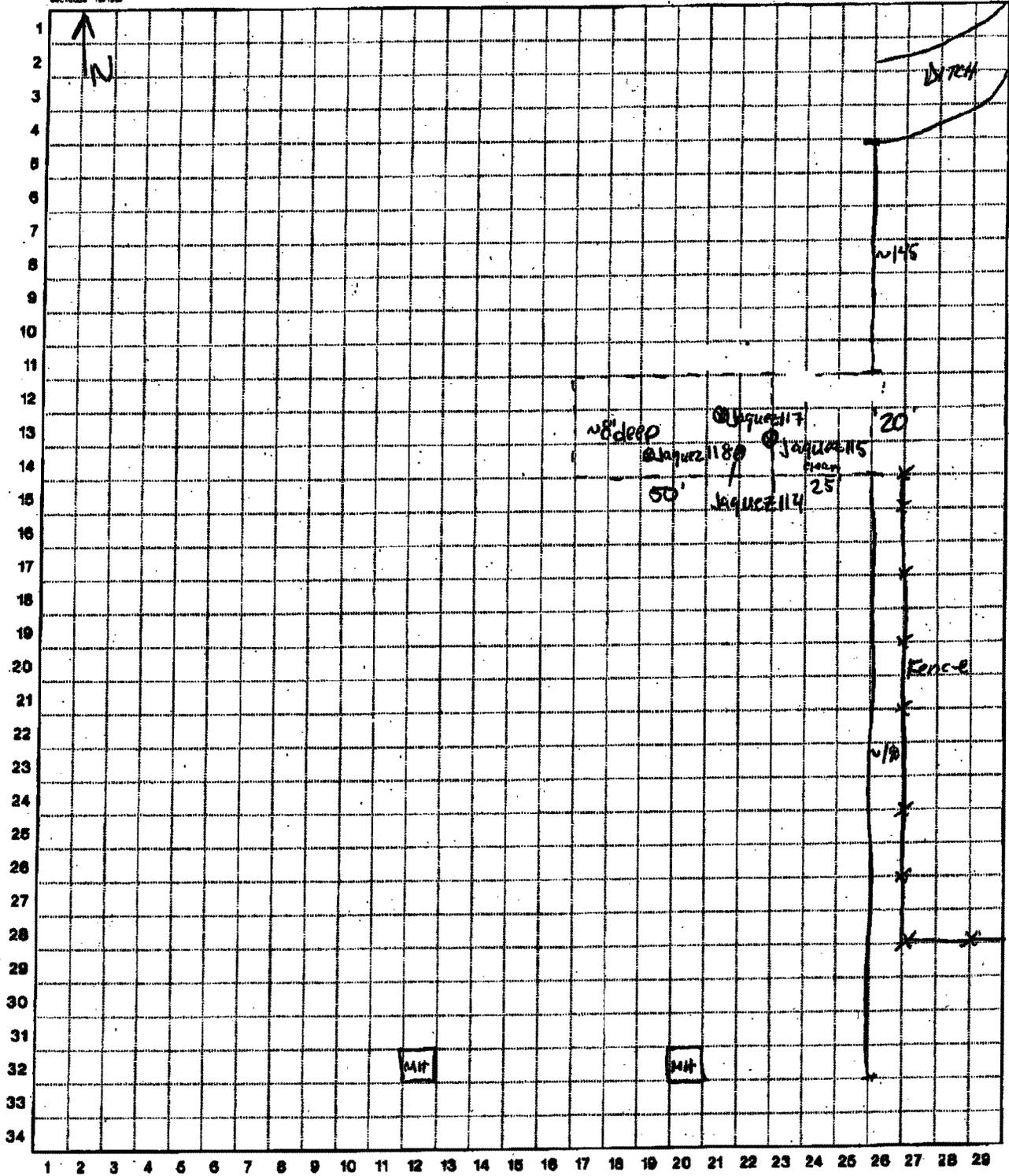
628 ppm



PROJECT Jaquez
PROJECT MANAGER ALA
JOB No. MWH1005
LOCATION Jaquez

DATE 2/11/11
CONT. No. _____
BY BDH CHK'D _____
SHEET No. _____ OF _____

64.70038 1/1/99

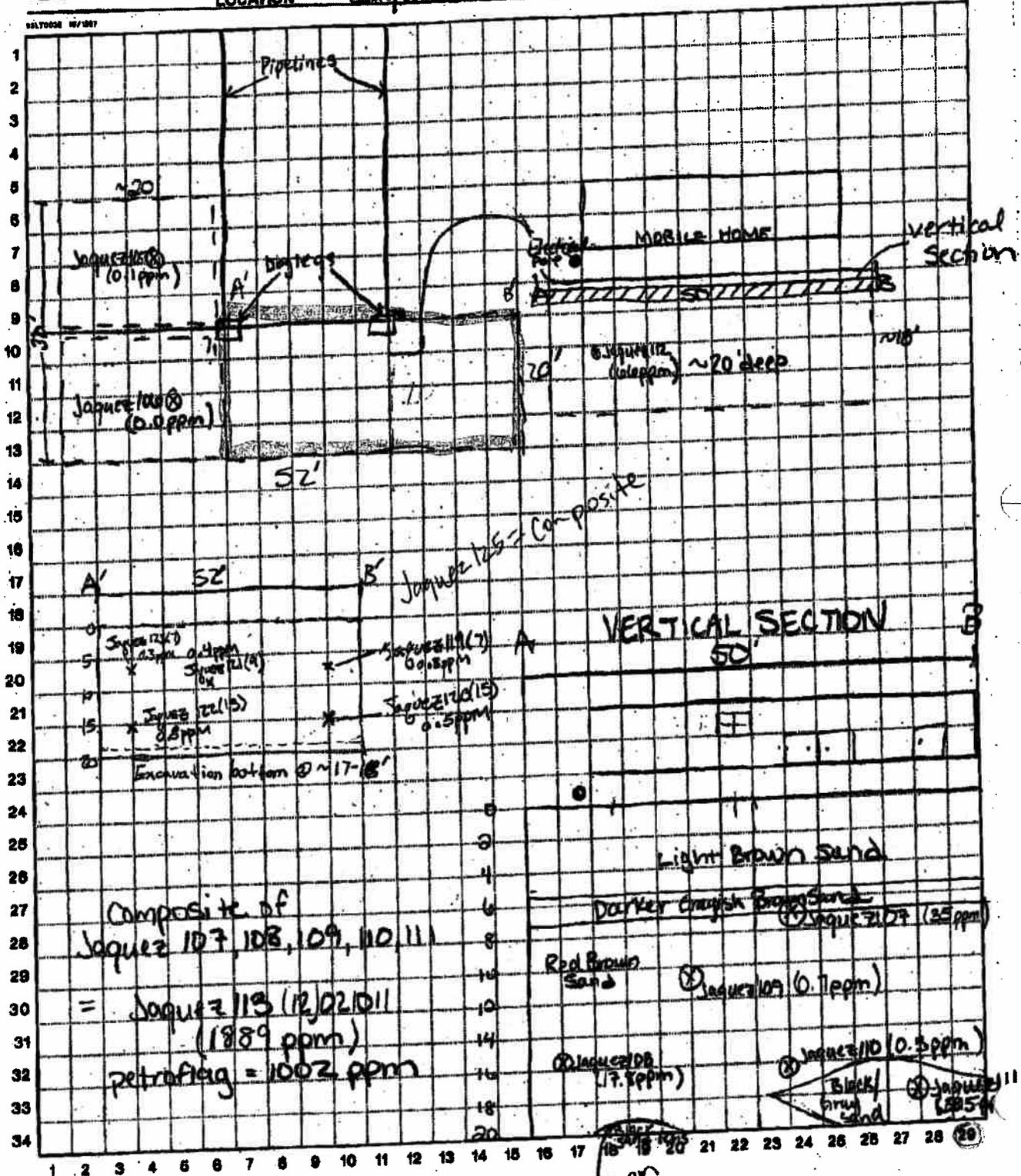


* Start at Sample # 119



PROJECT Jaquez
PROJECT MANAGER ALA
JOB No. MWH 1005
LOCATION Jaquez

DATE 2/13/2011
2/10/2011
CONT. No. _____
BY Rdt CHK'D _____
SHEET No. 1 OF 2



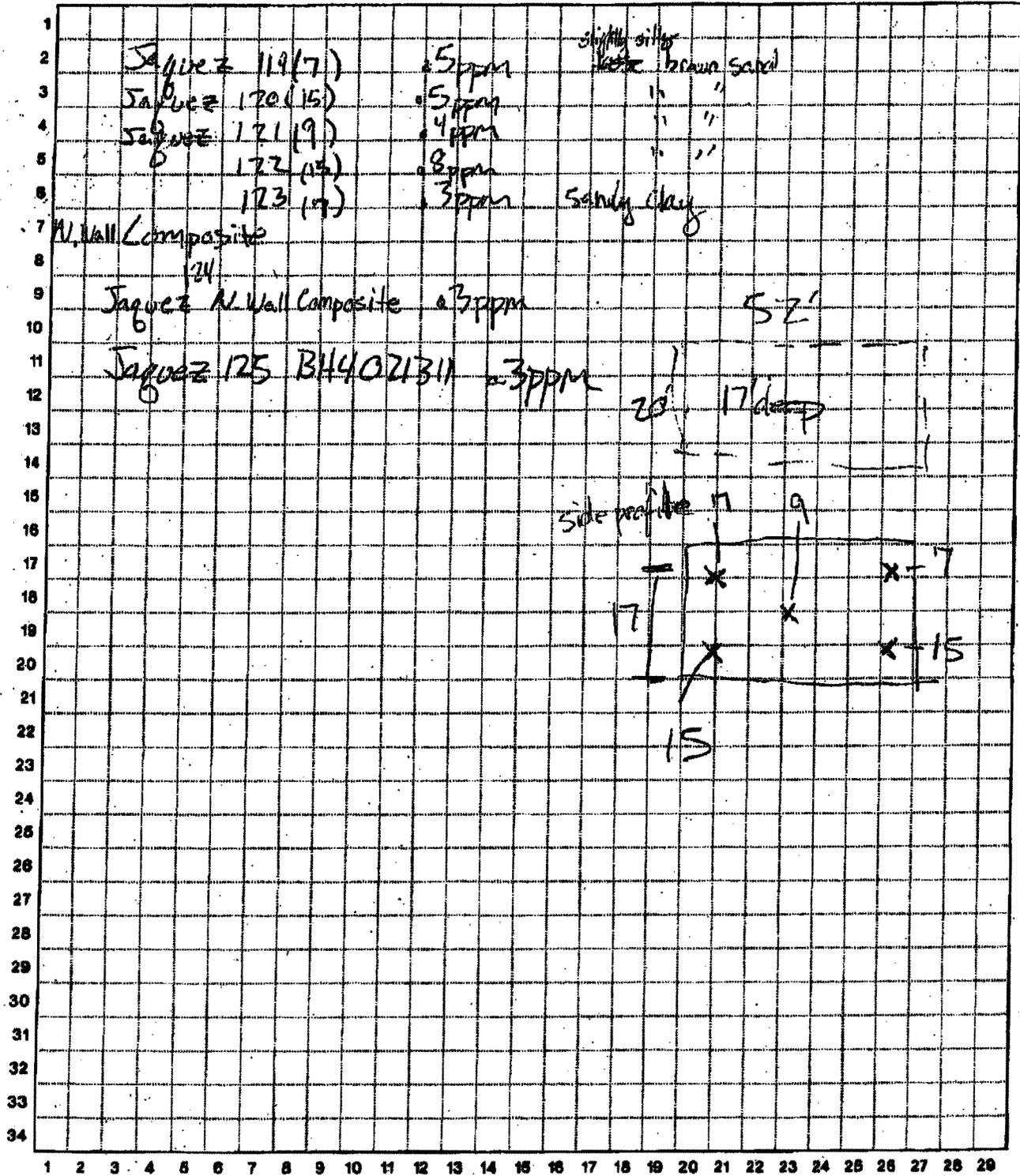
Contamination ~ 3.5' at Thickest



PROJECT Jaquez
 PROJECT MANAGER ALA
 JOB No. MWH 1005
 LOCATION Jaquez

DATE 2-13-2011
 CONT. No. _____
 BY Sam LaPue CHK'D _____
 SHEET No. 2 OF 2

DATE PLOT (07/83)



Soil Excavation Oversight Field Form

Date: 2/14/11 Time On-Site: 10:00 Time Off-Site: 16:16

Tailgate Safety Meeting? Y (Y/N) JSA? N/A (Y/N)
 One Call Completed? Y (Y/N) Lines Marked? Y (Y/N)



Project Name: Saquez
 Project Number: MWH1005
 LTE Employee(s): Brooke Herb - Dustin Held - Auger
 Site Name: Saquez

Others On-Site (contractors, regulators etc.): Sandy Lewis, Trieny, Al - Paul & Sons, Arnold w/Enterprise

Site Location (Lat & Long or T/R/S/O/A): 29N, 9W, 6

Soil Disposal Location: Enviotech Vol. Excavated: ~50 Vol. Off-Site: ~150

Water Encountered? Y (Y/N) Water Volume Removed: Controlled amount of water

Water Disposal Location: Key disposal packed over it

PID Screening Data: (Use 2nd Page if Needed) South Side of Ditch

Sample ID	Sample Location Description (ref. on sketch)	Depth	PID (ppm)	PF
Saquez 125 (4) 02/14/11	East Wall Brown Sand minor Bk staining	~4'	10.8 ppm	31 ppm
Saquez 126 (6) 02/14/11	East Wall - Brown " Gray staining	~6'	0.9	16 ppm
Saquez 127 (10) 02/14/11	South east wall black sand no color	~10'	8.0 ppm	
Saquez 128 (3) 02/14/11	East wall - Brown Sand - Wet	~3'	2.0 ppm	
Saquez 129 (10) 02/14/11	East wall - Brown Sand - minor Bk staining - Saturated	~10'	1.4 ppm	
Saquez 130 (8) 02/14/11	East wall - Brown Sand w/ Black staining - minor	~8'	2.7 ppm	
Saquez 131 (7) 02/14/11	East wall - Brown Sand - major Black staining no color	~7'	8.5 ppm	
Saquez 132 (6) 02/14/11	East wall Composite -			
	Composite of 125, 126, 128, 129, 130	Avg 6'	2.9 ppm	

Sample Collection Data:

Sample ID	Time	Sample Depth	PID (ppm)	Sample Location Description (ref. on sketch)	Analyses	PF
Saquez 132 (6) 02/14/11	15:15	6'	2.9 ppm	East Wall 5-point	BTEX, TPH	26 ppm

Laboratory Name: Accutest Shipping Date: 2/15/10
 Shipping Method: Fedex Shipped by: Brooke Herb

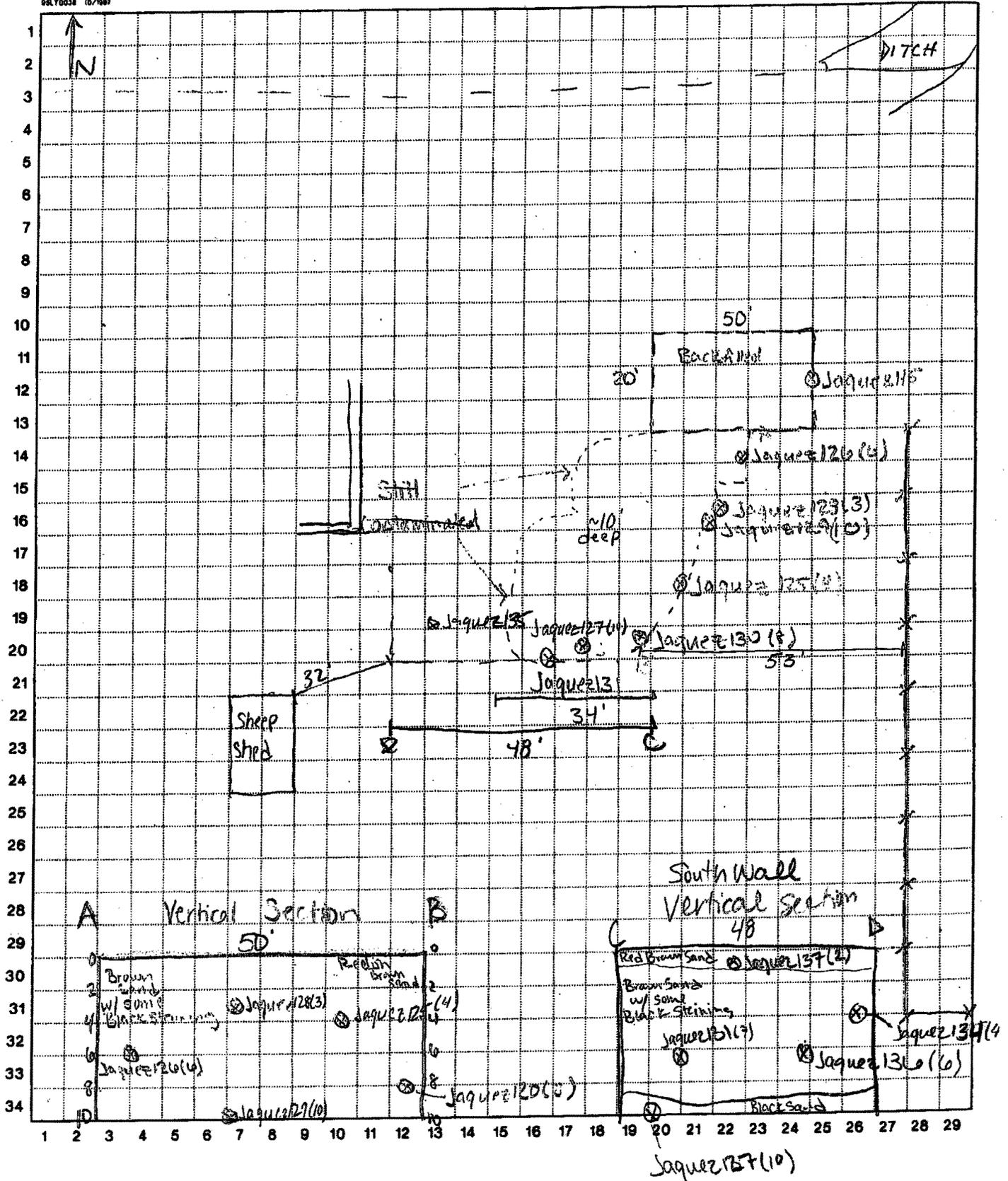




PROJECT Jaquez
PROJECT MANAGER ALA
JOB No. MWH1005
LOCATION Jaquez

DATE 3/14/2011
CONT. No. _____
BY BDH CHK'D _____
SHEET No. 1 OF 1

08L70038 (0/100)

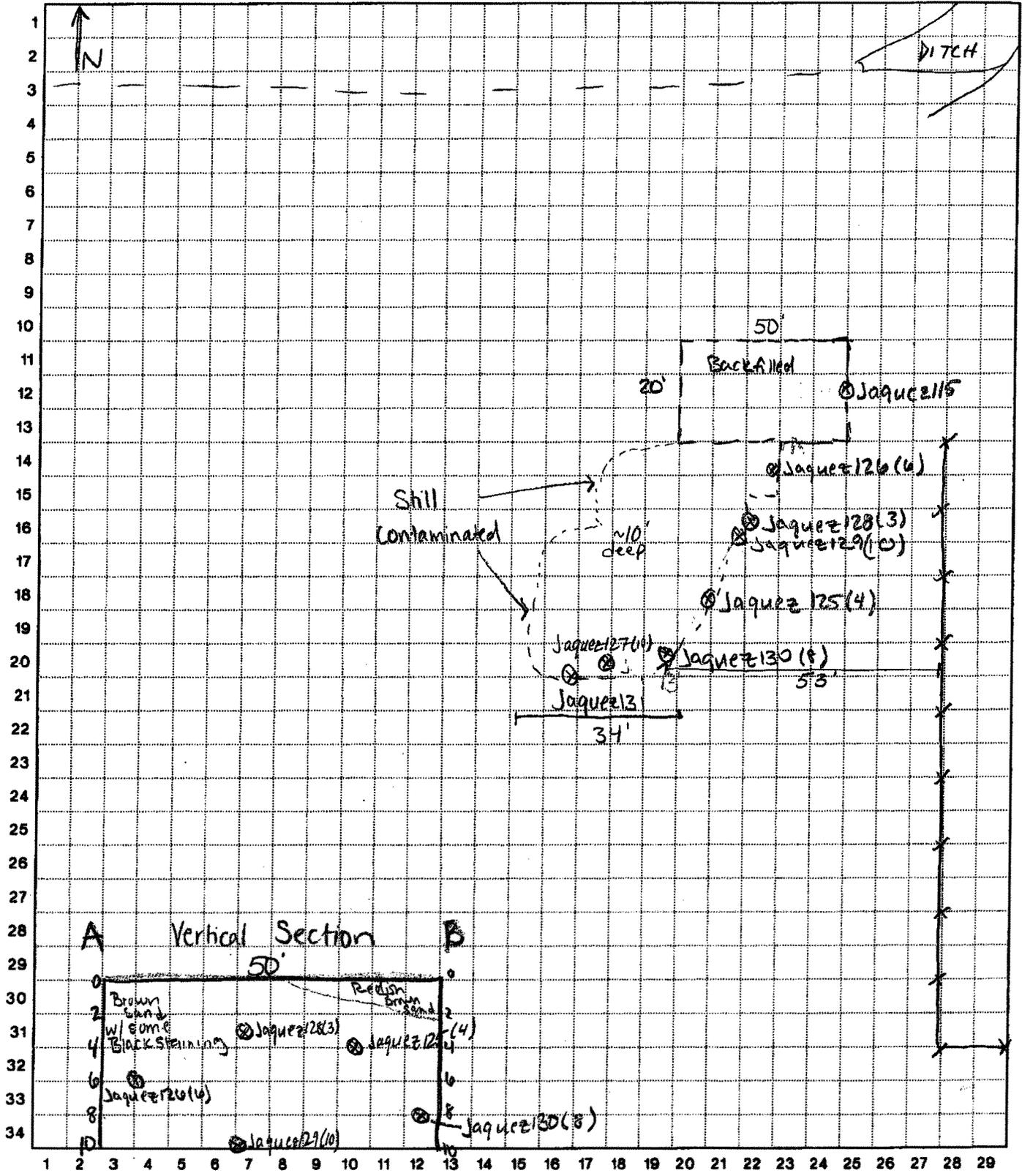




PROJECT Jaquez
PROJECT MANAGER ALA
JOB No. MWH1005
LOCATION Jaquez

DATE 2/14/2011
CONT. No. _____
BY BDH CHK'D _____
SHEET No. 1 OF 1

95.70038 10/1997



Soil Excavation Oversight Field Form

Date: 2/16/2011 Time On-Site: 10:05 Time Off-Site: 16:25

Tailgate Safety Meeting? Y (Y/N) JSA? NA (Y/N)

One Call Completed? Y (Y/N) Lines Marked? Y (Y/N)

Project Name: Jaquez

Project Number: MWH1005

LTE Employee(s): Brooke Herb

Site Name: Jaquez

Others On-Site (contractors, regulators etc.) Trieny & Clayton Paul & Son

Site Location (Lat & Long or T/R/S/Q/A): 29N, 9W, 6

Soil Disposal Location: Envirotech Vol. Excavated: ~225 Vol. Off-Site: ~100

Water Encountered? Y (Y/N) Water Volume Removed: 0

Water Disposal Location: _____



PID Screening Data: (Use 2nd Page if Needed)

Sample ID	Sample Location Description (ref. on sketch)	Depth	PID (ppm)
Jaquez 133 (GW) 02/16/11	Ground Water Sample from South Side of Excavation - slight sheen - yellow near cent. wall	GW seeping in at 4.5'	—
Jaquez 134 (4) 02/16/11	West side South wall - red brown sand black staining	~4'	11.6 ppm
Jaquez 135 (6) 02/16/11	Floor near South wall (west side) gray/black saturated	~10'	1453 ppm
Jaquez 136 (6) 02/16/11	South wall Gray Brown Sand - Saturated	6'	18.9 ppm 12.15
Jaquez 137 (2) 02/16/11	South wall middle top - red brown sand no staining	2'	13.1 ppm
Jaquez 138 (6) 02/16/11	South wall composite	6'	33.2 ppm 1500
—	Composite 127, 131, 134, 136, 137	—	—
139 (7) 02/16/11	Floor - South Side	7'	396 ppm
140 (11) 02/16/11	Brown Sand Below concrete wall on South side	~6'	3.0 ppm
141 (16) 02/16/11	Floor near SW corner Brown Clay	10'	639
142 (8) 02/16/11	Floor near SW corner Brownish Gray Clayey Sand	8'	2038
143 (7) 02/16/11	SW corner Floor Composite	Avg 7'	1852 ppm 1610
—	Composite 135, 139, 140, 142	—	—

Sample Collection Data:

Submit copy of report daily

Sample ID	Time	Sample Depth	PID (ppm)	Sample Location Description (ref. on sketch)	Analyses	PF
Jaquez 133 (GW) 02/16/11	11:00	GW	GW	South Side AW	BTEX TPH	PF
Jaquez 138 (6) 02/16/11	1800	Avg 6'	33.2	South wall S-point	BTEX TPH	3 ppm
Jaquez 143 (7) 02/16/11	16:10	Avg 7'	1852	SW corner Floor Comp	BTEX, TPH	763 ppm

Laboratory Name: Accutest

Shipping Method: Fedex Shipping Date: 2/17/11

Shipped by: Ashley Ager

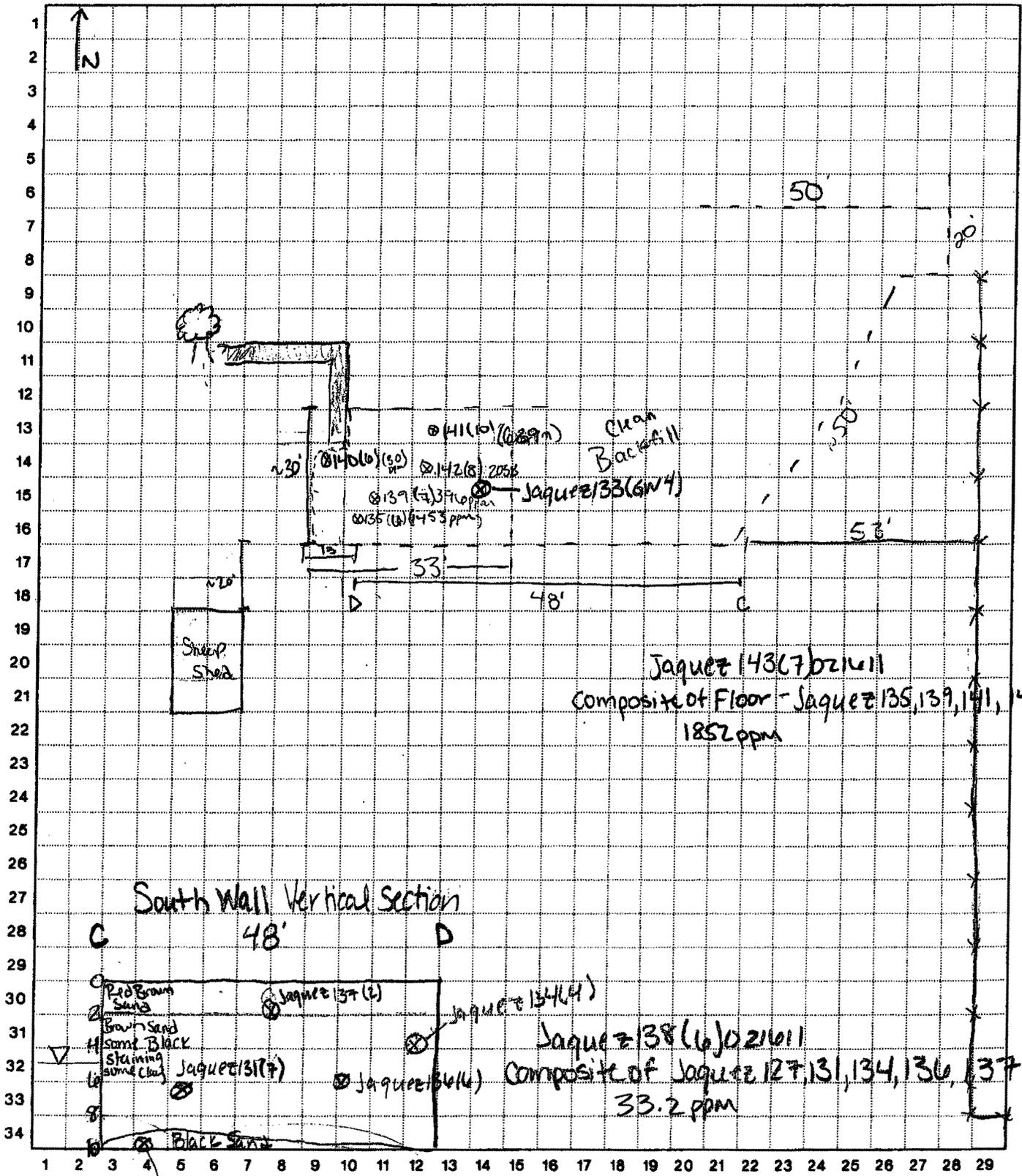




PROJECT Jaquez
 PROJECT MANAGER ALA
 JOB No. MWHIDOS
 LOCATION Jaquez

DATE 2/16/11
 CONT. No. _____
 BY BDH CHK'D _____
 SHEET No. 1 OF 1

95L70038 10/1997



South Wall Vertical Section

C 48' D

0-2' Pro Brown Sand
 2-4' Brown Sand
 4-6' Some Black staining (some clay)
 6-8' Black Sand

Jaquez 143(7) 02/11/11
 Composite of Floor - Jaquez 135, 139, 141, 142
 1852 ppm

Jaquez 138(6) 02/11/11
 Composite of Jaquez 127, 131, 134, 136, 137
 33.2 ppm

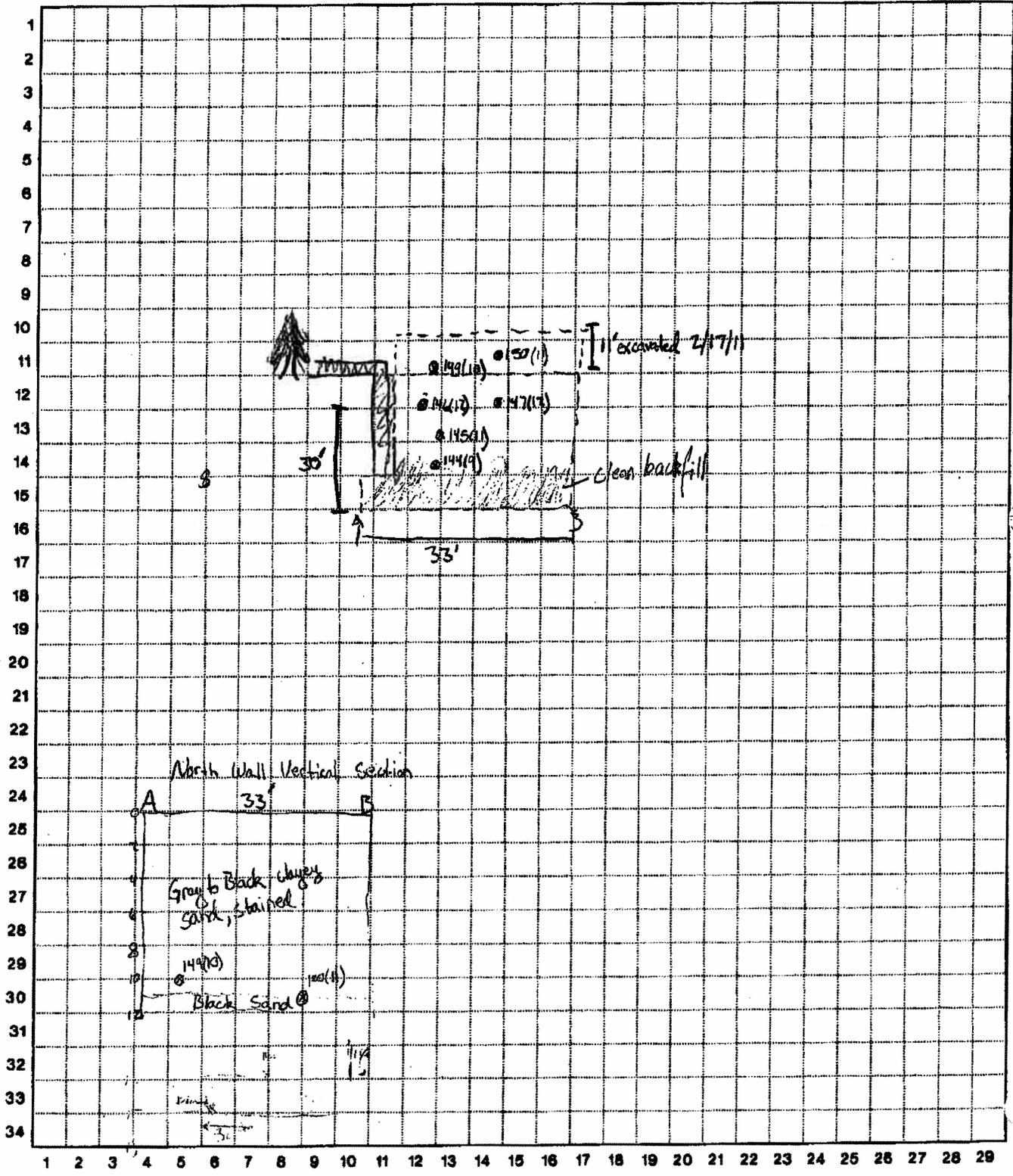
Jaquez 127(10)



PROJECT Jaquez
PROJECT MANAGER ALA
JOB No. MWH005
LOCATION Jaquez

DATE 2/17/11
CONT. No. _____
BY BVH CHK'D _____
SHEET No. 1 OF 1

04.70006 02/10/07



Soil Excavation Oversight Field Form

Date: 2/18/11 Time On-Site: 9:20 Time Off-Site: _____
 Tailgate Safety Meeting? Y (Y/N) JSA? NA (Y/N)
 One Call Completed? Y (Y/N) Lines Marked? Y (Y/N)
 Project Name: Jaquez
 Project Number: MWH 1005
 LTE Employee(s): Brooke Herb
 Site Name: Jaquez
 Others On-Site (contractors, regulators etc.): Trinity A1
 Site Location (Lat & Long or T/R/S/O/Q): 29N 9W L6
 Soil Disposal Location: Enviro Tech Vol. Excavated: ~500 Vol. Off-Site: ~100
 Water Encountered? Y (Y/N) Water Volume Removed: X
 Water Disposal Location: _____



PID Screening Data: (Use 2nd Page if Needed)

Sample ID	Sample Location Description (ref. on sketch)	Depth	PID (ppm)
Jaquez 151(4)021811	Southwest corner where still black pocket ^{Black gray sand + minor clay}	~4	1783 ppm
Jaquez 152(4)021811	Black sand lense on West wall	4.5	18.7 ppm
Jaquez 153(5)021811	West wall south end by Sheep-Sat	5	2.1 ppm
154(3)021811	SW wall of SW corner in front of Sheep Shed	3	2.3 ppm
155(4)021811	Soil Seg. Brwn Sand	4	190 ppm
156(3)021811	West Wall South in Red brown/black sand	3	0.8 ppm
157(7)021811	Floor of SW corner in front of Sheepshed	7	0.8 ppm
158(8)021811	East wall Black/Brown/Gray sand	8	3.5 ppm
159(5)021811	East wall South corner Dark gray sand	5	0.7 ppm
160(9)021811	Gray sand South wall east corner	9	9.3 ppm
161(6)021811	Black line (organics) in Brown sand on SW wall middle	6	1.6 ppm
162(2)021811	South wall - middle - Red brown sand	2	0.7 ppm
163(5)021811	South wall - middle east - Brown sand	5	1.5 ppm
164(6)021811	East wall - North floor wall against backfill	10	2.4 ppm
165(5)021811	East wall - Middle - Grayish Black sand	5	18.1 ppm
166(6)021811	East wall middle clayey sand - Dark brown	3.5	0.1 ppm
168(4.5)021811	West wall - South 50' - middle Brown sand	4.5	0.6 ppm
169(6.5)021811	East wall - composite - 164, 167, 165, 159, 158	6.5	2.6 ppm
170(10)021811	West wall ^{South} middle bottom - (Southern 50')	10	4.6 ppm
171(10)021811	West wall - Southern 50' - North bottom	10	815 ppm

Sample Collection Data:

Sample ID	Time	Sample Depth	PID (ppm)	Sample Location Description (ref. on)	Analyses

Laboratory Name: _____ Shipping Method: _____ Shipping Date: _____
 Shipped by: _____

11:02 John Jaquez ansibe



Soil Excavation Oversight Field Form

Date: 2/18/11 Time On-Site: _____ Time Off-Site: _____
 Tailgate Safety Meeting? _____ (Y/N) JSA? _____ (Y/N)
 One Call Completed? _____ (Y/N) Lines Marked? _____ (Y/N)
 Project Name: _____
 Project Number: _____
 LTE Employee(s): _____
 Site Name: _____
 Others On-Site (contractors, regulators etc.): _____
 Site Location (Lat & Long or T/R/S/Q/Q): _____
 Soil Disposal Location: _____ Vol. Excavated: _____ Vol. Off-Site: _____
 Water Encountered? _____ (Y/N) Water Volume Removed: _____
 Water Disposal Location: _____

A site drawing of the excavation must accompany this form.

PID Screening Data: (Use 2nd Page if Needed)

Sample ID	Sample Location Description (ref. on sketch)	M. & Bottom	Depth	PID (ppm)
Jaquez 172(9)021811	Southern SD' of West Wall - Brown Gray Sand		9'	0.8 ppm
Jaquez 173(6)021811	Southern SD' of West Wall - Dark		6.5	0.7 ppm
Jaquez 174(5)021811	South Wall 5 point composite		5	4.2 ppm
	154(6), 1163(5), 1160(4), 1161(6), 1162(2)			
Jaquez 175(8)021811	West wall 2 just to N. of tree - Brown Sand		8	4.1 ppm
Jaquez 176(4)021811	West wall 2 just N of tree coarse Brw Sand		4	1.2 ppm
Jaquez 178(55)021811	West wall Southern SD' 5 point Comp		5.5	1.9 ppm
	Comp ^o 168, 153, 150, 172, 173			
Jaquez 179(10)021811	Floor Black/Bray Sat. Clayey Sand		~10	1124 ppm

Sample Collection Data:

Submit copy of COC each Day

Sample ID	Time	Sample Depth	PID (ppm)	Sample Location Description (ref. on sketch)	Analyses	PE
Jaquez 178(55)021811	1533	5.5	1.9	West Wall Southern SD'	BTEX TPH	7
Jaquez 1169(65)021811	1540	6.5	2.0	East wall Composite	BTEX TPH	27
Jaquez 174(5)021811	1645	5	4.0	South wall comp?	"	210*
Jaquez 157(7)021811	1707	7	0.8	Floor	"	
Jaquez 179(10)021811	1721	10	1124	Floor (Further N)	16	

Laboratory Name: AccuTest
 Shipping Method: TEL EX Shipping Date: 2-23-11

Shipped by: Dustin Held

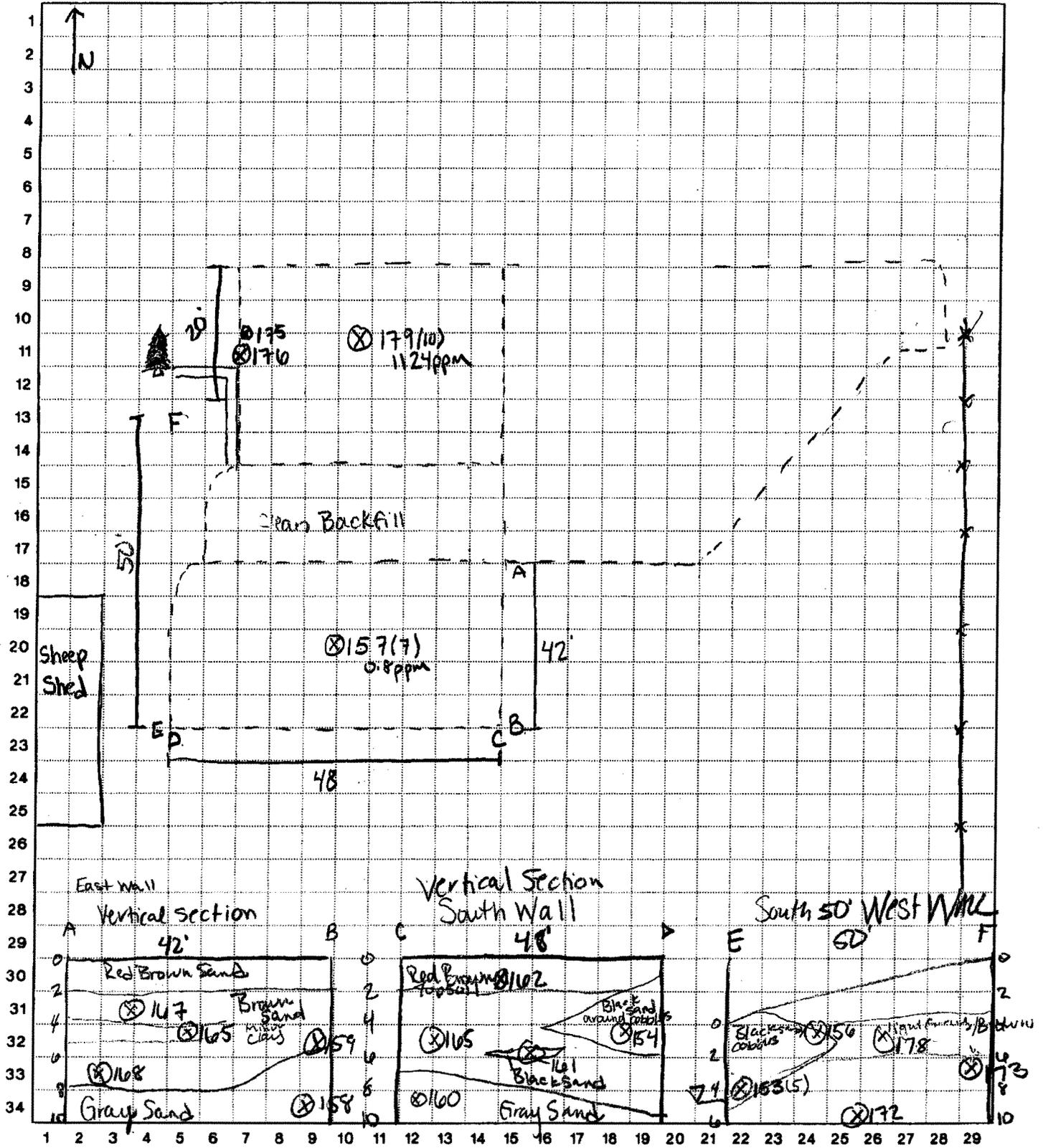




PROJECT Jaquez
 PROJECT MANAGER ALA
 JOB No. MWITICES
 LOCATION Jaquez

DATE 2/18/11
 CONT. No. 324
 BY _____ CHK'D _____
 SHEET No. 1 OF 1

951.10038 10/1987



Soil Excavation Oversight Field Form

Date: 2/21/11 Time On-Site: 8:30 Time Off-Site: 16:55
 Tailgate Safety Meeting? (Y/N) JSA? NA (Y/N)
 One Call Completed? (Y/N) Lines Marked? (Y/N)
 Project Name: Jaguet
 Project Number: MWH 1005
 LTE Employee(s): Sam LaRue
 Site Name: Jaguet
 Others On-Site (contractors, regulators etc.): Treney, Al
 Site Location (Lat & Long or T/R/S/Q/Q): 29W 9W 6
 Soil Disposal Location: Envirotech Vol. Excavated: _____ Vol. Off-Site: _____
 Water Encountered? _____ (Y/N) Water Volume Removed: _____
 Water Disposal Location: _____

A scale drawing of the excavation must accompany this form each day.

PID Screening Data: (Use 2nd Page if Needed)

Sample ID	Sample Location Description (ref. on sketch)	Depth	PID (ppm)
Jaguet 201(18)022111	saturated black sand	18'	30
Jaguet 207(18)022111	saturated black sand	18'	15.7
Jaguet 203(18)022111	" "	23'	74.7
Jaguet 204(23)022111	" "	23'	533
Jaguet 205(24)022111	" "	24'	0.7
Jaguet 206(18)022111	saturated brown clayey sand, 5' E. of W. Wall	18'	0.7
Jaguet 207(18)022111	saturated brown clayey sand w/ some black sand, 10' E. of W. wall	18'	115

Submit copy of EOC each Day

Sample Collection Data:

Sample ID	Time	Sample Depth	PID (ppm)	Sample Location Description (ref. on sketch)	Analyses
Jaguet 205(24)022111	15:45	24'	0.7	Floor	BTEX TPH

Laboratory Name: _____ Shipped by: _____
 Shipping Method: _____ Shipping Date: _____

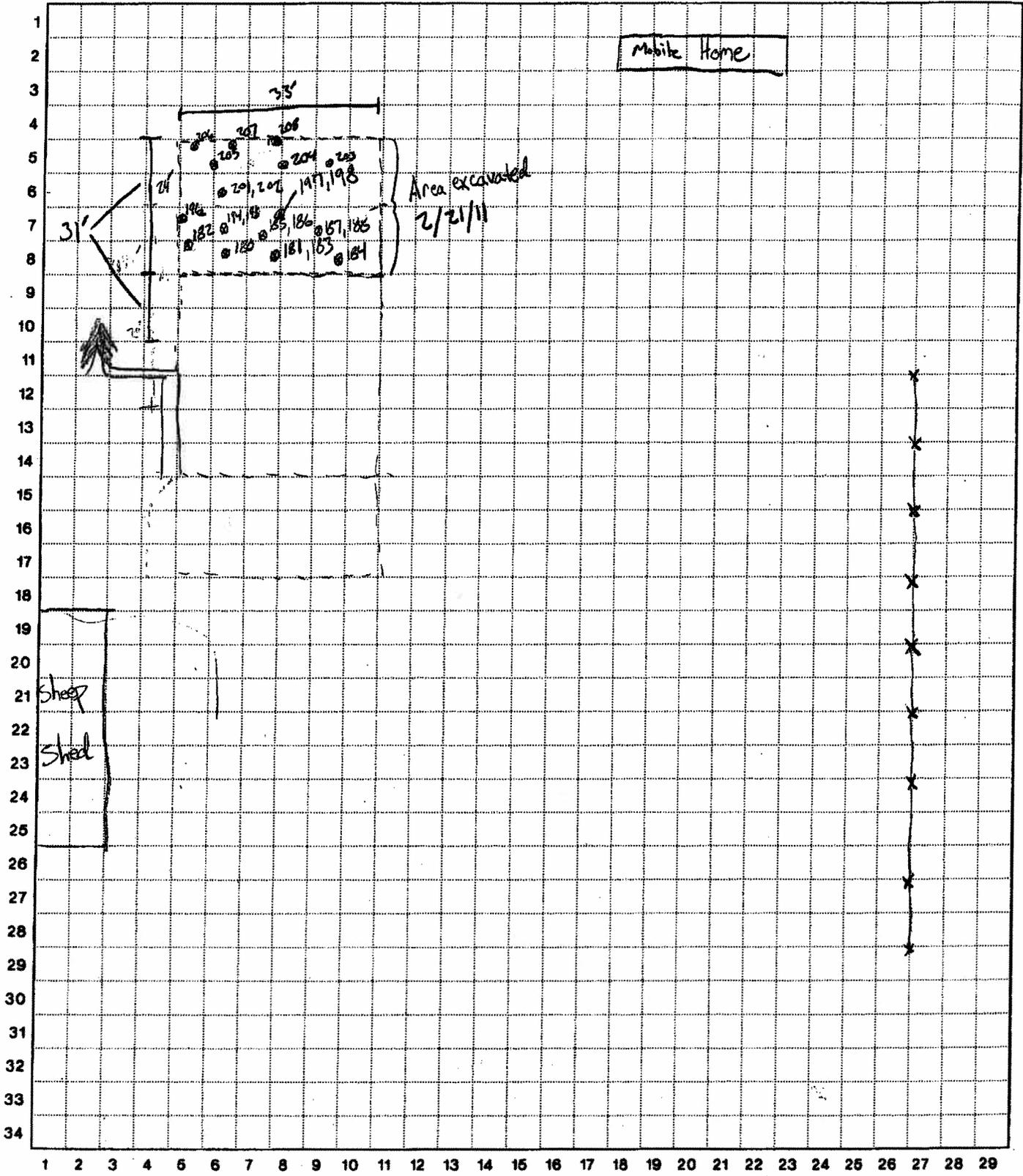




PROJECT Jaquez
PROJECT MANAGER A A
JOB No. MWH 1005
LOCATION Jaquez

DATE 2/2/11
CONT. No. SRL
BY _____ CHK'D _____
SHEET No. 1 OF 1

95LTD038 10/1007



Soil Excavation Oversight Field Form

Date: 2/22/11 Time On-Site: 9:00 Time Off-Site: 1717

Tailgate Safety Meeting? Y (Y/N) JSA? NA (Y/N)

One Call Completed? Y (Y/N) Lines Marked? Y (Y/N)

Project Name: Jaquez

Project Number: MWH1005

LTE Employee(s): Knolly Herio

Site Name: Jaquez

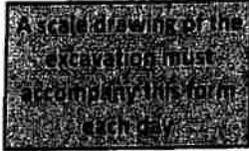
Others On-Site (contractors, regulators etc.): Sandy Trickey, Louis

Site Location (Lat & Long or T/R/S/Q/Q): 29N 9W 10

Soil Disposal Location: Enviro Tech Vol. Excavated: 800 Vol. Off-Site: ~200 HTM

Water Encountered? Y (Y/N) Water Volume Removed: 0

Water Disposal Location: _____



PID Screening Data: (Use 2nd Page if Needed)

Sample ID	Sample Location Description (ref. on sketch)	Depth	PID (ppm)
Jaquez 208 (4) 022211	West Wall 2 - North Top Brown Sand / lt. gray clay ^{clay} ^{max} ^{moist}	4'	2.0 ppm
Jaquez 209 (8) 022211	West Wall 2 - Middle - Brown Sand	8'	0.1 ppm
Jaquez 210 (20) 022211	Floor - North - Brown Sat Sand	20'	0.1 ppm
Jaquez 211 (21) 022211	Floor - Brown Clay & Brown Sand	21'	0.7 ppm
Jaquez 212 (8) 022211	North Wall S. Side - Backfill	8'	2.0 ppm
Jaquez 213 (20.5) 022211	Floor composite 210 & 211	20.5'	0.3 ppm
Jaquez 214 (21) 022211	Floor - Brown Coarse Sand directly below Gray Sand 21	21'	19.2 ppm
Jaquez 215 (18) 022211	Floor - Black Sat. Sand, North Abr	18'	5.6 ppm
Jaquez 216 (15) 022211	Floor " " "	15'	10.2 ppm
Jaquez 217 (15) 022211	Floor Dark Grayish Black Coarse sand	15'	9.9 ppm
Jaquez 218 (16) 022211	Floor - 1st Backfill Coarse sand	16'	0.9 ppm
Jaquez 219 (17) 022211	Floor - Composite of 214-218	Avg 17'	1.5 ppm
Jaquez 220 (10) 022211	West Wall 2 Composite of: 175, 176, 196, 206, 208, 209	Avg 10'	1.1 ppm

Sample Collection Data:

Sample ID	Time	Sample Depth	PID (ppm)	Sample Location Description (ref. on sketch)	Analyses
Jaquez 213 (20.5) 022211	12:53	20.5'	0.3	Floor Comp	BTEX, TPH
Jaquez 219 (17) 022211	17:00	17'	1.5 ppm	Floor Comp	"
Jaquez 220 (10) 022211	19:00	10'	1.1 ppm	West Wall Comp	"

PF 45 ppm

Laboratory Name: Accutest
 Shipping Method: Fedex Shipping Date: 2-23-11

Shipped by: Dustin Feld

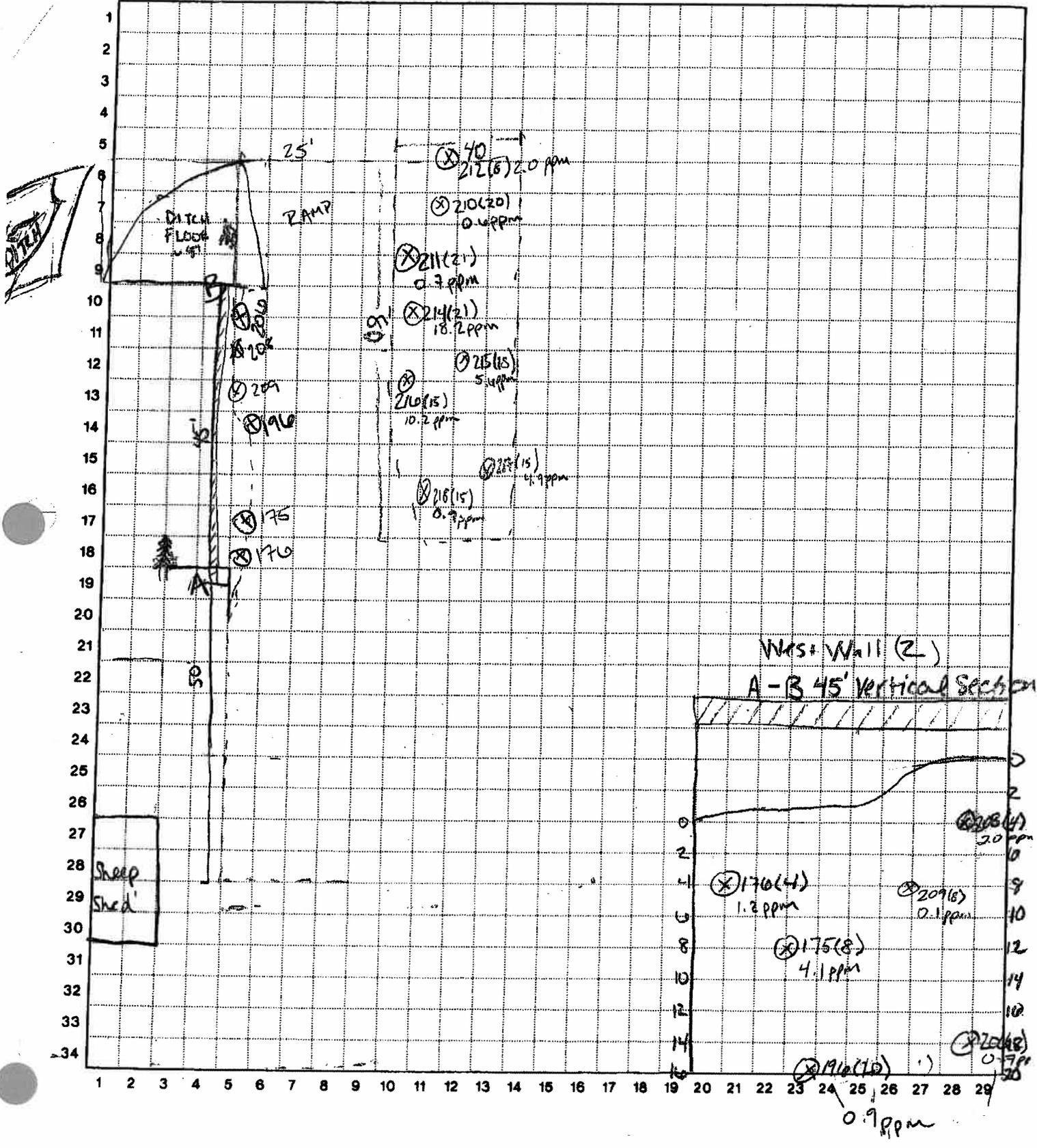




PROJECT Saquez
 PROJECT MANAGER ALA
 JOB No. MWH 1005
 LOCATION Saquez

DATE 2/22/11
 CONT. No. _____
 BY BDH CHK'D _____
 SHEET No. _____ OF _____

DLT0038 10/997



Soil Excavation Oversight Field Form

Date: 2/23/11 Time On-Site: 958 Time Off-Site: 16:58
 Tailgate Safety Meeting? Y (Y/N) JSA? NA (Y/N)
 One Call Completed? Y (Y/N) Lines Marked? Y (Y/N)
 Project Name: Jaquez
 Project Number: MW H1005
 LTE Employee(s): Brooke
 Site Name: Jaquez
 Others On-Site (contractors, regulators etc.) Trinity, Louis Paul & Sons
 Site Location (Lat & Long or T/R/S/Q/Q): 29N 9W 60
 Soil Disposal Location: Envirotech Vol. Excavated: 1800 yds Vol. Off-Site: 1200 yds
 Water Encountered? Y (Y/N) Water Volume Removed: X
 Water Disposal Location: NA



PID Screening Data: (Use 2nd Page if Needed)

Sample ID	Sample Location Description (ref. on sketch)	Depth	PID (ppm)
Jaquez 222(12) 02231	Floor - Brown Saturated Sand	12'	17.3 ppm
Jaquez 222(14) 02231	Gray Black Sand Sat Floor	14'	5.3 ppm
Jaquez 223(16) 02231	East Wall Backfill - directly W of Fence Post	6'	17.1 ppm
Jaquez 224(13) 02231	Floor Sat. Black coarse sand	13'	5.9 ppm
Jaquez 225(16) 02231	East Wall Backfill	6'	1.8 ppm
Jaquez 226(13) 02231	Floor Composite of 221, 222, 224	13'	5.1 ppm
Jaquez 227(22) 02231	Floor Brown Sat Sand N.M.	22'	8.5 ppm
Jaquez 228(21) 02231	Floor Black Sat Sand above Brown sand	21'	38.7 ppm
Jaquez 229(22) 02231	Floor - Brown Sat sand N.M.	22'	3.2 ppm
Jaquez 230(18) 02231	Floor - Brown/Black staining Clay	18'	40.8 ppm
Jaquez 231(20) 02231	Floor - Black coarse sand saturated	20'	13.8 ppm
Jaquez 232(19) 02231	Floor - Composite of 227-231	Avg 19'	30.7 ppm
Jaquez 233(21) 02231	Floor - Brown Clay	21'	3.2 ppm

Sample Collection Data:

Sample ID	Time	Sample Depth	PID (ppm)	Sample Location Description (ref. on sketch)	Analyses
Jaquez 226(13) 02231	13:13	13'	5.1 ppm	Floor Comp 222, 223	BTEX TPH
Jaquez 232(19) 02231	16:32	Avg 19'	30.7 ppm	Floor Comp 226-231	"

Laboratory Name: Accutest Shipping Method: FedEx Shipping Date: 2-24-11
 Shipped by: B. Hub

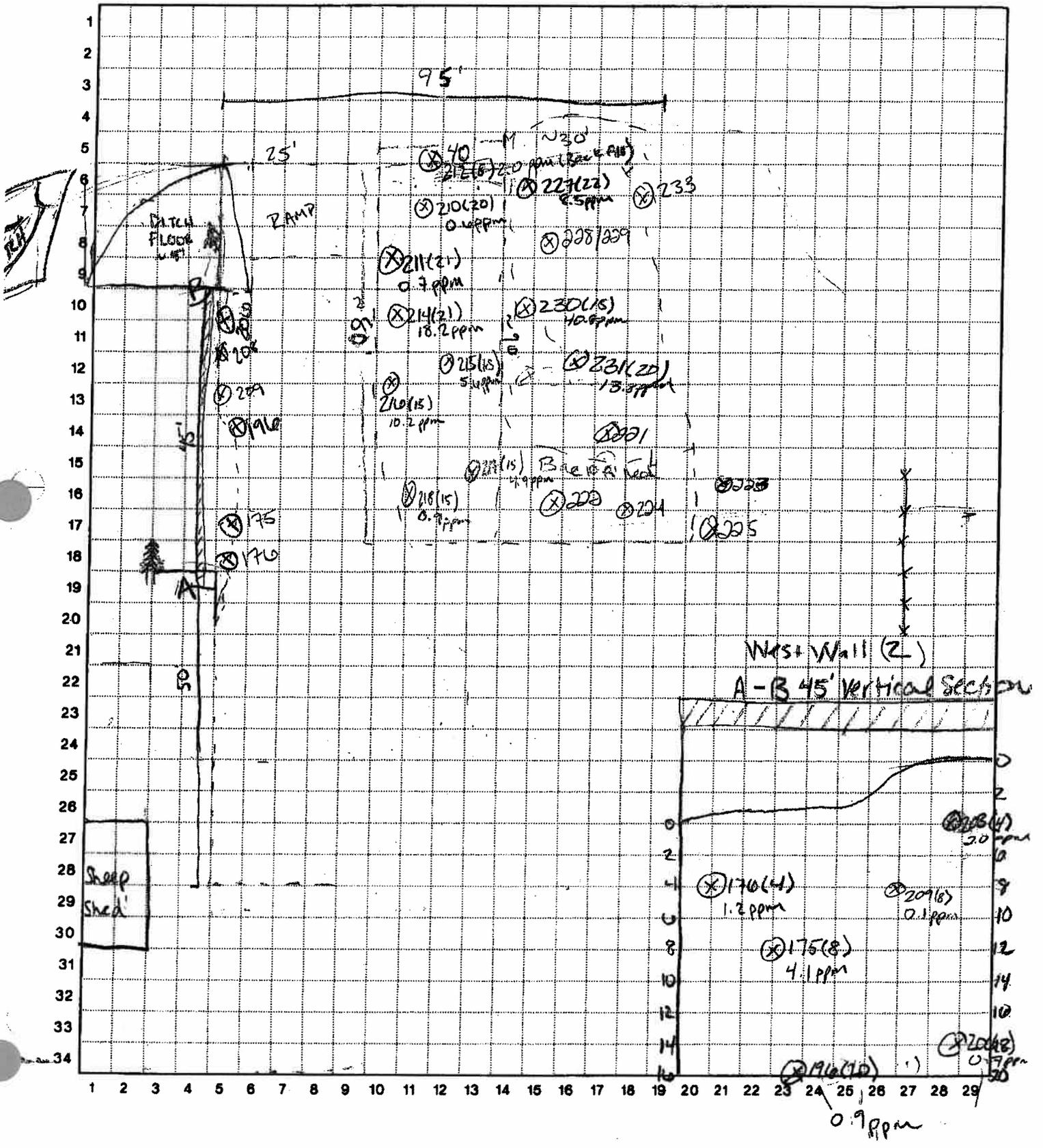




PROJECT Saquez
 PROJECT MANAGER ALA
 JOB No. MWH 1005
 LOCATION Saquez

DATE 2/27/11 - 2/23/10
 CONT. No. _____
 BY BDH CHK'D _____
 SHEET No. _____ OF _____

95.70038 10/1997



Soil Excavation Oversight Field Form

Date: 2/24/11 Time On-Site: 11:00 Time Off-Site: 1045
 Tailgate Safety Meeting? Y (Y/N) JSA? NA (Y/N)
 One Call Completed? Y (Y/N) Lines Marked? Y (Y/N)
 Project Name: Jaquez
 Project Number: MWH1005
 LTE Employee(s): Brooke Herk
 Site Name: Jaquez
 Others On-Site (contractors, regulators etc.) Trieny & Louis
 Site Location (Lat & Long or T/R/S/Q/Q): 29N 9W 6
 Soil Disposal Location: Envirotech Vol. Excavated: ~ 675 Vol. Off-Site: ~ 200
 Water Encountered? Y (Y/N) Water Volume Removed: 0
 Water Disposal Location: NA



PID Screening Data: (Use 2nd Page if Needed)

Sample ID	Sample Location Description (ref. on sketch)	Depth	PID (ppm)
Jaquez 234 (16) 022411	Floor - Black Sat. sand	16'	89.2 ppm
Jaquez 235 (14) 022411	Floor - Brown Sat Sand & Brown Clay	18'	5.9 ppm
Jaquez 236 (12) 022411	Floor Brown Sat. Sand	12'	0.1 ppm
Jaquez 237 (16) 022411	Floor - Gray/Black above 236 Brown Sand	10'	18.0 ppm
Jaquez 238 (4) 022411	East Wall - South Brown w/Black Stain	4'	7.2 ppm
239 (9) 022411	Floor By East Wall Black w/some Brown clayey sand	9'	5.3 ppm
240 (5) 022411	E. Wall - Brown Sat clayey sand	5'	0.0 ppm
241 (8) 022411	E. Wall - Brown Sat Sand	8'	0.8 ppm
242 (5) 022411	E. Wall - Soil Seg - pulled back farther.	5'	22.9 ppm
243 (6) 022411	Floor by E wall	8'	16.5 ppm
244 (7) 022411	Floor Black/Brown Sand	7'	14.3 ppm
245 (9) 022411	Bottom of E. wall	9'	2.3 ppm
246 (3) 022411	Black sand & minor Brown clayey sand	3'	16.9
247 (6) 022411	East wall midline composite	6'	4.5 ppm
	Comp of 238, 240, 241, 245, 246	-	-
Jaquez 248 (8) 022411	Floor Composite - South East 243, 244, 239	8'	18.8
Jaquez 249 (15) 022411	Floor Composite 234-237	15'	25.4 ppm

Sample Collection Data:

Sample ID	Time	Sample Depth	PID (ppm)	Sample Location Description (ref. on)	Analyses
Jaquez 247 (6) 022411	10:15	6'	4.5 ppm	East wall midline comp	DTEX, TTH
Jaquez 248 (8) 022411	10:22	8'	18.8 ppm	SE Floor Comp	"
Jaquez 249 (15) 022411	10:30	15'	25.4	Floor Comp	"

Laboratory Name: Accutest Shipping Method: Fedex Shipping Date: 2/28/11 Shipped by: _____

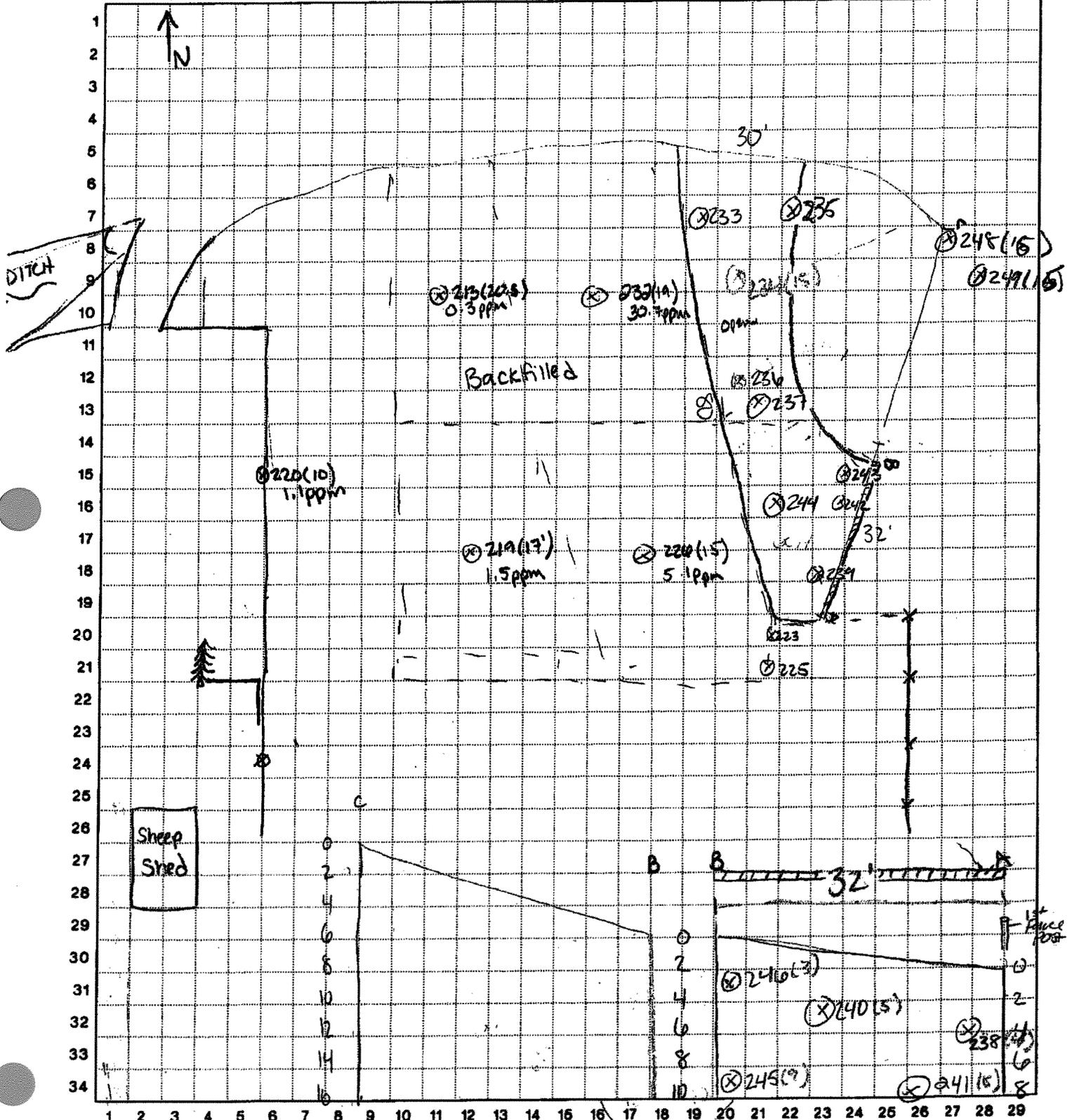




PROJECT Jaquez
PROJECT MANAGER ALA
JOB No. MWH1005
LOCATION Jaquez

DATE 2/24/11
CONT. No. _____
BY BDH CHK'D _____
SHEET No. _____ OF _____

95170028 10/1/087



Brown Sand w/ trace of Black staining
(S.C.R. CHAS)

Soil Excavation Oversight Field Form

Date: 2/25/11 Time On-Site: 11:30 Time Off-Site: 16:40
 Tailgate Safety Meeting? Y (Y/N) JSA? NA (Y/N)
 One Call Completed? Y (Y/N) Lines Marked? Y (Y/N)
 Project Name: Jaquez
 Project Number: MWH 1005
 LTE Employee(s): Brooke Herp
 Site Name: Jaquez
 Others On-Site (contractors, regulators etc.): Therly & Lewis
 Site Location (Lat & Long or T/R/S/Q/Q): 29N 99W, Le
 Soil Disposal Location: Enviro Tech Vol. Excavated: _____ Vol. Off-Site: 500
 Water Encountered? Y (Y/N) Water Volume Removed: 0
 Water Disposal Location: _____



PID Screening Data: (Use 2nd Page if Needed)

Sample ID	Sample Location Description (ref. on sketch)	Depth	PID (ppm)
Jaquez 250(8)022511	East Wall - Middle Grayish brown Sandy clay	8'	0.0 ppm
Jaquez 251(12)022511	East Wall - Top (middle) Brown-red/brown sand	2'	1.0 ppm
Jaquez 252(17)022511	Floor Dark Gray clayey sand	17'	70.5 ppm
Jaquez 253(4)022511	Gray staining near top of E. Wall (mid) sand	4'	1.8 ppm
Jaquez 254(6)022511	GN on NE corner of S. side Silty Gray Slight	12'	- NA -
Jaquez 255(25)022511	Test hole on West corner - ditch floor clean	25'	0.0 ppm
Jaquez 256(17)022511	West wall under ditch floor - Brown Sand wet	17'	18.2 ppm
Jaquez 257(12)022511	West wall under ditch - Brown Sand for	12'	0.5 ppm
Jaquez 258(9)022511	West wall under ditch - Brown/red/gray Sand	4'	1.1 ppm
Jaquez 259	Mislabeled - no sample		
Jaquez 260(6)022511	West Wall under ditch - Gray sand	6'	1.0 ppm
Jaquez 261(8)022511	" " - Darker Gray sand	8'	0.9 ppm
Jaquez 262(10)022511	" " Brown/gray clayey sand	12'	0.5 ppm
Jaquez 263(2)022511	" " Brown Sandy clay	21'	0.5 ppm
Jaquez 264(22)022511	Under ditch NW corner floor	22'	0.4 ppm
Jaquez 265(15)022511	West wall - North (under ditch)	Avg 12.5'	
	Composite of 256, 257, 258, 261, 263		
Jaquez 266(3)022511	East Wall Brown Sand	3'	1.2

Sample Collection Data:

Sample ID	Time	Sample Depth	PID (ppm)	Sample Location Description (ref. on sketch)	Analyses	PE
Jaquez 254(6)022511	12:34	~14'	NA ppm	AW NE corner S. side	BTEX, TPH	PE
Jaquez 265(15)022511	15:20	Avg 12.5'	1.1 ppm	West wall under ditch comp		Oppm
Jaquez 264(22)022511	15:36	22'	0.4 ppm	Floor		

Laboratory Name: Accutest
 Shipping Method: Fedex Shipping Date: 2/28/11

Shipped by: Devon Anderson

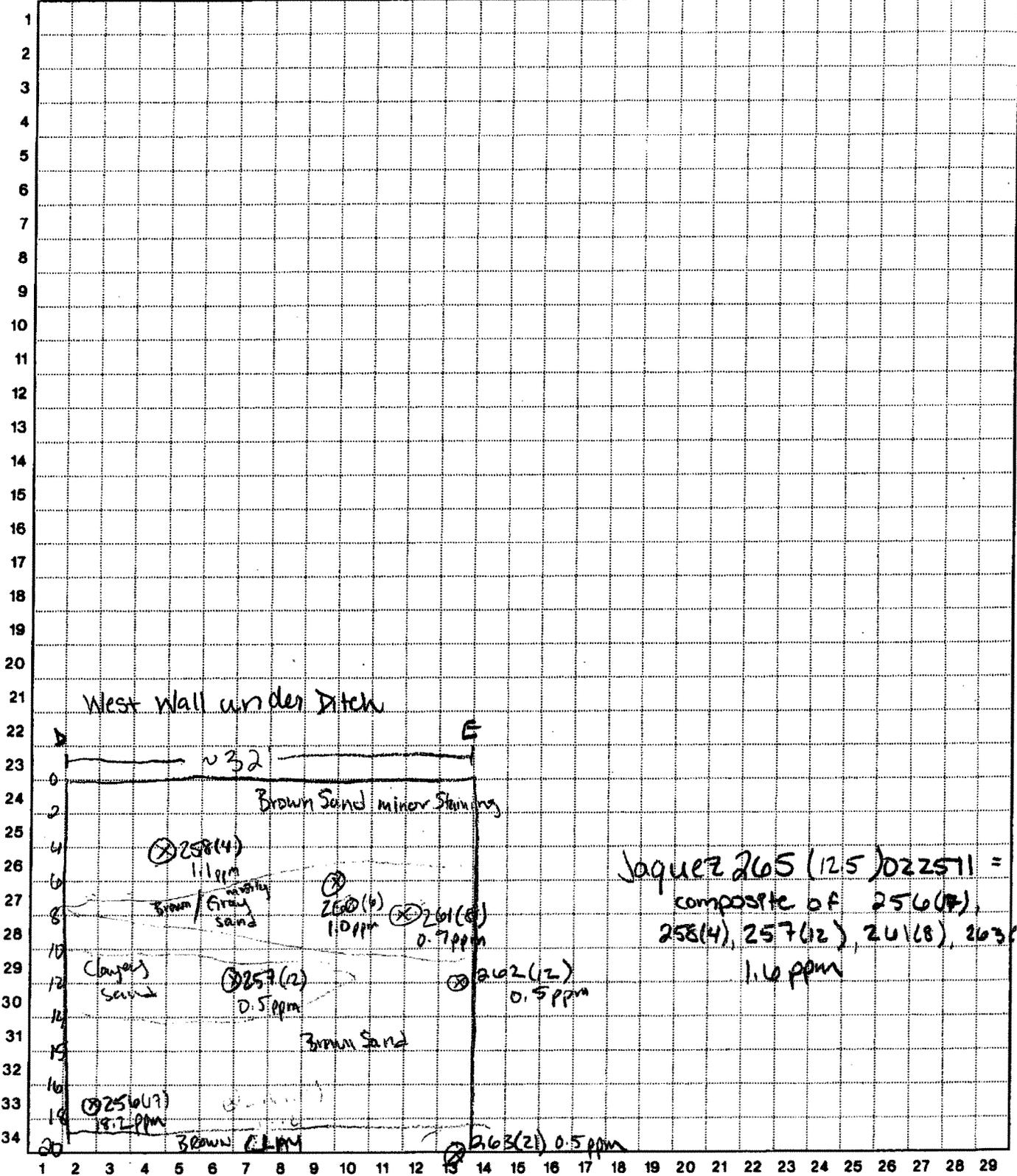




PROJECT Jaquez
 PROJECT MANAGER ALA
 JOB No. MWH1005
 LOCATION Jaquez

DATE 2/25/11
 CONT. No. _____
 BY BPH CHK'D _____
 SHEET No. 2 OF 2

98110036 10/1987



⊗ 264 Floor

Soil Excavation Oversight Field Form

Date: 2/28/11 Time On-Site: 9:18 Time Off-Site: 1335
 Tailgate Safety Meeting? Y (Y/N) ISA? NA (Y/N)
 One Call Completed? Y (Y/N) Lines Marked? Y (Y/N)



Project Name: Jaquet
 Project Number: MWH1005
 LTE Employee(s): Brooke Herb
 Site Name: Jaquet
 Others On-Site (contractors, regulators etc.): Trinity Louis
 Site Location (Lat & Long or T/R/S/Q/Q): 29N 9W 6
 Soil Disposal Location: Envirotech Vol. Excavated: 400 Vol. Off-Site: 600
 Water Encountered? Y (Y/N) Water Volume Removed: 0
 Water Disposal Location: NA

PID Screening Data: (Use 2nd Page if Needed)

Sample ID	Sample Location Description (ref. on sketch)	Depth	PID (ppm)
Jaquet 267 (4) 022811	- East Wall N. Top - Brown Clay	4'	0.1 ppm
Jaquet 268 (16) 022811	- Floor Brown Sat Sand	16'	2.5 ppm
Jaquet 269 (16) 022811	- Floor Brown Sat Sand	16'	0.3 ppm
Jaquet 270 (15) 022811	- Floor Gray/Black Sand	15'	284 ppm
Jaquet 271 (12) 022811	- East Wall S. Bottom - Brown & Black Sand	17'	11.2 ppm
Jaquet 272 (3) 022811	East Wall STOP Brown Coarse Sand	3'	1.3 ppm
Jaquet 273 (12) 022811	- Floor Gray Black Sand - Go deeper	12'	842 ppm
Jaquet 274 (17) 022811	Floor Sat) Brown Sand	17'	10.6 ppm
Jaquet 275 (10) 022811	E. Wall N. Bottom - move back	10'	33.4 ppm
Jaquet 276 (14) 022811	E. Wall N. Bottom Gray Sand	14'	0.3 ppm
Jaquet 277 (10) 022811	E. Wall Middle Bottom - Black Sand	10'	0.0 ppm
Jaquet 278 (6) 022811	E. Wall Middle Middle - Brown Sand	6'	0.0 ppm
Jaquet 279 (7) 022811	East Wall composite of 267(4), 272(3), 278(6), 276(14), 271(12)	Avg 7'	3.9 ppm
Jaquet 280 (16) 022811	- Floor Composite - 268(16), 269(16), 270(15) & 274(17)	16'	41.1 ppm

Sample Collection Data:

Sample ID	Time	Sample Depth	PID (ppm)	Sample Location Description (ref. on sketch)	Analyses
Jaquet 279 (7) 022811	11:30	7'	3.9 ppm	East Wall Composite	BTEX, TPH
Jaquet 280 (16) 022811	12:00	16'	41.1 ppm	FLOOR Comp	"

Laboratory Name: Accutest Shipping Method: Fedex Shipping Date: 2/28/11
 Shipped by: Brooke Herb

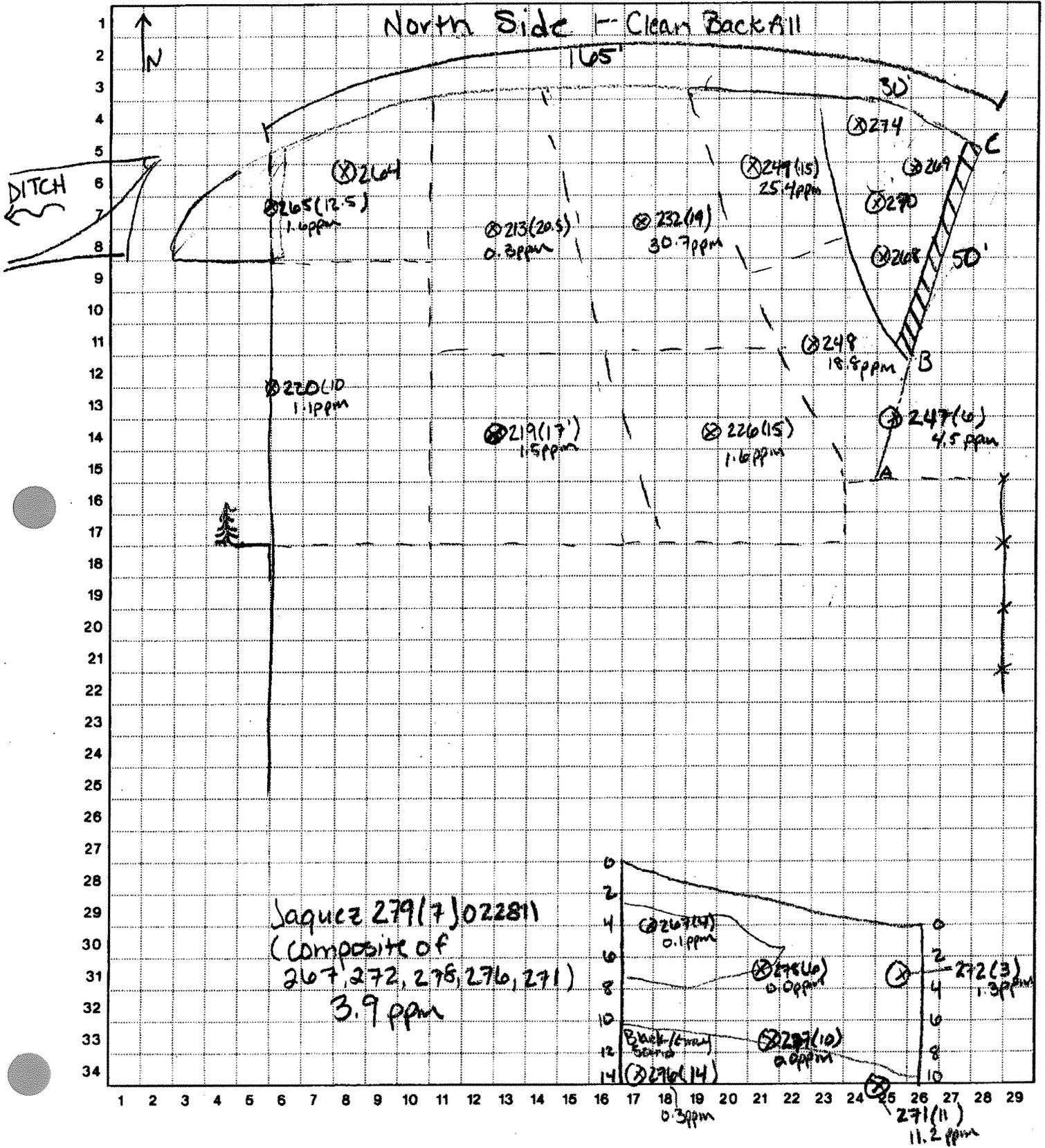




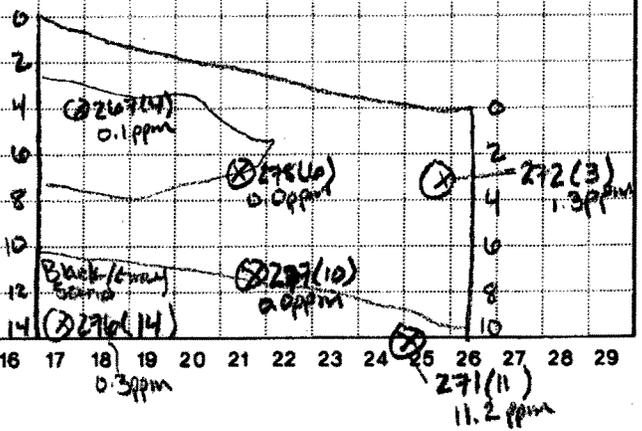
PROJECT Jaquez
 PROJECT MANAGER ALA
 JOB No. MWH 1005
 LOCATION Jaquez

DATE 2/28/11
 CONT. No. _____
 BY BDA CHK'D _____
 SHEET No. 1 OF 1

95L70038 10/1987



Jaquez 279(7) 022811
 (Composite of
 267, 272, 275, 276, 271)
 3.9 ppm



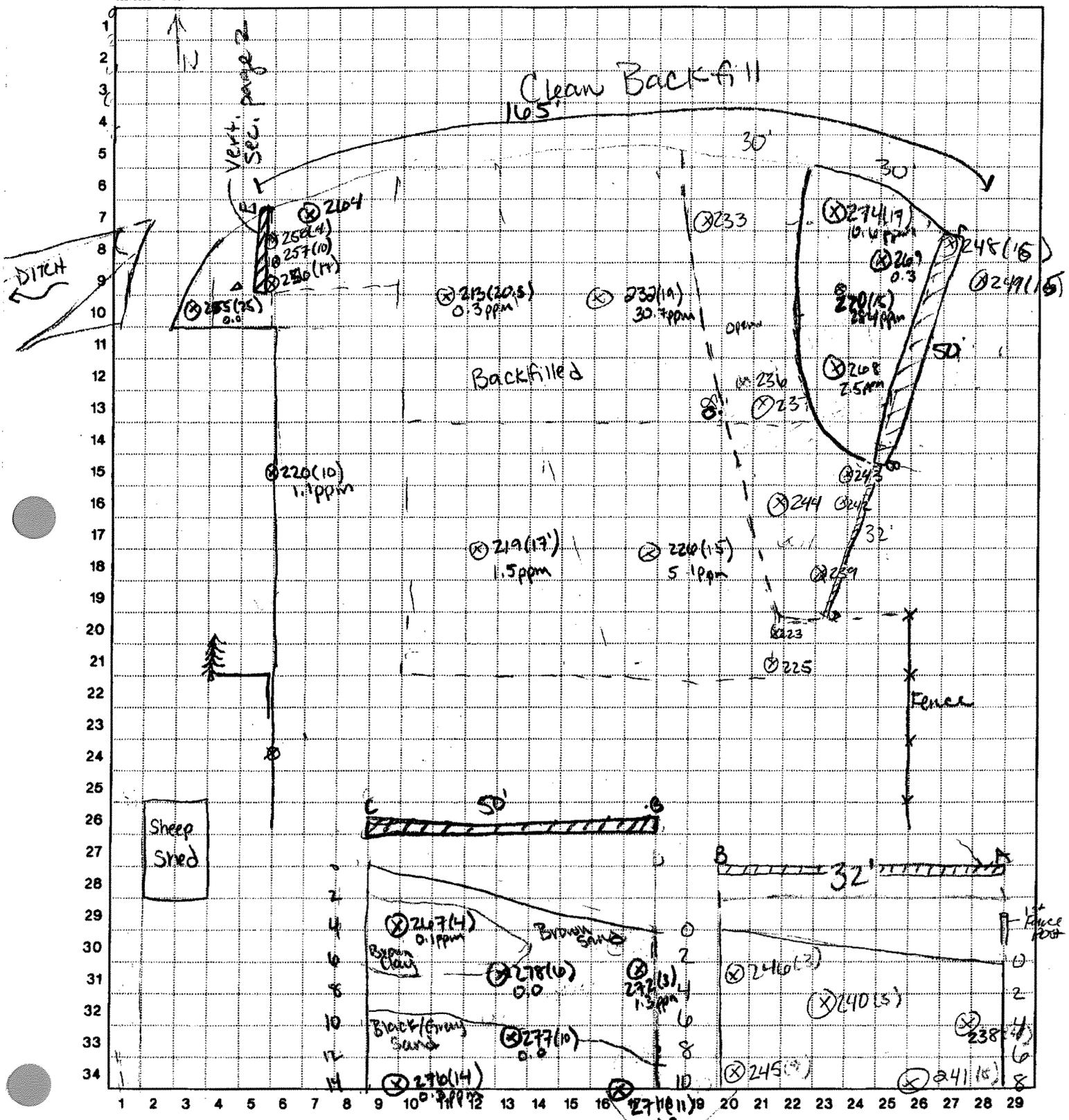
South Side



PROJECT Jaquez
 PROJECT MANAGER ALA
 JOB No. MWH005
 LOCATION Jaquez

DATE 2/24/11 - 2/28/11
 CONT. No. _____
 BY BDH CHK'D _____
 SHEET No. 1 OF 2

93.70038 10/1987



Brown Sand w/ clay & Black Shale
Sand. Clay

12-15-10

07:15 calibrate PID, calibrate 4-gas meter,

08:00 in office

09:10 arr on site

20:15 calibrate Petri

20:40 run analysis,
correction fact

meet w/sandy - removed clean over-
burden yesterday. Drove to 4.5' sided
stained soil. Waited for field screening.

09:20 Ian from El Paso arrived

Mr. Jaquez arrived & asked for status
report - provided by myself, Ian & Sandy

Potholes - RH-1 in SE corner, failed due
to cave in - begin excavation

Mr. Jaquez requested air monitoring
potential re locate. Ian authorized
use PID & 4-gas meter to monitor
continuously

Brandon Powell on site - 5 pt compositional
Nothing closed what sample
discuss w/Ian

Pothole impossible due to side walls
caving in. Start excavation in SE
corner, segregate material - all >20ppm
to haul; <20ppm clean stack pile
progress: 46' x 25' x 14' across N side

Fenced hole
17:45 leave site

Ashley L. Allen

12-16-10 Jaquez
07:15 calibrate PID & 4 gas meter
07:30 LV office
09:10 arr on site

Meet w/Sandy - plan & tailgate
Louis ^{Paul & Son}
2 employees from M&R trucking
Air monitoring for w/PID & 4 gas meter

10:00 Buddy Shaw on site
photos taken, walk around summary
CBP had early morning safety meeting &
asked lots of questions, sent Buddy out

→ according to Sandy
10:31 Buddy Shaw left

Plan to uncover groundwater in open part
of hole, remove all impacted soils from
floor, sample clean soils beneath, then
cover w/backfill.

10:45 Vac truck in to remove water
12:43 Mr Jaquez came to observe for a few minutes
asked Louis to move car

12:58 Travis w/ Paul & Son brought orange safety
vest for everyone on site

13:2 - Trans working on tank the Altec restart up
again ~ 14:00

Leave site @ 5:25 - Sandy still
moving dirty soil pile over as to get to
east side tomorrow

12-17-10 Jaquez
08:15 LV office
09:30 arr on site
calibrate PID & 4 gas meter
start air monitoring
Meet w/Sandy, plan & tailgate
Paul's Son & Sandy's ~~son~~ Al
M&R Trucking - 2 employees

Move spoil pile, vac out standing water,
backfill ~2' of clean fill to prevent
additional water from seeping into
open hole. Then work south. Keep
ramp in place & parking spot for vac
truck to West

11:55 - Brandon Powell ~~and~~ another NMUCS
employee on site. discussed plan & closure
samples only on floor as of now

→
12:05 - Casey w/ ditch company on site
checking out integrity of ditch walls &
confirming ditch to be turned back on
the night of the 23rd. water needs
to run for at least 5 days to fill reservoir
Sandy told him to wait to hear
from him or Jan on turning it off again
for phase II. Probably not until after
the 1st of the year

12-17-10

Sandy building "dam" so water doesn't saturate the area of the floor that has already been backfilled

leave site @ 1143

Sat. December 18th 2010

Arrive on site @ 1455

Sandy Baca & Al Paul & Sons

1 employee w/ RM Trucking

37" Raining

130 bbls water removed

- filling in fast now, Sandy was going to try to put some dirt over it to slow it down

leave site 1125

12-19-10

Arrive site 1511

Sandy Baca & Al (Paul & Son)

There was a fracture on the "east" ditch wall this morning. They got as close as possible getting the floor clean & backfilling. In order to keep ditch wall integrity (some contaminated soil was backfilled only 10-20' from ditch wall).

During Phase II will go back & remove overburden to remove contaminated soil. Southeast portion has been dug to 12' deep.

80 bbls ^{water} removed from lined pit
50 bbls water removed from excavation

NoHo - leave site

12-21-10 Jaquez

9:05 - Brooke Herb on site

off Cloudy, 43°

Sandy Bada, Louis, Al (Paul & Sons)

Ian → El Paso

1 Employee R & M Trucking

1000 - Brandon Powell & James w/ NMAC

on site. Discussed moving North.

Wants to see what BYEX levels are on both sides of Enterprise

degree before he is comfortable leaving contamination in place.

Either hand auger or geoprobe to see if it is pinching out.

Ian finally got a hold of land owner to N. Said you can do whatever (take down fence) but not to move trailer.

1437 - Chris w/ Enterprise responding to one call. To mark lines further North

Ian called Envirotech for estimated yds³ disposed - going to get back to him in AM.

1630 - leave site

12-22-10

09:37 Ashley Ager on site

Drizzling, 38°

Paul & Sons Sandy Bada, Louis, Al

1 Employee M & R Trucking

Very muddy conditions. Grader on site to level.

10:00 Tailgate

10:20 start digging on S side

Calibrate PID & H-gas monitor begin air monitoring

3340 yds of EET Tuesday - from land farm

Southwall identified. Talk & show to John Jaquez. Mr. Jaquez worried about what might be under shed, but ok w/ stopping southern progress. collect composite.

1:30 stop progress to West. Begin stabilizing ditch wall

-GPS locations

-Put samples. run Petroflag, Hand Auger w/Ian

15:15 Troy pick up samples & ship

1350 begin auger holes N side of fence 2 way b/w fence & house

0-5' silty sand brown
5-6' thin clayey silt
6-9.5' silty sand
9.5-13 grayish brown clay

stop @ 13' - need more augers
leave hole & return tomorrow

start 2nd hole
stop @ 13' - return tomorrow w/ more augers

0-3' loose dry sand, brown
3-9' clayey sand - backfill?, brown
9-13' clayey sand brown

backfill Excavation to ~5' depth. Ditch wall stabilized

W 16:37
Call Jed

Ashley Logan

12-23-10

10:00 AM on site to complete auger holes

BH-2 16.5', no staining, c. sand, saturated sample & GPS location D.O. PID

BH-1 16.25', no staining clayey sand saturated, sample & GPS location D.O. PID

alert Ian & Jed of results
Ian contacted Brandon Powell, Brandon said to dig as far N as possible to fence line.

11:39 W site.

Equipment used to grade road & clean paved County Road
Sandy will return Mow to dig West

1:25 drop off samples @ FedEx
Jed contacted Arctest to alert of sample shipment

Ashley Logan

Saunders

12-27-10

On site @ 10:45 - Devin Henneman /
Overcast / some snow / ~ 29°

Digging to the ~~west~~ ^{west} ~~middle~~ ^{middle} ~~east~~ ^{east} ~~side~~ ^{side} ~~of~~ ^{of} ~~the~~ ^{the} ~~floor~~ ^{floor ~~area~~ ^{area} ~~to~~ ^{to} ~~limonite~~ ^{limonite} ~~deeper~~ ^{deeper} ~~contaminated~~ ^{contaminated} ~~soil~~ ^{soil}}

Impacted soil encountered @
~ 8-10' soil is dark black
w/ HC odor

12:40 stop to grease Track hoe
allow leader to catch up stockpiling
clean soil.

1:20 Resume digging west south end
^{and middle}
Samples collected from the floor

Leave site @ 1630

Saunders

12-28-10

Booke arrive site 10:00
Cloudy 32°

Sandy Boice & Al (Paul & Sons)

Digging ^{from middle} to the west backfilling from
the south as getting the floor clean

12:15-13:00 Stop digging excavator

13:30 - Mich w/ M&R Trucking on site

14:00 - Brandon Powell & James w/ UNOCOR onsite
discuss N wall wants to start on east
side of N wall and work to the west.
Probably okay to leave Enterprise pipe line
in place based on boreholes ^{but}
would like to see where it pinches out
based on east side

16:38 - leave site

FORAY

|||||

2011

Jaquez - Jan. 4, 2011
Brooke Herb on site 905 - Cloudy, 4° snowing
Sandy Baca & Louis (Paul's son)
1 Employee RAM Trucking - dinner

910 -
Frozen pool of water - Had to break ice w/ track hoe
so pumping could begin
940 - start backfilling as water is being pumped
950 - HR leave w/ full 5000 lb load
Sandy working on equipment - resume digging 10:30

Got composite sample of North end
of West wall - Backfilled
Got a composite sample of Western
50 of North Wall

Could see where contaminated lense pinched
out to West. Just before electrical pole.
Took pictures before backfilling.

Going to scrape as far back on
North wall in middle & East
tomorrow

Leave site 1:00

Photos 0406-441

|||||

Jaquez

January 5, 2011

Brooke Herb on site 1043

Louis w/ Paul & Sons is backfilling. Sandy
had meeting w/ BP about South Side
excavation, running late

1245 - Sandy Baca on site - posting truck turning signs
on road per county request - gas up

1332 - Begin digging

1430 Chris w/ Enterprise on site in response to
one call for South side of ditch - no conflict

1720 - Mr Jaquez on site. Not happy about
how much contaminated soil is in
North Wall. Is going to try to talk
to his neighbor about moving trailer
Wants to be present when we
meet w/ Brandon Powell

18:07 leave site

Jaquez

January 31st 2011

Arrive @ Site - 9:47

Overcast

Jeff Baer, Nelson V.

Sandy Brea, Omni's

Jeff P & 2 others w/ BP - 11:10

- Start w/ Pipeline further East

Black sand @ Headgate

Sample taken @ 52.5' S from

elbow (ground @)

- Black soil swamp smell

5th Composite taken of first 30'
Brown sand

Sample taken @ 69'

dark gray Black

just under pipe

smells like Swamp

Sample @ 74' - Brown Sat
Sand 0.0 ppm ~ 8' deep

Groundwater ~ 4.5' - 5'

PID Readings from Baer
calibrate @ 10:30
52 ppm

① Black sand @ Headgate 0.0 ppm
on west wall

② 5-point composite 0-31'
Immediately below pipeline
1040 time of reading 0.0 ppm
Brown sand

③ Immediately below pipe 52'
from elbow 0.0
Black

④ 52' from elbow depth of 8'
saturated brown sand
0.0 ppm

⑤ 69' from elbow immediately below
pipe line 0.0 ppm

⑥ 74' from elbow 8' deep
0.0 ppm

⑦ 110' just below pipe
0.0 ppm - my reading

Jaquez

January 31

⑧ 130' just below pipe line
darker gray more black
still smells swampy
0.0 ppm

⑨ 150' just below pipe
Black/Gray sand
sidewalls have Black staining
no staining on sidewalls prior
just dirtily around pipe
0.0 ppm - mycodines

⑩ 175' Just below pipe floor
Stained on walls & floor around
pipe ~ 5'
Gray Black sand

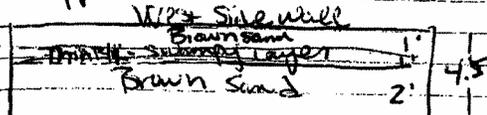
Can smell contamination right by
meter house

236' from Elbow to Meter house

Jaquez

January 31st

195' just below pipeline
still smells swampy - gray/blk
sand - ~~watts~~ flood near
pipe are stained
0.0 ppm - me



221' end near meter house
Saturated sand HC odor -
already been backfilled once

101 ppm

12:10 lunch 1247

Start on 2nd pipeline - further west
Start at South end @ meter house
@ Jaquez meter house 2-west

~15' from meter house
Brown saturated sand w/ some
Black staining - swamp smell
0.0 ppm - just below pipe
wet

17' 4-5' deep 0.0 ppm (1309)
Brown sat sand

Jaquez

January 30th

Sample taken @ 37' 13:11
just below pipeline 0.0 ppm (B)
Brown Sand

60' Brown Sand w/ staining
0.0 ppm (C) 4-5' deep

95' from MH 2 - dark gray sand
swamp smell (D) 4-5' deep
0.0 ppm

100' - Different color - dark black
sand - right around pipeline
sample taken just below pipeline (E)
0.0 ppm

Brown Sand @ 112-116
116 - Dark Black sand

133' - Smells like sewage
sample just below pipe
(F) 0.0 ppm

155' - Strong sewage smell - plastic
lining & gravel - old septic system
PVC grouted sewer

Black staining clayey sand
HC odor (G)

Jaquez

January 31st

Sample take just below pipeline
(H) 4' deep 0.0 ppm

(I) ~116' Horizontal pipeline in gravel
pack w/ Black plastic lining
on top of it. - old vapor extraction
system?

White plastic around pipeline ~2' ?
soil is very black - slight sheen on
water

172' from MH - sample taken
gray/black clayey sand
just below pipe - swamp smell
(H) 0.0 ppm

Black side walls from ~150'
to elbow - 150-176' @ -4'
deep black staining

176' - elbow top 2' clean brown sand
bottom 2'-3' black staining

Sample @ Elbow has a
different smell
brown sand w/ some black staining

Elbow @ 196'
(I) 0.0

January 31

Blag Readings on West Pipe C
Environmental Instruments, CO
Determinator - on Target Class 1, Division 2
OVM

- (A) 0.0 ppm
- (B) 0.0 ppm
- (C) 0.0 ppm
- (D) 0.0 ppm
- (E) 75.4 ppm 110' 4.5' deep 13:17
jet Black sand
- (F) 0.0 ppm 153'
- (G) 129.8 ppm 155'
- (H) 0.0 ppm 172'
- (I) 96.5 ppm 196' elbow brown sand

1st Pipeline, diton - East

- (7) 0.0 ppm 110'
- (8) 0.0 ppm 130'
- (9) 0.0 ppm 158'
- (10) 0.0 ppm 175'
- (11) 0.0 ppm 195'
- 101 ppm on nose 221
- 24 ppm on there's

Leave Site 3:00

Location Jaquez Date 2/3/11
Project / Client MWH1005

On Site @ 10:20

Snow on ground ~10"

Tracy & I other w/ Paul & Sons
Arnold w/ Enterprise
Ian w/ El Paso

Removing overburden

1200 Sandy Base

1200 AI w/ New Mexico Gas Company
Clear on depths here

1247 Sandy Ian & Arnold 6 off site

^{gray} Black Soil encountered @ ~3-4'

Smells swampy

Sampling for soil segregation
Jaquez 90 - Jaquez 75

Leave site 11:03

Location Jaquez Date 2/3/11 5
Project / Client MWH1005

Arrive on-site 9:20 Sunny/cold 3°

Brooke - LTE

Arnold Gilbert - Enterprise
Trinity - Paul & Sons

Digging From Northern ^{North East} Most
part of Ditch to South West

1100 - Lost "tooth" on Bucket

1105 - Arnold off site

1115 - using backhoe to remove
rocks out of backhoe

1120 - Louis - Paul & Sons on site

1147 - Resume Digging

1200 Keith w/ Enterprise

confirmed that they are
blowing down pipe this morning

1300 BID here to document/
take pictures of ditch

1400 Pot Hole to find contamination - fill back in for Sunday

1410 - Leave Site - Trinity Sand Sand
Went coming back & he was just
going to mix clean soil

Location JaquezProject / Client MWH 1005Date 2/4/2011

Arrive On Site 9:03

Sunny & cold ~10°

Treny & Lewis & one other - Paul & Sons
Arnold A. Enterprise

Two other guys to blowdown lines

9:55 Jeff Rice w/ Blair site

Dig several potholes to determine where
contamination begins- find Contamination & where it cleans up
to East - Backfill for today
- working on Backfilling & bearing pit
to make ramp & move clean soil pile
out to prep for starting to dig
contamination next week. Tent went
to leave hole open over weekend.
Starting under pipelines to North
on Monday.

Leave Site @ 11:55

Location JaquezProject / Client MWH 1005Date 2/7/11

Arrive on site 8:10

Sunny ~14° Cloudy

Arnold Gilmore w/ Enterprise
Sundy, Treny, Lewis, Ben w/ Paul & Sons
Brandon Powell is sick today & not
going to make it.Pipelines are supported & exposed
Crew worked over the weekend.
No contaminated soil was exposed12:15 - Sandy helping Mr Jaquez dig out
frozen pipeline 12:55 resume digging

Jan on his way from AB

We are as far as we can go
w/out the state & El Paso meeting

Leave site @ 1:02:5

Location JaquezDate 2/8/2011Project / Client MWH/DCS

Arrive onsite 8:33

Snowing ~ 28°

Personnel on site:

Arnold w/ Enterprise, Louis w/ Paul & Sons

915 Sandy on site

930 Ian on site

Talk w/ Sandy & Ian - Brandon Powell still sick but Ian talked to State & they want to keep digging North around mobile home. Ian still has not got permission from land owner to dig on his property. Also has not got a hold of Farmington Electric to remove power line. The plan is to backfill what was excavated yesterday & swing the jibs holding up pipelines to the South so digging can continue North. Crane not available until Thursday

Leave site 942

Location JaquezDate 2/10/2011Project / Client MWH/DCS

Arrive on site 920

Sunny, Clear, ~15°

Arnold w/ Enterprise

Paul & Sons - Louis, Triny, Sandy 945

Start Digging @ 10:05

Moving toward West Extent where Electrical Pole removed

Dug on West side of West dogleg dug down to ~20-25' no contamination visible on any walls. Sample diguizos was collected - 10:19pm
Ran out of it to the west on the North wall

1130 - Brandon Powell from Stake on site. Brandon wants us to Auger down around mobile home to see how thick contamination is, how hot if it is still thick

Jaquez

2/10/11

Cent.

go to the other side of trailer to see if
may have to move get landowner
permission to move trailer. Brandon doesn't
want to leave that much that's that that
in place

BH5 - MER Trucking on site

Take Composite of East Side of North
Wall.

OFF SITE 1725

Jaquez

2/11/11

Brook & Sam on site @ 12:10
Thermy & Lewis w/ Paul & son
Arrived w/ Enterprise
4 guys wrapping pipe lines

Digging on the South side of
Ditch, found the eastern extent
of a 20' section

Take samples from floor of East
Wall

Dig 3 bore holes between
trailer & Excavation

BH3 E. Hole clean all the way to groundwater
BH4 Middle Hole Black staining @ 12-13'
6.2 ppm on PID

Brown sandy clay @ 13' no
staining to 15' - wet

BH5 West Hole clean to 15' - wet

Leave site @ 1838

tion _____ Date _____

ect / Client _____

2/13/11

On site @ 8:55 am

Collect 5 pt composite from N-wall as sample.

Finish B4-4 to 17', very wet and saturated sandy clay. Sample collected.

Leave site @ 12:00 pm

Location Jaquez Date 2/14/11 13

Project / Client MWH 1005

Arrive on site @ 1000

Overcast ~30°

On Site: Sandy Boca, Louis, Trieny, Al w/
Paul & Sons
Arnold w/ Enterprise

Backfilling ^(compacting) around pipelines

Trieny digging on South Side of
excavation.

Take 5-point composite of East wall
(East wall runs southeast)

Dustin on site 1250 - Auger behind
Trailer B/H/O - no HC odor, no
staining. 0-16.5'. Clay from ~12'-16.5'
Saturated @ 16.5'

Leave Site @ 1616

Location: Jaquez

Date: 2/10/11

Project / Client: MWH1005

1111

Arrive on site @ 10:05 Overcast, ~38°

Backfill & compaction complete on North side. Concrete Barriers in place around Enterprise deglegs.

Calibrate PID - 1030 101

Clayton

Trieny & Loader band onsite 1055

- They excavated further west yesterday (2/15)

- Take groundwater sample from water that seeped in overnight - 11:00 sample time

- Slight sheen - yellow near contaminated wall

- water filled in to ~0.5' down on S side

GPS-File Jaquez5 - Jaquez133(GWS)02/10/11

Ditch embankment failing where metal from re route ends - Brought in Trucks w/ rocks to fill in area where cave in

South side - floor still dirty - water seeping in @ ~4-5' dug through sludge to ~9-11'

Location: Jaquez

Date: 2/10/11

Project / Client: MWH 1005

Still contaminated PID readings #400 - 2000

Take floor composite Jaquez 1431 (7/22/11)

Trieny going to backfill w/ contaminated

& let Sandy decide what to do. Don't

want the hole to fill in too much

Leave site @ 16:25

Location Jaquez

Date 2/17/11

Project / Client MWH/1005

MT

Arrive onsite 9:45

Sunny / Partly Cloudy ~45°

Paul & Sons: Al, Benj

Sam Larue on site 12:05

Brode off site 12:45

Treney on site 13:30

MTR trucking water truck on site 14:45

Truck leaves site 15:30

Sam off site 16:30

Location Jaquez

Date 2/18/11

Project / Client MWH/1005

MT

Arrive onsite 9:20

Overcast, ~37°

Treney, Al Paul & Sons

Digging out SW corner near

sheep shed.

get East Wall ^{5:00pm} Camp Jaquez 109(6.5)

South Wall Composite Jaquez 174(5)

‡ The Southern 50' on West wall

Jaquez 178(5.5)

In SW corner were able to

get to clean floor @ ~7'

Jaquez 157(7)

Floor to N. of where was backfilled

2/18/11 still hot. SW @ ~7'

Sample taken from ~10

Jaquez 179(10) 1124 pm

Brandon Powell on site ~1330

wanted to see where BH by

trailer were taken

Sandy & John Jaquez onsite 1530

LEAVE SITE 1745

Location Jaquez Date 2/21/11

Project / Client MWH1005

Arrive @ 8:30

On site: Treiny, Al w/ Paul & Sons

11:20

Still dirty @ 18' while moving
Along W. wall Treiny will
remove excavated dirt & build
a ramp to be able to dig safer.

Sam LaRoe off site 11:55

Location Jaquez Date 2/22/11

Project / Client MWH1005

On site 9:00

Treiny, Sandy, Louis
Sandy off site 9:15
w/ Paul & Sons

Bloomfield Irrigation Ditch - 2 guys

on site 10:10 - 10:45. Back on site 12:00
Cutting aqua pipeline that has been removed

Treiny moving impacted soil so Louis in
Front loader can remove it. Backfilling
near west wall.

Working from N to S collecting Floor
Samples

Leave site @ 17:17

20

Location Jaquez Date 2/23/11
Project / Client MWH1005

Arrive onsite 9:58
 Sunny 45°
 Trieny & Louis w/ Paul & sons
 Start digging on S. end move east ~20'
 until hit clean backfill in front of
 Fence post.
 Then start at N. up against
 clean backfill. Take various
 PID readings for soil segregation
 and on floor.

Leave Site 10:58

Location Jaquez Date 2/24/11²¹
Project / Client MWH1005

HT HT HT

On Site 11:00
 overcast, ~40°
 Trieny & Louis w/ Paul & sons
 Trieny digging from N to S
 Found ^{cap} E. Wall to South
 took composite sample
 Take Floor Composite Samples (2).
 Take Various PID Screenings for
 Soil Segregation much of clean soil is black

Leave Site @ 12:45

22

Location JaquezDate 2/25/11Project / Client MWH/DOCS~~HT HT HT HT~~

On Site 11:30

Overcast, 42°

Trieny, Louis w/ Paul & Sons

Moving Impacted Soil in order to continue excavating NE corner on South Side of Ditch. Start digging along E Wall but contamination pile is too close to wall & falling in Cross Contaminating.

Move to West Wall under ditch. Get 5-point Comp off west wall & Floor sample @ 22'. All clean went all the way NSE to Backfill.

Trieny & Louis coming on Saturday to move contaminated pile. Planning to Dig remaining impact soil to E. on Monday.

Leave Site 16:40

Location JaquezDate 2/25/11

23

Project / Client _____

On Site 9:18

Sunny, 32°

Trieny & Louis w/ Paul & Sons

Sand on site @ 3:00 - 13:30

Paul w/ Paul & Sons on site 13:35 - 13:40

Finish excavating NE corner of South side

Collect East Wall North composite & Floor composite.

Trieny preping for Ditch Rebuild & (continuing to) remove impacted soil from site.

• Still a lot of impacted soil in lined pit

Leave Site 13:34

SOIL SAMPLING FORM

Project Name: Jaquez Client: EL PASO
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29N Rng 9W Sec 6 Unit _____
Date 12-15-10 Weather Cloudy, 42°F
Collected by: Ashley Ager Comments: _____

Sampling Method: Grab sampler Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: Composite

Sample Identification: Jaquez-1(14)-121510

Sample Depth (below ground surface): 14'

Sample Time 1501

Sample Description:

Soil color: brown (brown, red, orange, yellow, black, staining)
Soil texture: sand (gravel, sand, silt, clay)
Soil moisture: saturated (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 0.0

Instrumentation:

PID meter: MiniRae 2000
Other: Petroflag: 14

Sample Analyses: BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: _____
Pit Name: _____ Meter/LD # _____
Pit Location: Twp _____ Rng _____ Sec _____ Unit _____
Date 12-15-10 Weather _____
Collected by: ALA Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez - 9(1) - 121510

Sample Depth (below ground surface): 1'

Sample Time 1530

Sample Description:

Soil color: brown (brown, red, orange, yellow, black, staining)
Soil texture: silt (gravel, sand, silt, clay)
Soil moisture: dry (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 0.0

Instrumentation:

PID meter: Mini Rae 2000
Other: Petrotag: 22

Sample Analyses: BTEX TPH
Other _____

Did Not Ship

SOIL SAMPLING FORM

Project Name: Jaquez Client: _____
Pit Name: _____ Meter/LD # _____
Pit Location: Twp _____ Rng _____ Sec _____ Unit _____
Date 12-15-10 Weather _____
Collected by: ALA Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: Composite

Sample Identification: Jaquez - 8(9) - 121510

Sample Depth (below ground surface): 9' is middle depth

Sample Time 1610

Sample Description:

Soil color: grayish black (brown, red, orange, yellow, black, staining)
Soil texture: clay to silt (gravel, sand, silt, clay)
Soil moisture: damp (dry, moist, wet)
Soil odor: HC odor (hydrocarbon odor?)

PID Headspace Reading: 188

Instrumentation:

PID meter: Mini Rae 2000
Other: Petroflag: 419

Sample Analyses:

BTEX TPH
Other _____

Did Not Ship

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29N Rng 9W Sec 6 Unit _____
Date 12-16-10 Weather Cloudy, light rain
Collected by: Brooke Herb Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: ~~_____~~

Sample Identification: Jaquez-12(14)-121610

Sample Depth (below ground surface): 14'

Sample Time 1205

Sample Description:
Soil color: Brown (brown, red, orange, yellow, black, staining)
Soil texture: sand (gravel, sand, silt, clay)
Soil moisture: Saturated (dry, moist, wet)
Soil odor: NONE (hydrocarbon odor?)

PID Headspace Reading: 1.1

Instrumentation:
PID meter: Mini Rae 2000
Other: _____

Sample Analyses: BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29N Rng 9W Sec 6 Unit _____
Date 12-17-10 Weather Cloudy, 36°
Collected by: Brooke Herb Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez 16(14)-121710

Sample Depth (below ground surface): 14'

Sample Time 1507

Sample Description:

Soil color: Brown (brown, red, orange, yellow, black, staining)
Soil texture: m. to c. sand (gravel, sand, silt, clay)
Soil moisture: Saturated (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 0.0 ppm

Instrumentation:

PID meter: Mini Rae 2000
Other: _____

Sample Analyses:

BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29 N Rng 9 W Sec 6 Unit _____
Date 12-17-10 Weather Clear, 36°
Collected by: Brooke Herd Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez - GW(1) - north - 121710

Sample Depth (below ground surface): _____

Sample Time 1600

Sample Description:
Soil color: _____ (brown, red, orange, yellow, black, staining)
Soil texture: _____ (gravel, sand, silt, clay)
Soil moisture: _____ (dry, moist, wet)
Soil odor: _____ (hydrocarbon odor?)

PID Headspace Reading: _____ ppm

Instrumentation:
PID meter: Mini Rae 2000
Other: _____

Sample Analyses: BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29N Rng 9W Sec 6 Unit _____
Date 12/19/10 Weather Cloudy, light rain
Collected by: Brooke Herb Comments: _____

Sampling Method: Grab sampler Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: 2-point composite

Sample Identification: Jaquez 17(14) 12/19/10

Sample Depth (below ground surface): 14'

Sample Time 1530

Sample Description:

Soil color: Brown (brown, red, orange, yellow, black, staining)
Soil texture: Sand (gravel, sand, silt, clay)
Soil moisture: Saturated (dry, moist, wet)
Soil odor: None (hydrocarbon odor?)

PID Headspace Reading: 0.0

Instrumentation:

PID meter: Mini Rae 2000

Other: _____

Sample Analyses:

BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: EL Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29N Rng 9W Sec 6 Unit _____
Date 12/20/10 Weather: Cloudy
Collected by: Brooke Herbs Comments: ?

Sampling Method: Grab sample Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez 18(14)-122010

Sample Depth (below ground surface): 14'

Sample Time 15:04

Sample Description:
Soil color: Brown (brown, red, orange, yellow, black, staining)
Soil texture: Sand (gravel, sand, silt, clay)
Soil moisture: Saturated (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 0.0

Instrumentation:
PID meter: MiniRae 2000
Other: _____

Sample Analyses: BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Typ 29N Rng 9W Sec 0 Unit _____
Date 12/27/10 Weather Cloudy, 43°
Collected by: Broke Herb Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez 19(15)-122110

Sample Depth (below ground surface): 15'

Sample Time 1020

Sample Description:
Soil color: Brown (brown, red, orange, yellow, black, staining)
Soil texture: Sand (gravel, sand, silt, clay)
Soil moisture: Saturated (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 0.0

Instrumentation:
PID meter: mini pal 2000
Other: _____

Sample Analyses: BTEX TPH 6
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29N Rng 9W Sec 6 Unit _____
Date 12/21/10 Weather cloudy, 40'
Collected by: Broke Herb Comments: _____

Sampling Method: Grab sampler Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez-22(15)-122110

Sample Depth (below ground surface): 15

Sample Time 13:08

Sample Description:
Soil color: Brown (brown, red, orange, yellow, black, staining)
Soil texture: m-c sand (gravel, sand, silt, clay)
Soil moisture: Saturated (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 0.0

Instrumentation:
PID meter: Mini Rae 2000
Other: _____

Sample Analyses: BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29N Rng 9W Sec 4 Unit _____
Date 12/21/10 Weather Cloudy, 40°
Collected by: Brooke Her Comments: _____

Sampling Method: Grab samples Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez(23(15))-122110

Sample Depth (below ground surface): 15'

Sample Time 1330

Sample Description:
Soil color: Brown (brown, red, orange, yellow, black, staining)
Soil texture: Sand (gravel, sand, silt, clay)
Soil moisture: Sat (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 0.0

Instrumentation:
PID meter: Mini Rae 2000
Other: _____

Sample Analyses: BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: EL PASO
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29N Rng 9W Sec 6 Unit _____
Date 12/21/10 Weather Cloudy 40
Collected by: Brooke Herb Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez 24 (15) 12/10

Sample Depth (below ground surface): 15'

Sample Time 1400

Sample Description:
Soil color: Brown (brown, red, orange, yellow, black, staining)
Soil texture: sand (gravel, sand, silt, clay)
Soil moisture: saturated (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 0.2

Instrumentation:
PID meter: Mini Rae 2000
Other: _____

Sample Analyses: BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29N Rng 9W Sec 6 Unit _____
Date 12/21/10 Weather Cloudy, light rain
Collected by: Brooke Herro Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez 25 (20) 172110

Sample Depth (below ground surface): 20'

Sample Time 15:40

Sample Description:
Soil color: Grayish-Black (brown, red, orange, yellow, black, staining)
Soil texture: Sand (gravel, sand, silt, clay)
Soil moisture: Saturated (dry, moist, wet)
Soil odor: Very minor hydrocarbon (hydrocarbon odor?)

PID Headspace Reading: 2.8 ppm

Instrumentation:
PID meter: Mini Rae 2000
Other: _____

Sample Analyses: BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: MWH
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29N Rng 9W Sec 6 Unit _____
Date 12-22-10 Weather _____
Collected by: Ashley Ager Comments: 38°, Cloudy, Drizzle

Sampling Method: Grab sample Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler X Other: Composite

Sample Identification: Jaquez-31(9)-122210

Sample Depth (below ground surface): average - 9'

Sample Time 11:44

Sample Description:

Soil color: grayish brown (brown, red, orange, yellow, black, staining)
Soil texture: sand, silt & clay (gravel, sand, silt, clay)
Soil moisture: wet (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 0.0

Instrumentation:

PID meter: Minirae 2000
Other: Petroflag: 148

Sample Analyses: BTEX 8021 TPH 8015
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: MWH
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29N Rng 9W Sec 6 Unit _____
Date 12-22-10 Weather 38°, Cloudy
Collected by: Ashley Ager Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
 Hollow stem drilling / Split spoon sampler Other: JE

Sample Identification: Jaquez-32(11)-122210

Sample Depth (below ground surface): 11'

Sample Time 1205

Sample Description:

Soil color: brown (brown, red, orange, yellow, black, staining)
Soil texture: clayey sand (gravel, sand, silt, clay)
Soil moisture: saturated (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: ~~0.0~~ 0.0

Instrumentation:

PID meter: mini Rae 2000
Other: PetroFlag: 79

Sample Analyses: BTEX 8021 TPH 8015
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: MWH
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29N Rng 9W Sec 6 Unit _____
Date 12-22-10 Weather 38° Cloudy
Collected by: Ashley Ager Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez-33(4)-122210

Sample Depth (below ground surface): 14'

Sample Time 1150

Sample Description: Groundwater

Soil color: _____ (brown, red, orange, yellow, black, staining)
Soil texture: _____ (gravel, sand, silt, clay)
Soil moisture: _____ (dry, moist, wet)
Soil odor: _____ (hydrocarbon odor?)

PID Headspace Reading: _____

Instrumentation:

PID meter: _____
Other: _____

Sample Analyses:

BTEX 8021 TPH _____
Other _____

SOIL SAMPLING FORM

Project Name: Juarez Client: MVH/El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29N Rng 9W Sec 6 Unit _____
Date 12/27/10 Weather Overcast
Collected by: Devin Hammann Comments: _____

Sampling Method: Grab samples Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Juarez 357 (14.75) 122710

Sample Depth (below ground surface): 14.75

Sample Time 1447

Sample Description:

Soil color: Brown (brown, red, orange, yellow, black, staining)
Soil texture: Silty sand (gravel, sand, silt, clay)
Soil moisture: Saturated (dry, moist, wet)
Soil odor: None (hydrocarbon odor?)

PID Headspace Reading: 0.0

Instrumentation:

PID meter: Mhic Rae 2000
Other: _____

Sample Analyses: BTEX X TPH X
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29 N Rng 9 W Sec 6 Unit _____
Date 12/27/10 Weather overcast
Collected by: Darin Henemann Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez 36 (15) 122710

Sample Depth (below ground surface): 15'

Sample Time 1508

Sample Description:
Soil color: grayish Brown (brown, red, orange, yellow, black, staining)
Soil texture: sand (gravel, sand, silt, clay)
Soil moisture: saturated (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 0.0

Instrumentation:
PID meter: mini Rae 2000
Other: _____

Sample Analyses: BTEX X TPH X
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: EL PASO
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29N Rng 9W Sec 4 Unit _____
Date 12/28/10 Weather Cloudy 32
Collected by: Brooke Herb Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
 Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez 37 (14) 122810

Sample Depth (below ground surface): ~ 14'

Sample Time 1024

Sample Description:
Soil color: Brown (brown, red, orange, yellow, black, staining)
Soil texture: clay (gravel, sand, silt, clay)
Soil moisture: moist (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 1.4 ppm

Instrumentation:
PID meter: mini rae 2000
Other: _____

Sample Analyses: BTEX TPH
Other: _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29N Rng 9W Sec 6 Unit _____
Date 12/23/10 Weather Cloudy
Collected by: Brook Herro Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez 38(18)122810

Sample Depth (below ground surface): 18'

Sample Time 1215

Sample Description:

Soil color: Brown (brown, red, orange, yellow, black, staining)
Soil texture: Sand (gravel, sand, silt, clay)
Soil moisture: Sad (dry, moist, wet)
Soil odor: None (hydrocarbon odor?)

PID Headspace Reading: 1.7 ppm

Instrumentation:

PID meter: Mini Rae 2000
Other: _____

Sample Analyses:

BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquet Client: E/ Puso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29N Rng 9W Sec 6 Unit _____
Date 12/28/10 Weather cloudy
Collected by: Brooke Hob Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquet 39(14) 12 2810

Sample Depth (below ground surface): 14'

Sample Time 15:23

Sample Description:

Soil color: Brown (brown, red, orange, yellow, black, staining)
Soil texture: sand (gravel, sand, silt, clay)
Soil moisture: Saturated (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 2.5 ppm

Instrumentation:

PID meter: Mini Rae 2000
Other: _____

Sample Analyses:

BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquet Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29N Rng 9W Sec 6 Unit _____
Date 12/20/10 Weather Cloudy 37°
Collected by: Brooke Herbs Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquet 40(14) 122810

Sample Depth (below ground surface): 14'

Sample Time 15:58

Sample Description:

Soil color: Brown (brown, red, orange, yellow, black, staining)
Soil texture: Clay (gravel, sand, silt, clay)
Soil moisture: wet 0 (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 0.8 ppm

Instrumentation:

PID meter: Minirae 2000
Other: _____

Sample Analyses:

BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29N Rng 9W Sec 6 Unit _____
Date 12/28/10 Weather cloudy 37°
Collected by: Brooke Herb Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez 41 (13) 122810

Sample Depth (below ground surface): 13'

Sample Time 147

Sample Description:

Soil color: Brown (brown, red, orange, yellow, black, staining)
Soil texture: clay (gravel, sand, silt, clay)
Soil moisture: wet (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 1.1

Instrumentation:

PID meter: mini Rae 2000
Other: _____

Sample Analyses:

BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29N Rng 9W Sec 6 Unit _____
Date 1/4/2011 Weather Overcast 24°
Collected by: Brooke Herb Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez - 49 (10) 00411

Sample Depth (below ground surface): Average 10'

Sample Time 1446

Sample Description:

Soil color: Brown (brown, red, orange, yellow, black, staining)
Soil texture: Sand (gravel, sand, silt, clay)
Soil moisture: wet (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 0.8 ppm

Instrumentation:

PID meter: Mini Rae 2000
Other: Petro Flag 17

Sample Analyses:

BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29N Rng 9W Sec 6 Unit _____
Date 1/4/2011 Weather Cloudy, 24°
Collected by: Brooke Herb Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez-55 (9) 010411

Sample Depth (below ground surface): Ag. 9'

Sample Time 16:16

Sample Description:
Soil color: Brown (brown, red, orange, yellow, black, staining)
Soil texture: Sand (gravel, sand, silt, clay)
Soil moisture: Moist (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 37.8 ppm

Instrumentation:
PID meter: Mini Rae 2000
Other: Petro Flag 72

Sample Analyses: BTEX TPH
Other: _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29N Rng 9W Sec 6 Unit _____
Date 1/5/11 Weather Cloudy 10°
Collected by: Booke Herb Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez - (66(9) 010511

Sample Depth (below ground surface): Average 9'

Sample Time 1730

Sample Description:
Soil color: Brownish-Black (brown, red, orange, yellow, black, staining)
Soil texture: (Clayey) sand (gravel, sand, silt, clay)
Soil moisture: moist (dry, moist, wet)
Soil odor: Strong HC odor (hydrocarbon odor?)

PID Headspace Reading: 1799 ppm

Instrumentation:
PID meter: Mini Rae 2000
Other: retroflag; 2606

Sample Analyses: BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29 N Rng 9W Sec 6 Unit _____
Date 1/5/11 Weather Cloudy 10
Collected by: Brooke Herd Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
 Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez-67(9) 010511

Sample Depth (below ground surface): Avg 9'

Sample Time 1735

Sample Description: Brownish Black (brown, red, orange, yellow, black, staining)
Soil color: _____
Soil texture: sand (gravel, sand, silt, clay)
Soil moisture: moist (dry, moist, wet)
Soil odor: Strong HC Odor (hydrocarbon odor?)

PID Headspace Reading: 3002 ppm

Instrumentation:
PID meter: Mini Rae 2000
Other: petrotag 4207 ppm

Sample Analyses: BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29 N Rng 9 W Sec 6 Unit _____
Date 2/10/11 Weather _____
Collected by: Booke Herold Comments: farthest west on N wall - no visible contamination

Sampling Method: Grab sample Hand Auger Geoprobe
 Hollow stem drilling / Split spoon sampler Other: 5 point from bucket

Sample Identification: Jaquez - 105 (10) 021011

Sample Depth (below ground surface): 0/16 - 18'

Sample Time 1046

Sample Description:

Soil color: Brown (brown, red, orange, yellow, black, staining)
Soil texture: sand (gravel, sand, silt, clay)
Soil moisture: moist (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 0.1 ppm

Instrumentation:

PID meter: Mini Rae 2000
Other: 10 ppm

Sample Analyses:

BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29 N Rng 9 W Sec 6 Unit _____
Date 2/10/2011 Weather Sunny, cold
Collected by: Brooke Herro Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
 Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez - 113 (12) 021011

Sample Depth (below ground surface): Average ~12'

Sample Time 17:00

Sample Description:
Soil color: Brown w/ Black Staining (brown, red, orange, yellow, black, staining)
Soil texture: Sand (gravel, sand, silt, clay)
Soil moisture: moist (dry, moist, wet)
Soil odor: Strong HC odor (hydrocarbon odor?)

PID Headspace Reading: 1889 ppm

Instrumentation:
PID meter: Mini Rae 2000
Other: 1002 ppm petroflag

Sample Analyses: BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29 N Rng 9 W Sec 6 Unit _____
Date 2/11/2011 Weather Sunny, Clear 36°
Collected by: Brooke Herold Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
 Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez-114 (9) 021111

Sample Depth (below ground surface): 9'

Sample Time 12:45

Sample Description:

Soil color: Brown (brown, red, orange, yellow, black, staining)
Soil texture: Sand (gravel, sand, silt, clay)
Soil moisture: Wet Saturated (dry, moist, wet)
Soil odor: None (hydrocarbon odor?)

PID Headspace Reading: 0.3 ppm

Instrumentation:

PID meter: Mini Rae 2000
Other: PetroTag 28 ppm

Sample Analyses:

BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29 N Rng 9 W Sec 6 Unit _____
Date 12-11-11 Weather Gold, Clear 36°
Collected by: Booke Herd Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
 Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez-115 (4) 021111

Sample Depth (below ground surface): 4'

Sample Time 1302

Sample Description:
Soil color: Brown minor Black staining (brown, red, orange, yellow, black, staining)
Soil texture: Sand (gravel, sand, silt, clay)
Soil moisture: wet (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 0.7 ppm

Instrumentation:
PID meter: Mini Rae 2000
Other: Petro Flag 12 ppm

Sample Analyses: BTEX TPH
Other: _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29N Rng 9W Sec 6 Unit _____
Date 2-11-11 Weather Sunny, Clear 36°
Collected by: Booke Herd Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
 Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez - BH4 (12) - 021111

Sample Depth (below ground surface): 12'

Sample Time 2:16:10

Sample Description:
Soil color: clayey sand (brown, red, orange, yellow, black, staining)
Soil texture: black (gravel, sand, silt, clay)
Soil moisture: wet (dry, moist, wet)
Soil odor: HC odor (hydrocarbon odor?)

PID Headspace Reading: 6.25 ppm

Instrumentation:
PID meter: Mini Rae 2000
Other: Petroflag: 3019 ppm return 2/14 = 642 ppm

Sample Analyses: BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29N Rng 9W Sec 6 Unit _____
Date 2-13-11 Weather Clear, 45°
Collected by: Sam LaRue Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez 124(9) 021311

Sample Depth (below ground surface): average 9'

Sample Time 09:30

Sample Description:

Soil color: light brown (brown, red, orange, yellow, black, staining)
Soil texture: silt & sand (gravel, sand, silt, clay)
Soil moisture: dry (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 0.3 ppm

Instrumentation:

PID meter: Mini Ral 2000
Other: Petroflag = 9 ppm

Sample Analyses: BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: MWH
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29N Rng 6W Sec 6 Unit _____
Date 2-13-11 Weather Clear, 46°
Collected by: Sam LaRue Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez BH 4 (17) 021311

Sample Depth (below ground surface): 17'

Sample Time 11:50

Sample Description:

Soil color: gray (brown, red, orange, yellow, black, staining)
Soil texture: sandy to clayey silt (gravel, sand, silt, clay)
Soil moisture: damp to wet (dry, moist, wet)
Soil odor: HC odor? (hydrocarbon odor?)

PID Headspace Reading: ~~1.8 ppm~~ 1.8 ppm

Instrumentation:

PID meter: Min. Rae 2000
Other: PetroFlag ~~TPH~~ rerun next day (2/14) = 3.2 ppm
rerun 2/22 = 0 ppm

Sample Analyses:

BTEX TPH
Other: ~~TPH~~ ~~TPH~~ ~~TPH~~ did not ship TPH

~~TPH~~

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29 N Rng 9 W Sec 6 Unit _____
Date 2/14/11 Weather Sunny
Collected by: Booke Herb Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez-132(6)021411

Sample Depth (below ground surface): Average 6'

Sample Time 15:15

Sample Description:

Soil color: Brown w/ Black staining (brown, red, orange, yellow, black, staining)
Soil texture: Sand minor clay (gravel, sand, silt, clay)
Soil moisture: Wet (dry, moist, wet)
Soil odor: None (hydrocarbon odor?)

PID Headspace Reading: 2.9 ppm

Instrumentation:

PID meter: Mini Rae 2000
Other: 2.9 ppm Petroflag

Sample Analyses:

BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29 N Rng 9 W Sec 6 Unit _____
Date 2/11/11 Weather overcast, 40°
Collected by: Brooke Herd Comments: _____

Sampling Method: Grab samples Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez-143 (7) 02/10/11

Sample Depth (below ground surface): Average 7'

Sample Time 11:10

Sample Description: grayish
Soil color: Dark brown (brown, red, orange, yellow, black, staining)
Soil texture: Sand (gravel, sand, silt, clay)
Soil moisture: Saturated (dry, moist, wet)
Soil odor: ~~None~~ some HC odor (hydrocarbon odor?)

PID Headspace Reading: 1852 ppm

Instrumentation:

PID meter: Mini Rae 2000
Other: petroflag: ~~763~~ 763 ppm

Sample Analyses: BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29 N Rng 9 W Sec 6 Unit _____
Date 2/16/10 Weather Overcast, 40
Collected by: Booke Herd Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
 Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez-138 (6) 02/16/10

Sample Depth (below ground surface): Average 6'

Sample Time 18:00

Sample Description:

Soil color: Grayish Brown w/some Black (brown, red, orange, yellow, black, staining)
Soil texture: Clayey sand (gravel, sand, silt, clay)
Soil moisture: wet (dry, moist, wet)
Soil odor: minor HC odor (hydrocarbon odor?)

PID Headspace Reading: 33.2 ppm

Instrumentation:

PID meter: Mini Rae 2000
Other: Petroflag 3 ppm

Sample Analyses:

BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29 N Rng 9 W Sec 6 Unit _____
Date 2-17-11 Weather Sunny, 40°
Collected by: Brooke Herd Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
 Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez-148 (12) 021711

Sample Depth (below ground surface): 12'

Sample Time 14:40

Sample Description:
Soil color: black (brown, red, orange, yellow, black, staining)
Soil texture: sand (gravel, sand, silt, clay)
Soil moisture: saturated (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 13.0 ppm

Instrumentation:
PID meter: Mini Rae 2000
Other: Petroflag: 18 ppm

Sample Analyses: BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Plt Location: Twp 29 N Rng 9W Sec 6 Unit _____
Date 2/18/11 Weather Overcast 40°
Collected by: Brooke Herd Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
 Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez-178 (5.5) 021811

Sample Depth (below ground surface): Avg 5.5'

Sample Time 15:33

Sample Description:
Soil color: Brown minor Gray (brown, red, orange, yellow, black, staining)
Soil texture: Sand (gravel, sand, silt, clay)
Soil moisture: wet (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 1.9 ppm

Instrumentation:
PID meter: Mini Rae 2000
Other: Petroflag: 7 ppm

Sample Analyses: BTEX TPH
Other _____

Southern 50' of West Wall

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29 N Rng 9W Sec 6 Unit _____
Date 2/18/11 Weather Overcast 40°
Collected by: Booke Herd Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
 Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez - 169 (6.5) 021811

Sample Depth (below ground surface): Average 6.5'

Sample Time 15:46

Sample Description:
Soil color: Brown w/ Black staining (brown, red, orange, yellow, black, staining)
Soil texture: Clayey Sand (gravel, sand, silt, clay)
Soil moisture: wet to Saturated (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 2.6 ppm

Instrumentation:
PID meter: Mini Rae 2000
Other: Petro Flag = 27 ppm

Sample Analyses: BTEX TPH
Other _____

East wall 5-point

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29 N Rng 9 W Sec 6 Unit _____
Date: 2/18/2011 Weather: overcast 40'
Collected by: Booke Herold Comments: _____

Sampling Method: Grab samples Hand Auger Geoprobe
 Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez - 174(5)021811

Sample Depth (below ground surface): Average 5'

Sample Time 16:45

Sample Description:

Soil color: Brown w/ some Gray & Black staining (brown, red, orange, yellow, black, staining)
Soil texture: Sand - minor clay (gravel, sand, silt, clay)
Soil moisture: moist (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 4.6 ppm

Instrumentation:

PID meter: Mini Rae 2000
Other: Petrolog: 210 ppm → seems high

Sample Analyses:

BTEX TPH
Other _____

Southwall 5-point

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Typ 29 N Rng 9 W Sec 6 Unit _____
Date 2/18/11 Weather overcast 40
Collected by: Booke Herd Comments: Floor

Sampling Method: Grab sample Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez - 157(7)021811

Sample Depth (below ground surface): 7'

Sample Time 1707

Sample Description:
Soil color: light Gray Brown (brown, red, orange, yellow, black, staining)
Soil texture: Sand (gravel, sand, silt, clay)
Soil moisture: Saturated (dry, moist, wet)
Soil odor: None (hydrocarbon odor?)

PID Headspace Reading: 0.8 ppm

Instrumentation:
PID meter: Mini Rae 2000
Other: _____

Sample Analyses: BTEX TPH
Other _____

Floor

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29 N Rng 9W Sec 6 Unit _____
Date 2/18/2011 Weather overcast 40
Collected by: Booke Herro Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez 179 (10) 02.18.11

Sample Depth (below ground surface): ~10

Sample Time 17:21

Sample Description:
Soil color: Dark Gray to Black (brown, red, orange, yellow, black, staining)
Soil texture: Sandy clay (gravel, sand, silt, clay)
Soil moisture: Saturated (dry, moist, wet)
Soil odor: Some HC odor (hydrocarbon odor?)

PID Headspace Reading: 1124 ppm

Instrumentation:
PID meter: Mini Rae 2000
Other: _____

Sample Analyses: BTEX TPH
Other: _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29 N Rng 9 W Sec 6 Unit _____
Date 2-21-11 Weather Sunny, 45°
Collected by: Booke Herd Comments: _____
San La Rue

Sampling Method: Grab sample Hand Auger Geoprobe
 Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez - 199 (23) 02-211

Sample Depth (below ground surface): 23'

Sample Time 14:00

Sample Description:
Soil color: brownish gray (brown, red, orange, yellow, black, staining)
Soil texture: sand (gravel, sand, silt, clay)
Soil moisture: saturated (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 32.2 ppm

Instrumentation:
PID meter: Mini Rae 2000
Other: _____

Sample Analyses: BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29 N Rng 9 W Sec 6 Unit _____
Date 2-21-11 Weather Sunny, 45°
Collected by: Brooke Herd Comments: _____
Sam LaRue

Sampling Method: Grab sample Hand Auger Geoprobe
 Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez - 205 (24) 022111

Sample Depth (below ground surface): 24'

Sample Time 15:45

Sample Description:

Soil color: black (brown, red, orange, yellow, black, staining)
Soil texture: sand (gravel, sand, silt, clay)
Soil moisture: saturated (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 0.7 ppm

Instrumentation:

PID meter: Mini Rae 2000
Other: _____

Sample Analyses:

BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29 N Rng 9 W Sec 6 Unit _____
Date 2/22/11 Weather Sunny 45
Collected by: Brooke Herd Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
 Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez - 213 (20.5) 022211

Sample Depth (below ground surface): Avg. 20.5'

Sample Time 12:53

Sample Description:

Soil color: Brown (brown, red, orange, yellow, black, staining)
Soil texture: Coarse sand / minor clay (gravel, sand, silt, clay)
Soil moisture: Saturated (dry, moist, wet)
Soil odor: None (hydrocarbon odor?)

PID Headspace Reading: 0.3 ppm

Instrumentation:

PID meter: Mini Rae 2000
Other: _____

Sample Analyses:

BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Plt Name: _____ Meter/LD # _____
Plt Location: Twp 29 N Rng 9W Sec 6 Unit _____
Date 2-22-11 Weather Sunny 45
Collected by: Brooke Herold Comments: Floor composite 214-218

Sampling Method: Grab sample Hand Auger Geoprobe
 Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez - 219 (17') 022211

Sample Depth (below ground surface): Average 17'

Sample Time 17:00

Sample Description:

Soil color: Black (brown, red, orange, yellow, black, staining)
Soil texture: Sand (gravel, sand, silt, clay)
Soil moisture: Saturated (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 1.5 ppm

Instrumentation:

PID meter: Mini Rae 2000
Other: _____

Sample Analyses:

BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29 N Rng 9 W Sec 6 Unit _____
Date: 2/22/11 Weather: Sunny 45
Collected by: Booke Herd Comments: West Wall Camp at 175, 176, 196, 206, 208, 209

Sampling Method: Grab sample Hand Auger Geoprobe
 Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez - 220 (10) 022211

Sample Depth (below ground surface): Avg. 10'

Sample Time: 19:00

Sample Description:

Soil color: Grayish Brown (brown, red, orange, yellow, black, staining)
Soil texture: Sand (gravel, sand, silt, clay)
Soil moisture: moist (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 1.1 ppm

Instrumentation:

PID meter: Mini Rae 2000
Other: PetroFlag: 45 ppm

Sample Analyses:

BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29 N Rng 9 W Sec 6 Unit: _____
Date 2/23/11 Weather Sunny 50°
Collected by: Booke Herold Comments: Flour Composite of 221, 222, 224

Sampling Method: Grab sample Hand Auger Geoprobe
 Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez-026 (13) 022311

Sample Depth (below ground surface): 13'

Sample Time 13:13

Sample Description:

Soil color: Brown w/ some black (brown, red, orange, yellow, black, staining)
Soil texture: Sand- minor clay (gravel, sand, silt, clay)
Soil moisture: Saturated (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 5.1 ppm

Instrumentation:

PID meter: Mini Rae 2000
Other: _____

Sample Analyses: BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29 N Rng 9 W Sec 6 Unit _____
Date 2/23/11 Weather Sunny 40
Collected by: Booke Herd Comments: Floor comp 226-231

Sampling Method: Grab sample Hand Auger Geoprobe
 Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez-232(19)022311

Sample Depth (below ground surface): Avg. 19'

Sample Time 16:32

Sample Description:
Soil color: Brownish Black (brown, red, orange, yellow, black, staining)
Soil texture: Sand (gravel, sand, silt, clay)
Soil moisture: Saturated (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 30.7 ppm

Instrumentation:
PID meter: Mini Rae 2000
Other: _____

Sample Analyses: BTEX TPH
Other: _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29 N Rng 9 W Sec 6 Unit _____
Date 2/24/11 Weather Sunny 40
Collected by: Brooke Herd Comments: East Wall (middle) composite
238, 240, 241, 245, 246

Sampling Method: Grab sample Hand Auger Geoprobe
 Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez - 247(6) 022411

Sample Depth (below ground surface): Average 6'

Sample Time 16:15

Sample Description:

Soil color: Brown w/ Black staining (brown, red, orange, yellow, black, staining)
Soil texture: Clayey sand (gravel, sand, silt, clay)
Soil moisture: Saturated (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 4.5 ppm

Instrumentation:

PID meter: Mini Rae 2000
Other: _____

Sample Analyses: BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29 N Rng 9 W Sec 6 Unit _____
Date 2/24/11 Weather _____
Collected by: Booke Herd Comments: Floor (SE) composite
239, 243, 244

Sampling Method: Grab sample Hand Auger Geoprobe
 Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez-248(8)022411

Sample Depth (below ground surface): Avg 8'

Sample Time 16:22

Sample Description:

Soil color: Brown w / Black (brown, red, orange, yellow, black, staining)
Soil texture: Clayey sand (gravel, sand, silt, clay)
Soil moisture: Saturated (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 18.8 ppm

Instrumentation:

PID meter: Mini Rae 2000
Other: _____

Sample Analyses:

BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29 N Rng 9 W Sec 6 Unit _____
Date 2/24/11 Weather _____
Collected by: Booke Herd Comments: Floor Composite
234-237

Sampling Method: Grab samples Hand Auger Geoprobe
 Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez-249(15)022411

Sample Depth (below ground surface): avg 15'

Sample Time 11:30

Sample Description:

Soil color: Brown w / Black (brown, red, orange, yellow, black, staining)
Soil texture: sand (gravel, sand, silt, clay)
Soil moisture: Saturated (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 25.4 ppm

Instrumentation:

PID meter: Mini Rae 2000
Other: _____

Sample Analyses:

BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29 N Rng 9 W Sec 6 Unit _____
Date 2/25/2011 Weather Overcast 35°
Collected by: Booke Herd Comments: west wall below ditch composite
256, 257, 258, 261, 263

Sampling Method: Grab sample Hand Auger Geoprobe
 Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez - 265 (125) 022511

Sample Depth (below ground surface): Average 12.5'

Sample Time 15:20

Sample Description:

Soil color: Brown minor gray (brown, red, orange, yellow, black, staining)
Soil texture: sand (med grain) (gravel, sand, silt, clay)
Soil moisture: damp (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 1.6 ppm

Instrumentation:

PID meter: Mini Rae 2000
Other: PetroFlag: 0 ppm

Sample Analyses:

BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29 N Rng 9 W Sec 6 Unit _____
Date 2/25/2011 Weather Overcast 35°
Collected by: Brooke Herro Comments: Floor - NW corner S. Side

Sampling Method: Grab samples Hand Auger Geoprobe
 Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez-264(22)022511

Sample Depth (below ground surface): 22'

Sample Time 15:36

Sample Description:

Soil color: Brown (brown, red, orange, yellow, black, staining)
Soil texture: clayey sand to sand (gravel, sand, silt, clay)
Soil moisture: saturated (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 0.4 ppm

Instrumentation:

PID meter: Mini Rae 2000
Other: _____

Sample Analyses:

BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29 N Rng 9 W Sec 6 Unit _____
Date 2/28/11 Weather Sunny 38°
Collected by: Brooke Herb Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
 Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez-279(7)022811

Sample Depth (below ground surface): Average 7'

Sample Time 11:30

Sample Description:
Soil color: Brown/Black (brown, red, orange, yellow, black, staining)
Soil texture: sandy clay (gravel, sand, silt, clay)
Soil moisture: wet (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 3.9 ppm

Instrumentation:
PID meter: Mini Rae 2000
Other: Petro flag 175 PPR

Sample Analyses: BTEX TPH
Other _____

SOIL SAMPLING FORM

Project Name: Jaquez Client: El Paso
Pit Name: _____ Meter/LD # _____
Pit Location: Twp 29 N Rng 9 W Sec 6 Unit _____
Date 2/28/11 Weather Sunny 38'
Collected by: Booke Herb Comments: _____

Sampling Method: Grab sample Hand Auger Geoprobe
 Hollow stem drilling / Split spoon sampler Other: _____

Sample Identification: Jaquez - 280(16) 022811

Sample Depth (below ground surface): Average 16'

Sample Time 12:00

Sample Description:

Soil color: Brown miter Gray (brown, red, orange, yellow, black, staining)
Soil texture: Sand (gravel, sand, silt, clay)
Soil moisture: Saturated (dry, moist, wet)
Soil odor: none (hydrocarbon odor?)

PID Headspace Reading: 41.1 ppm

Instrumentation:

PID meter: Mini Rae 2000
Other: _____

Sample Analyses:

BTEX TPH
Other _____



CHAIN OF CUSTODY

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

MSD-83 Tracking # **874476532682** Waste Order Control #
 Account Code # Account Job #

Client / Reporting Information		Project Information		Requested Analysis		Matrix Codes	
Company Name MWH		Project Name / No. San Juan River Basin Program - Jaquez Site					
Project Contact Jed Smith E-Mail: jed.smith@mwhglobal.com		Bill to El Paso Corp Invoice Attn: Norma Ramos					
Address 1801 California Street, Suite 2800		Address 1001 Louisiana Street, Rm S1904B					
City Denver	State CO	City Hou	State TX				
Zip 80202	Phone No. 303-281-2276	Zip 77002	Phone No.				
Samplers Name Ashley Acker		Client Purchase Order #					
Accutest Sample #		Field ID / Point of Collection		Collection		Number of preserved bottles	
						BTEX (8021B) include m, p, & o-xylene TVPH/8016 TEPH/8016	
						DW - Drinking Water GW - Ground Water WW - Wastewater SD - Soil SL - Sludge LIQ - Liquid SOL - Other Solid	
						LAB USE ONLY	

Turnaround Time (Business days)
 10 Day STANDARD
 7 Day
 4 Day RUSH
 3 Day EMERGENCY
 2 Day EMERGENCY
 1 Day EMERGENCY
 Other

Approved By/ Date: _____

Data Deliverable Information
 Commercial "A" TRRP-13
 Commercial "B" EDD Format
 Reduced Tier 1 Other
 Full Data Package

Commercial "A" = Results Only
 Commercial "B" = Results & Standard QC

Comments / Remarks
 If samples are received unpreserved, please notify MWH regarding holding time!!
 Please return cooler to: LTE
 2243 Main Ave, Ste 3
 Durango, CO 81301

Real time analytical data available via Lablink

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLE CHANGE POSSESSION, INCLUDING COURIER DELIVERY

Relinquished by: 1 Ashley Acker Date Time: 12/23/10/1330	Received By: 1 Date Time: 12/23/10/1330	Relinquished By: 2 Date Time:	Received By: 2 Date Time:
Relinquished by: 3 Date Time:	Received By: 3 Date Time:	Relinquished By: 4 Date Time:	Received By: 4 Date Time:
Relinquished by: 5 Date Time:	Received By: 5 Date Time:	Custody Seal #	Preserved where applicable <input type="checkbox"/>

On Ice Cooler Temp.



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

CHAIN OF CUSTODY

FED-EX Tracking # 874476532682	Bottle Order Control #
Accutest Quote #	Accutest Job #

Client / Reporting Information		Project Information		Requested Analyses										Matrix Codes					
Company Name MWH		Project Name / No. San Juan River Basin Program - Jaquez Site		BTEX (8021B) include m, p, & o-xylene TTVPH/8015 TEPH/8015										DW - Drinking Water					
Project Contact Jed Smith		E-Mail jed.smith@mwhglobal.com												Bill to El Paso Corp	Invoice Attn. Norma Ramos	GW - Ground Water			
Address 1801 California Street, Suite 2900		Address 1001 Louisiana Street, Rm S1904B												SO - Soil					
City Denver		City Hou												SL - Sludge					
State CO		State TX												OI - Oil					
Zip 80202		Zip 77002		LIQ - Liquid															
Phone No. 303-291-2276		Phone No.		Fax No.	SOL - Other Solid														
Fax No.		Client Purchase Order #		LAB USE ONLY															
Samplers Name Ashley Ager		Field-ID / Point of Collection																	
Accutest Sample #		Collection		Number of preserved bottles															
		Date		Time		Matrix	# of bottles	HCl	NO3	NH3	NH4	NO2	NO	H2S	H2O	H2SO4	H2S	H2O	NONE
JACQUEZ-BH-1 (16.25') 4730		12/23/10		1120		SO	3												
JACQUEZ-BH-2 (16.5') 4730		12/23/10		1035		SO	3												
						SO													
						SO													
						SO													
						SO													
						SO													
						SO													
						SO													
						SO													
						SO													
						SO													

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				<input type="checkbox"/> Commercial "A" <input checked="" type="checkbox"/> Commercial "B" <input type="checkbox"/> Reduced Tier 1 <input type="checkbox"/> Full Data Package		<input type="checkbox"/> TRRP-13 <input type="checkbox"/> EDD Format <input type="checkbox"/> Other	
Real time analytical data available via Lablink				Commercial "A" = Results Only Commercial "B" = Results & Standard QC		If samples are received unpreserved, please notify MWH regarding holding time!!! Please return cooler to: LTE 2243 Main Ave, Ste 3 Durango, CO 81301	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY							
Relinquished by:	Date Time:	Received By:	Date Time:	Relinquished By:	Date Time:	Received By:	Date Time:
1 Ashley Ager	12/23/10/1330	1		2		2	
Relinquished by:	Date Time:	Received By:	Date Time:	Relinquished By:	Date Time:	Received By:	Date Time:
3		3		4		4	
Relinquished by:	Date Time:	Received By:	Date Time:	Custody Seal #	Preserved where applicable	On Ice	Cooler Temp.
5		5			<input type="checkbox"/>	<input type="checkbox"/>	



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

CHAIN OF CUSTODY

FED-EX Tracking # 8744 7653 1609	Bottle Order Control #
Accutest Quote #	Accutest Job #

Client / Reporting Information		Project Information		Requested Analytes										Matrix Codes	
Company Name MWH		Project Name / No. San Juan River Basin Program - Jaquez Site		BTEX (8021B/8035) include m, p, & o-xylene TTPH/8035/8015 TEPH/8015										DW - Drinking Water	
Project Contact Jed Smith E-Mail: jed.smith@mwhglobal.com		Bill to El Paso Corp Invoice Attn: Norma Ramos												GW - Ground Water	
Address 1801 California Street, Suite 2900		Address 1001 Louisiana Street, Rm S1904B												WW - Wastewater	
City, State, Zip Denver, CO 80202		City, State, Zip Hou, TX 77002												SO - Soil	
Phone No. 303-291-2276 Fax No.		Phone No. Fax No.		SL - Sludge											
Sampler's Name Brooke Herb		Client Purchase Order #		OI - Oil											
Accutest Sample #		Field ID / Point of Collection		Collection		Date		Time		Matrix		# of bottles		LAB USE ONLY	
		Jaquez III (17)-021011		02-10-11		1635		SD		2		<input checked="" type="checkbox"/> HCl <input type="checkbox"/> NH3 <input type="checkbox"/> HNO3 <input type="checkbox"/> H2SO4 <input type="checkbox"/> ENDOF <input type="checkbox"/> MIBK <input type="checkbox"/> MEK <input checked="" type="checkbox"/> NONE			
Turnaround Time (Business days)		Approved By/ Date:		Data Deliverable Information		Comments / Remarks									
<input checked="" type="checkbox"/> 2 Day <input type="checkbox"/> 7 Day STANDARD <input type="checkbox"/> 4 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input checked="" type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input type="checkbox"/> Other		Approved By: Jed Smith Date: 02-14-11		<input type="checkbox"/> Commercial "A" <input checked="" type="checkbox"/> Commercial "B" <input type="checkbox"/> Reduced Tier 1 <input type="checkbox"/> Full Data Package		<input type="checkbox"/> TRRP-13 <input type="checkbox"/> EDD Format <input type="checkbox"/> Other									
Real time analytical data available via Lablink				Commercial "A" = Results Only Commercial "B" = Results & Standard QC		If samples are received unpreserved, please notify MWH regarding holding time!! Please Rush Sample Results 2-Day. Please return cooler to LT Environmental, Durango office									
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY															
Relinquished by: Brooke Herb		Date Time: 02/14/11 1201		Received By: [Signature]		Date Time: 02/14/11 1305		Relinquished By: [Signature]		Date Time:		Received By:			
Relinquished by:		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:			
Relinquished by:		Date Time:		Received By:		Date Time:		Relinquished By:		Date Time:		Received By:			
Custody Seal #		Preserved where applicable		On Ice		Cooler Temp									

10165 Harwin Dr, Ste 150 Houston, TX 77036
TEL: 713-271-4700 FAX: 713-271-4770
www.acltest.com

Client / Reporting Information		Project Information		Requested Analyses												Matrix Codes
Company Name: MWH - Jed Smith Street Address: 1801 California St City/State/Zip: Denver CO 80202 Project Contact: Jed Smith Phone #: 303-291-2276 Sample Name(s): Brooke Herb		Project Name: Jaquez Street: El Paso Corp City/State/Zip: Houston TX 77002 Project #: Client Purchase Order #: Jed Smith		Billing Information (if different from Report to): Company Name: El Paso Corp Street Address: 1001 Louisiana St City/State/Zip: Houston TX 77002												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
Field ID / Point of Collection: Jaquez 138(6) 021101 Date: 2/16/11 Time: 18:00 Sampled By: BH Matrix: SO # of bottles: 3		Number of preserved bottles: BTEX (80218/5035) include m.p.e.o. - 2/16/11 TTPH/5035/5015 TERP/5015												LAB USE ONLY		
Turnaround Time (Business days): <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 T/A data available VIA Lablink		Approved By (Accutest PM): / Date: _____		Data Deliverable Information: <input type="checkbox"/> Commercial "A" (Level 1) <input checked="" type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULT1 (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 _____												Comments / Special Instructions: Hold GW sample until directives received from Jed Smith
Sample Custody must be documented below each time samples change possession, including courier delivery.																
Relinquished By: [Signature] Date/Time: 2-17-11/0730	Received By: 1 [Signature] Date/Time:	Relinquished By: 2 [Signature] Date/Time:	Received By: 4 [Signature] Date/Time: 2-17-11/12:02	Custody Seal #: <input type="checkbox"/> Intact <input type="checkbox"/> Preserved where applicable <input type="checkbox"/> On Ice <input type="checkbox"/> Cooler Temp.												

From Please print and press hard.
 Date 12-23-10 Sender's FedEx Account Number SENNER'S FEDEX ACCOUNT NUMBER ONLY
 Ashley Ager Phone 970-385-1096
 Company LTE
 Address 2243 Main Ave Ste 3 Dept./Floor/Box/Room
 City Durango State CO ZIP 81301
 Your Internal Billing Reference OPTIONAL

To Recipient's Name Recipient's Address
 Name SAMPLE RECEIVING Phone 713 271-4700
 Company ACCUTEST LABS

Address 10145 HARWIN DR STE 150 Dept./Floor/Box/Room
 Address Use this line for the HOLD location address or for continuation of your shipping address.
 City HOUSTON State TX ZIP 77036-1622

0429896372



SENNER'S COPY

4a Express Package Service *To most locations. Packages up to 150 lbs.
 FedEx Priority Overnight Next business morning. *FedEx shipments will be delivered on Monday unless SATURDAY Delivery is selected.
 FedEx Standard Overnight Next business afternoon. *Saturday Delivery NOT available.
 FedEx First Overnight Earliest next business morning delivery to select locations.
 FedEx 2Day Second business day. *Third day shipments will be delivered on Monday unless SATURDAY Delivery is selected.
 FedEx Express Saver Third business day. *Monday Delivery NOT available.

4b Express Freight Service **To most locations. Packages over 150 lbs.
 FedEx 1Day Freight Next business day. *FRS shipments will be delivered on Monday unless SATURDAY Delivery is selected. CALL 1.800.332.0607
 FedEx 2Day Freight Second business day. *Third day shipments will be delivered on Monday unless SATURDAY Delivery is selected.
 FedEx 3Day Freight Third business day. *Saturday Delivery NOT available.

5 Packaging *Declared value limit: \$500.
 FedEx Envelope*
 FedEx Pak* Includes FedEx Small Pak and FedEx Large Pak.
 FedEx Box
 FedEx Tube
 Other

6 Special Handling and Delivery Signature Options
 SATURDAY Delivery NOT available for FedEx Standard Overnight, FedEx Express Saver, or FedEx 2Day Freight.
 No Signature Required Package may be left without obtaining addressee for delivery.
 Direct Signature Someone at recipient address may sign for delivery. Fee applies.
 Indirect Signature Free and available at recipient address, someone at a neighboring address may sign for delivery. Fee applies.
 Does this shipment contain dangerous goods?
 No One box must be checked.
 Yes As per shipping label's Declaration.
 Yes Shipper's Declaration (SHIP) required.
 Dry Ice Dry Ice, UN 1845
 Cargo Aircraft Only
 Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or per FedEx Express Ship Rules.

7 Payment \$/€
 Sender's Bill to Me
 Recipient
 Third Party
 Credit Card
 Cash/Check
 Enter FedEx Account, Billing Credit Card No. below.
 FedEx Acct. No. 2411-4393-7
 Total Packages 1 Total Weight 16 lbs. 8 oz. Total Declared Value \$ 605
 *Our liability is limited to \$100 unless you declare a higher value. See back for details. By using the FedEx you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms and conditions.
 Rev. Date 2/10 - Post #15879 - ©1994-2010 FedEx - PRINTED IN U.S.A. 384

FULLY AND STRONGLY COPY BEFORE AFFIXING TO THE PACKAGE. NO POSTAGE NEEDED.



Airbill

FedEx Tracking Number

8744 7653 2682

Sender's Copy

1 From Please print and press hard.

Date 12-23-10 Sender's FedEx Account Number SENDER'S FEDEX ACCOUNT NUMBER ONLY

Sender's Name Ashley Ager Phone 970.385-1096

Company LTE

Address 2243 Main Ave Ste 3 Dept./Floor/Suite/Room

City Durango State CO ZIP 81301

2 Your Internal Billing Reference

Optional Recipient's Name SAMPLE RECEIVING Phone 713.271-4700

Company ACCUTEST LABS

Address 10145 HARWIN DR STE 150 We cannot deliver to PO, boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

Address Use this line for the HOLD location address or for continuation of your shipping address.

City HOUSTON State TX ZIP 77036-1622

0429896372



Ship on the go at mobile.fedex.com

4a Express Package Service

FedEx Priority Overnight, FedEx Standard Overnight, FedEx Express Saver, FedEx First Overnight

4b Express Freight Service

FedEx 1Day Freight, FedEx 2Day Freight, FedEx 3Day Freight

5 Packaging

FedEx Envelope, FedEx Pak, FedEx Box, FedEx Tube, Other

6 Special Handling and Delivery Signature Options

SATURDAY Delivery, No Signature Required, Direct Signature, Indirect Signature

Does this shipment contain dangerous goods? No Signature Required checked

Does this shipment contain dangerous goods? No checked

Does this shipment contain dangerous goods? Dry Ice, UN 1845 checked

7 Payment Method

Sender, Recipient, Third Party, Credit Card, Cash/Check

Total Packages 1, Total Weight 11 lbs, Total Declared Value \$0

605

Nov. Date 2010 Part #18278 ©1999-2010 FedEx - PRINTED IN U.S.A. 588

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175 BODO DR
DURANGO, CO 81301

Location: DROA
Device ID: DROA-POS2
Employee: 93905
Transaction: 76011377201

STANDARD OVERNIGHT
858677886767 8.65 lb (S) ***

Scheduled Delivery Date 02/16/2011

Recipient/Third Party

*** See payer invoice

M = Weight entered manually
S = Weight read from scale
T = Taxable item

Subject to additional charges. See FedEx Service Guide
at fedex.com for details. All merchandise sales final.

Visit us at: fedex.com
Or call 1.800.GoFedEx
1.800.463.3339

February 15, 2011 11:28:44 AM

7788 6767

197013851096

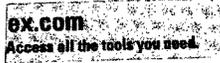
ite 3

ZIP 81301

1713 271-4700

X ZIP 77036-1622

0344196942



Sender's Copy

4a Express Package Service

FedEx Priority Overnight
Next business morning. Three business days will be delivered on Monday unless SATURDAY Delivery is selected.

FedEx Standard Overnight
Next business morning. Saturday Delivery NOT available.

FedEx Express Saver
1-3rd business day. Saturday Delivery NOT available.

FedEx 2Day
Second business day. Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

FedEx 1Day Freight
Next business day. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

FedEx 2Day Freight
Second business day. Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

FedEx 3Day Freight
Third business day. Saturday Delivery NOT available.

5 Packaging

FedEx Envelope* FedEx Pak* FedEx Tube Other

6 Special Handling

SATURDAY Delivery
NOT Available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 2Day Freight.

HOLD Weekday at FedEx Location
NOT Available for FedEx First Overnight.

HOLD Saturday at FedEx Location
Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below.

Sender Acct. No. in Section 7 will be billed. Recipient Third Party Credit Card Cash/Check

FedEx Acct. No. 2411-4393-7 Cash/Check No.

Total Packages 1 Total Weight 8.65 Total Declared Value* \$ 00

8 NEW Residential Delivery Signature Options *If you require a signature, check Direct or Indirect.*

No Signature Required
Package may be left without obtaining a signature for delivery.

Direct Signature
Requires recipient's address may sign for delivery. Fee applies.

Indirect Signature
If no one is available at recipient's address, anyone at neighboring address may sign for delivery. Fee applies.

519

Rec. Date 1/26/11 FedEx #156775-01500-000 FedEx-PRINTED IN U.S.A.-05F

PULL AND RETAIN THIS COPY BEFORE AFFIXING TO THE PACKAGE. NO POUCH NEEDED.

FedEx
Express

Airbill

FedEx Tracking Number

8748 3799 5340

1 From Please print and press hard.

Date 2-17-11

Sender's FedEx Account Number

SENDER'S FEDEX ACCOUNT NUMBER ONLY

Sender's Name Sam LaRue

Phone 970.385.1096

Company LTE

Address 2243 Main Ave

3

City Durango

State CO ZIP 81301

2 Your Internal Billing Reference

First 28 characters will appear on invoice.

OPTIONAL

3 To

Recipient's Name SAMPLE RECIEVING

Phone (713) 271-4700

Company ACCUTEST LABS

Address 10165 HARWIN DR STE 150

HOLD Weekday
FedEx location address
REQUIRED. NOT available for
FedEx First Overnight.

Address HOUSTON

State TX ZIP 77036-1622

0431701086

MAR 12
021
Sender's Copy

4a Express Package Service

- FedEx Priority Overnight
Next business morning. First shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- FedEx Standard Overnight
Next business afternoon. Saturday Delivery NOT available.
- FedEx First Overnight
Earliest next business morning. Delivery to select locations.
- FedEx 2Day
Second business day. Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- FedEx Express Saver
Third business day. Saturday Delivery NOT available.

4b Express Freight Service

- FedEx 1Day Freight
Next business day. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- FedEx 2Day Freight
Second business day. Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- FedEx 3Day Freight
Third business day. Saturday Delivery NOT available.

5 Packaging

- FedEx Envelope* FedEx Pak* FedEx Box FedEx Tube Other

6 Special Handling and Delivery Signature Options

- SATURDAY Delivery
NOT available for FedEx Standard Overnight, FedEx Express Saver, or FedEx 3Day Freight.
- No Signature Required
Package may be left without obtaining a signature for delivery.
- Direct Signature
Someone at recipient's address may sign for delivery. Fee applies.
- Indirect Signature
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential addresses only. Fee applies.
- Does this shipment contain dangerous goods?
One box must be checked.
- No Yes Yes (per recipient's Declaration) Dry Ice Dry Ice, E UN 1845 Cargo Aircraft Only

7 Payment Bill to:

- Sender Recipient Third Party Credit Card Cash/Check
- FedEx Acct. No. 2411-4393-7 Exp. Date
- Total Packages Total Weight Total Declared Value

The liability is limited to \$100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service restrictions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

605

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Access the shipping tools you need directly from Microsoft® Office Outlook®



FedEx Tracking Number

8731 7020 9293

Airbill

1 From Please print and press hard.

Date 2-17-11 Sender's FedEx Account Number SENDER'S FEDEX ACCOUNT NUMBER ONLY

Sender's Name Ashley Ager Phone 970.946.1093

Company LTE

Address 2243 Main Ave #3

City Durango State CO ZIP 81301

2 Your Internal Billing Reference

First 24 characters will appear on Invoice. OPTIONAL

3 To Recipient's Name

MARIANNE WALKER Phone (713) 271-4700

Company ACCUTEST LABS

Address 10165 HARWIN DR STE 150 Dept./Floor/Sub/Floor

Address HOUSTON State TX ZIP 77036-1622

0423961317



Ship on the go at mobile.fedex.com Tap into all our FedEx shipping tools with FedEx Mobile.



4a Express Package Service

FedEx Priority Overnight, FedEx Standard Overnight, FedEx First Overnight, FedEx 2Day, FedEx Express Saver

4b Express Freight Service

FedEx 1Day Freight, FedEx 2Day Freight, FedEx 3Day Freight

5 Packaging FedEx Envelope, FedEx Pak, FedEx Box, FedEx Tube, Other

6 Special Handling and Delivery Signature Options

SATURDAY Delivery, No Signature Required, Direct Signature, Indirect Signature

Does this shipment contain dangerous goods? No, Yes, Dry Ice, Cargo Aircraft Only

7 Payment Bill to:

Sender, Recipient, Third Party, Credit Card, Cash/Check

Total Packages, Total Weight, Total Declared Value

Your liability is limited to \$100 unless you declare a higher value. See back for details.

605

PLEASE RETAIN THIS COPY BEFORE AFFIXING TO THE PACKAGE. NO POUCH NEEDED.

FedEx S Airbill
Express

FedEx Tracking Number 8748 3799 5350

1 From Please print and press hard.

Date 2/23/11 Sender's FedEx Account Number SENDER'S FEDEX ACCOUNT NUMBER ONLY

Sender's Name LT Environmental Phone 970, 385-1090

Company LT Environmental

Address 2243 Main Ave Dept./Floor/Room

City Durango State CO ZIP 81301

2 Your Internal Billing Reference

First 28 characters will appear on invoice. OPTIONAL

3 To Recipient's Name SAMPLE RECEIVING Phone (713) 271-4700

Company ACCUTEST LABS

Address 10165 HARWIN DR STE 150
We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Room

Address HOUSTON State TX ZIP 77036-1622

0431701086

 **Ship and track packages at fedex.com**
Simplify your shipping. Manage your account. Access all the tools you need.

0215 Sanders Copy

4a Express Package Service *To most locations. Packages up to 150 lbs.
 FedEx Priority Overnight (Next business morning. *Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.)
 FedEx Standard Overnight (Next business afternoon. *Saturday Delivery NOT available.)
 FedEx First Overnight (Earliest next business morning delivery to select locations.)*
 FedEx 2Day (Second business day. **Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.)
 FedEx Express Saver (Third business day. *Saturday Delivery NOT available.)

4b Express Freight Service **To most locations. Packages over 150 lbs. CALL 1.888.332.0867
 FedEx 1Day Freight (Next business day. **Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.)
 FedEx 2Day Freight (Second business day. **Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.)
 FedEx 3Day Freight (Third business day. *Saturday Delivery NOT available.)

5 Packaging *Declared value limit \$500.
 FedEx Envelope*
 FedEx Pak* (Includes FedEx Small Pak and FedEx Large Pak.)
 FedEx Box
 FedEx Tube
 Other

6 Special Handling and Delivery Signature Options
 SATURDAY Delivery (NOT available for FedEx Standard Overnight, FedEx Express Saver, or FedEx 2Day Freight.)
 No Signature Required (Package may be left without obtaining a signature for delivery.)
 Direct Signature (Someone at recipient's address may sign for delivery. Fee applies.)
 Indirect Signature (If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.)

Does this shipment contain dangerous goods?
One box must be checked.
 No
 Yes (As per attached Shipper's Declaration) Yes (Shipper's Declaration not required.)
Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.
 Dry Ice (Dry Ice, UN 1845) Cargo Aircraft Only

7 Payment Bill to:
Enter FedEx Acct. No. or Credit Card No. below.
 Sender (Card No. is required) Recipient Third Party Credit Card Cash/Check
FedEx Acct. No. 2411-4393-7 Exp. Date

Total Packages Total Weight Total Declared Value*
\$ 605

PUT IN AND RETAIN THIS COPY BEFORE AFFIXING TO THE PACKAGE. NO POUCH NEEDED.

FedEx US Airbill
Express

FedEx Tracking Number **8748 3799 5361**

1 From Please print and press hard.
Date 3/24/11
Sender's Name Brooke Herb
Company LT Environmental
Address 2413 Main Ave Suite 3
City Durango **State** CO **ZIP** 81301

2 Your Internal Billing Reference
 OPTIONAL

3 To
Recipient's Name SAMPLE RECEIVING
Company ACCUTEST LABS
Address 10165 HARWIN DR STE 150
City HOUSTON **State** TX **ZIP** 77036-1622

HOLD Weekday
 FedEx location address
 REQUIRED. NOT available for
 FedEx First Overnight.
HOLD Saturday
 FedEx location address
 REQUIRED. Available ONLY for
 FedEx Priority Overnight and
 FedEx 2Day to select locations.

0431701086

0215 Sender's Copy

4a Express Package Service *In most locations. Packages up to 150 lbs.
 FedEx Priority Overnight Next business morning. *Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
 FedEx Standard Overnight Next business afternoon. *Saturday Delivery NOT available.
 FedEx 2Day Second business day. *Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
 FedEx Express Saver Third business day. *Saturday Delivery NOT available.

4b Express Freight Service **In most locations. Packages over 150 lbs.
 FedEx 1Day Freight Next business day. *Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
 FedEx 2Day Freight Second business day. *Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
 FedEx 3Day Freight Third business day. *Saturday Delivery NOT available.

5 Packaging *Declared value limit \$500.
 FedEx Envelope
 FedEx Pak
 FedEx Box
 FedEx Tube
 Other

6 Special Handling and Delivery Signature Options
 SATURDAY Delivery
 No Signature Required
 Direct Signature
 Indirect Signature

Does this shipment contain dangerous goods?
 No
 Yes
 Yes
 Yes
 Dry Ice
 Cargo Aircraft Only

7 Payment B/E
 Sender's Account
 Recipient
 Third Party
 Credit Card
 Cash/Check
 FedEx Acct. No. 2411-4393-7
 Total Packages Total Weight Total Declared Value*

Learn to pack like a pro at fedex.com/packaging
 Or let our pros pack for you with FedEx OfficeSM Pack & Ship.

PRINT AND RETAIN THIS COPY BEFORE AFFIXING TO THE PACKAGE. NO POUCH NEEDED.

605

FedEx US Airbill
Express

FedEx
Tracking
Number

8750 2593 0148

1 From Please print and press hard.

Date 2-28-11 Sender's FedEx Account Number

Sender's Name _____ Phone 970 385-1096

Company LTE

Address 2243 Main Ave #3

City Durango State CO ZIP 81301

2 Your Internal Billing Reference

To Recipient's Name Sample Receiving Phone (713) 271-4700

Company Accutest Labs

Address 101105 Harwin Dr, Ste 150

Address Houston State TX ZIP 77036-1622

Ship on the go at mobile.fedex.com
Tap into all our FedEx® shipping tools with FedEx® Mobile

1200 Senders Copy

4a Express Package Service *To most locations. Packages up to 150 lbs.
 FedEx Priority Overnight Next business morning. **Monday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
 FedEx Standard Overnight Next business afternoon. *Saturday Delivery NOT available.
 FedEx First Overnight Fastest next business morning delivery to select locations.
 FedEx 2Day Second business day. **Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
 FedEx Express Saver Third business day. *Saturday Delivery NOT available.

4b Express Freight Service **To most locations. Packages over 150 lbs.
 FedEx 1Day Freight Next business day. **Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected. **SALE \$394,232,9657**
 FedEx 2Day Freight Second business day. **Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
 FedEx 3Day Freight Third business day. *Saturday Delivery NOT available.

5 Packaging *Business volume discounts.
 FedEx Envelope* FedEx Pak* Includes FedEx Small Pak and FedEx Large Pak. FedEx Box FedEx Tube Other

6 Special Handling and Delivery Signature Options
 SATURDAY Delivery NOT available for FedEx Standard Overnight, FedEx Express Saver, or FedEx 2Day Freight.
 No Signature Required Packages may be left without obtaining a signature for delivery.
 Direct Signature Consignee at recipient's address may sign for delivery. Fee applies.
 Indirect Signature If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.
Does this shipment contain dangerous goods?
 No Yes (see back must be checked) Yes (Shipper's Declaration NOT required) Dry Ice Dry Ice, 2, UN 1845 Cargo Aircraft Only
 *Dangerous goods (including dry ice) cannot be shipped to FedEx packaging or placed in a FedEx Express shipping box.

7 Payment **RM** fee. Enter FedEx Acct. No. or Credit Card No. below.
 Shipper (see Bill to Shipper) Recipient Third Party Credit Card Cash/Check
 FedEx Acct. No. 24114393-7 Bill To: 7

Total Packages 1 Total Weight _____ Total Declared Value¹ _____
 1 Our liability is limited to \$500 unless you declare a higher value. See back for details. By accepting this bill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including those that affect our liability. **606**

RETAIN THIS COPY FOR YOUR RECORDS.

Location of Soil Samples and Borings Used To Assess Impacted Soils “Left-In-Place”



Note: Sample locations also shown on **Figure 3, 2010-2011 Excavation Limits and Sample Locations.**

Volume of Left-In-Place Petroleum Impacted Soil Estimated by LTE

Based on the excavation face data and the borehole results, the left-in-place impacted soil beyond the North area excavation face was estimated to pinch out at varying points either before reaching the trailer or, at the BH-4 location, between BH-4 and the North side of the trailer. Based on these parameters, the impacted soil has a limited volume of approximately **30 cubic yards**.

Eastern Lens –

Known:

Length = 25'

width = 4'

7' to the north, the lens pinches out to less than 1' thick

Assume:

The shape is a rectangular wedge and that it actually pinches out 3' behind the borehole. This means the height of the wedge is 10'.

Assume constant length

*Volume = [2(front length + back length) * width * height]*

*Volume = [2(25+25) * 4 * 10]*

Volume = 500 ft³

Volume = 20 yds³

Western Lens –

Known:

Length = 10' (assume constant)

Width = 4' (assuming 2' still exists under groundwater table)

7' to north, the lens has pinched out. Therefore, assume 8' height of wedge.

*Volume = [2(10*10) * 4 * 8]*

Volume = 160 ft³

Volume = 6 yds³

Total volume remaining = approximately 30 yds³



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 LT Environmental, Inc.
 2243 Main Avenue, Suite 3
 Durango, Colorado 81301

Boring/Well Number: BH-3	Date: 2/11/11
Project: Jaguar 2	Project Number: MCH005
Logged By: B. Herb	Drilled By: B. Herb
Detector: PID	Drilling Method: Hand Auger
Sampling Method: Grab	Hole Diameter: 15'
Slot Size:	Total Depth: 15'
Slot Length:	Depth to Water: 15'

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Lat/Long: GPS	Elevation:	Detector: PID	Drilling Method: Hand Auger	Sampling Method: Grab	Hole Diameter: 15'	Total Depth: 15'
Casing Type:	Casing Diameter:	Casing Length:	Slot Size:	Slot Length:	Depth to Water: 15'	
Gravel Pack:	Seal:	Grout:	Comments:			

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
					0			0-4': brown silty sand loose, dry 4-11' brown clayey sand damp	
					1				
		2=0	None		2				
					3				
		4=0	None		4				
					5				
		6=0	None		6				
					7				
		8=0	None		8				
					9				
		10=0	None		10				
					11				



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 LT Environmental, Inc.
 2243 Main Avenue, Suite 3
 Durango, Colorado 81301

Boring/Well Number:

BH-3

Date:

2-11-11

Project:

JAGUZ

Project Number:

Logged By:

Drilled By:

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Lat/Long:	Elevation:	Detector:	Drilling Method:	Sampling Method:	Hole Diameter:	Total Depth:
Casing Type:	Casing Diameter:	Casing Length:	Slot Size:	Slot Length:	Depth to Water:	

Gravel Pack:	Seal:	Grout:	Comments:
--------------	-------	--------	-----------

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
		12.0	None		11			11-17': grayish brown clay, dry, hard to auger, tight	
		14.0	None		12				
		15.0	None		13				
					14			saturated at 15'	
					15				
					16			No lab samples collected.	
					17				
					18				
					19				
					20				
					21				
					22				



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 Durango, Colorado 81301

Boring/Well Number: BH-4	Date: 2-11-11
Project: Jaquez	Project Number: MLW1005
Logged By: B. Herb	Drilled By: B. Herb
Sampling Method: Grab	Hole Diameter: 17'
Slot Length:	Depth to Water: 216'

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Lat/Long: GPS	Elevation:	Detector: PID	Drilling Method: Hand Auger
Casing Type:	Casing Diameter:	Casing Length:	Slot Size:
Gravel Pack:	Seal:	Grout:	Comments:

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
					0			0-4' brown silty sand loose, dry 4-12' brown clayey sand damp, tight	
					1				
		2'=0	None		2				
					3				
		4'=0	None		4				
					5				
		6'=0	None		6				
					7				
		8'=0	None		8				
					9				
		10'=0	None		10				
					11				



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 2243 Main Avenue, Suite 3
 Durango, Colorado 81301

Boring/Well Number:

BH-4

Date:

2-11-11

Project:

Project Number:

Logged By:

Drilled By:

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Lat/Long:	Elevation:	Detector:	Drilling Method:	Sampling Method:	Hole Diameter:	Total Depth:
Casing Type:	Casing Diameter:	Casing Length:	Slot Size:	Slot Length:	Depth to Water:	
Gravel Pack:	Seal:	Grout:	Comments:			

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
					11				
		12=0	Black	Jaquez BH4(12) 021211	12			12-12.75' black staining HC odor, clayey sand, thin	
		13=0	None		13			13' brown sandy clay	
		14=0	None		14			no staining	
	sat.				15			13-17' brown sandy clay terminated wet at 15'	
		16=0	None		16			unable to go further - need extra auger/dark	
		17=1.8	minor	Jaquez BH4(17) 021311	17			2-13-11 return to finish 15-17' brown sandy clay	
					18			17', some staining, black minor HC odor, saturated	
					19				
					20			→ Reran w/different PID at office = 1.6ppm	
					21				
					22				



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 LT Environmental, Inc.
 2243 Main Avenue, Suite 3
 Durango, Colorado 81301

Boring/Well Number:

BH-5

Date:

2-11-11

Project:

Jeanez

Project Number:

MWH1005

Logged By:

B. Herb

Drilled By:

B. Herb

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Lat/Long: GPS	Elevation:	Detector: PID	Drilling Method: Hand Auger	Sampling Method: Grab	Hole Diameter:	Total Depth: 15'
Casing Type:	Casing Diameter:	Casing Length:	Slot Size:	Slot Length:	Depth to Water: 15'	

Gravel Pack:	Seal:	Grout:	Comments:
--------------	-------	--------	-----------

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
					0			0-3.5 loose silty sand brown, dry to damp	
					1				
		2' = 0	None		2			3.5-10.25 clayey sand to sandy clay, brown, damp	
					3				
		4' = 0	None		4				
					5				
		6' = 0	None		6				
					7				
		8' = 0	None		8				
					9				
		10' = 0	None		10				
					11			10.25-15 d. brown clayey sand, wet tight	



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 LT Environmental, Inc.
 2243 Main Avenue, Suite 3
 Durango, Colorado 81301

Boring/Well Number:

BH-5

Date:

2-11-11

Project:

Jaquez

Project Number:

Logged By:

Drilled By:

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Lat/Long:	Elevation:	Detector:	Drilling Method:	Sampling Method:	Hole Diameter:	Total Depth:
Casing Type:	Casing Diameter:	Casing Length:	Slot Size:	Slot Length:	Depth to Water:	
Gravel Pack:	Seal:	Grout:	Comments:			

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
					11				
		12'=0	None		12				
					13				
		14'=0	None		14				
		15'=0	None		15			saturated at 15', groundwater seeping into hole.	
					16				
					17				
					18				
					19			No lab samples collected	
					20				
					21				
					22				



Compliance « Engineering « Remediation
 LT Environmental, Inc.
 2243 Main Avenue, Suite 3
 Durango, Colorado 81301

Boring/Well Number: BH-6 Date: 2-14-11
 Project: Saquez Project Number: MWH1005
 Logged By: B. Herb Drilled By: D. Hill

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Lat/Long: GPS Elevation: / Detector: PID Drilling Method: Hand Auger Sampling Method: Grab Hole Diameter: / Total Depth: 16.5'
 Casing Type: / Casing Diameter: / Casing Length: / Slot Size: / Slot Length: / Depth to Water: 16.5'
 Gravel Pack: / Seal: / Grout: / Comments: /

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
					0			0-2 loose brown silty sand, dry	
					1				
		2=0	None		2				
					3			2-9' silty sand, brown dry, tight	
		4=0	None		4				
					5				
		6=0	None		6				
					7				
		8=0	None		8				
					9				
		10=0	None		10			9-12' brown sandy clay, damp	
					11				



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 LT Environmental, Inc.
 2243 Main Avenue, Suite 3
 Durango, Colorado 81301

Boring/Well Number:

BH-6

Date:

2-14-11

Project:

Jaquez

Project Number:

Logged By:

V

Drilled By:

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Lat/Long:	Elevation:	Detector:	Drilling Method:	Sampling Method:	Hole Diameter:	Total Depth:
Casing Type:	Casing Diameter:	Casing Length:	Slot Size:	Slot Length:	Depth to Water:	
Gravel Pack:	Seal:	Grout:	Comments:			

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
					11				
		12'±0	None		12			12-16.5 brown clay, wet, tight	
					13				
		14'±0	None		14				
					15				
		16'±0	None		16			16.5' = saturated	
		16.5'±0	None		17				
					18				
					19			No lab samples collected	
					20				
					21				
					22				



February 22, 2011 Site Excavation Work
View From East Looking West



John Deer 230 C Trackhoe Operated by LTE
February 14, 2011



February 14, 2011 Site Excavation Work
View From North Looking South



February 22, 2011 Site Excavation Work
Along Citizens Ditch



February 14, 2011 - North Excavation Sidewall
View From the SW Looking NE



North Excavation Sidewall
Showing Impacted Soil Left-In Place



Vacuum Truck On-Site February 24, 2011
Used to Remove Groundwater Seeping Into Trench



Bill of Lading

MANIFEST # 37302

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 12-16-10 JOB# 10182-0001

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT							TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE	
1	El Paso Jaquez site	LFA-5	Conc 4 Sorz	R-37	12	-	Western Brothers Trucking	#1	9am	[Signature]	
2	"	"	"	R-37	12	-	Western Brothers Trucking	#2	9am	[Signature]	
3	"	"	"	Q-37	12	-	"	#7	10:31	[Signature]	
4	"	"	"	Q-37	12	-	"	2	10:32	[Signature]	
5	"	"	"	Q-37	12	-	"	#7	12:06	[Signature]	
6	"	"	"	Q-37	12	-	"	2	12:08	[Signature]	
7	"	"	"	Q-37	12	-	"	#2	13:38	[Signature]	
8	"	"	"	P-37	12	-	"	#7	13:38	[Signature]	
9	"	"	"	P-37	12	-	"	#7	15:30	[Signature]	
10	"	"	"	P-37	12	-	"	#2	15:32	[Signature]	
11	"	"	"	P-37	12	-	"	#7	17:01	[Signature]	
12	"	"	"	P-37	12	-	"	#2	17:02	[Signature]	
RESULTS:											
284	CHLORIDE TEST	3									
	PAINT FILTER TEST	3									
LANDFARM EMPLOYEE: <u>Gayle Lindon</u> 144											
Certification of above receipt & placement											
NOTES:											

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Western Brothers Trucking NAME Walter Watson SIGNATURE [Signature]
COMPANY CONTACT Walter Watson PHONE 870-6251 DATE 12/16/10

Signatures required prior to distribution of this legal document.

White - Company Records, Yellow - Billing, Pink - Customer



Bill of Lading

MANIFEST # 37304

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 12-16-10 JOB# 10182-001

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT							TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE	
1	EL PASO Jaquez site	LFH-5	Cont SOIL	R-37	12	-	Paulson	V-37	9:58	John R Cross	
2	"	"	"	R-37	12	-	"	V-662	9:57	Playthorn	
3	"	"	"	Q37	12	-	"	V-37	11:35	John R Cross	
4	"	"	"	Q37	12	-	"	V-662	11:35	Playthorn	
5	"	"	"	Q37	12	-	"	V-662	13:00	Playthorn	
6	"	"	"	Q37	12	-	"	V-317	13:00	John R Cross	
7	"	"	"	P37	12	-	"	V-317	14:21	John R Cross	
8	"	"	"	P37	12	-	"	V-662	14:21	Playthorn	
9	"	"	"	O-37	12	-	"	V-317	15:45	John R Cross	
10	"	"	"	O-37	12	-	"	V-662	15:50	Playthorn	
11	"	"	"	O-37	12	-	"	V-317	17:10	John R Cross	
12	"	"	"	O-37	12	-	"	V-662	17:20	Playthorn	
RESULTS: <298(1)							NOTES:				
CHLORIDE TEST 3											
PAINT FILTER TEST 3											
LANDFARM EMPLOYEE: Gary Robinson 144							CERTIFICATION OF ABOVE RECEIVAL & PLACEMENT <u>AP</u>				

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Paulson NAME John R. Cross SIGNATURE John R Cross
 COMPANY CONTACT Sandy Baca PHONE 330-3568 DATE 12-16-10



Bill of Lading

MANIFEST # 37314

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 12-17-10 JOB# 10182-0001

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT							TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE	
1	EL PASO Jaquez	LF II.5	cont Soil	0-37	12	-	Paul's son	V-37	8:10	John R Cross	
2	"	"	"	0-37	12	-	"	V662	8:15	Chantel Jones	
3	"	"	"	N-37	12	-	"	V-37	9:40	John R Cross	
4	"	"	"	N-37	12	-	"	V662	9:43	Chantel Jones	
5	"	"	"	N-37	12	-	"	V-37	11:05	John R Cross X	
6	"	"	"	N-37	12	-	"	V662	11:05	Chantel Jones	
7	"	"	"	M-37	12	-	"	V-37	12:00	John R Cross	
8	"	"	"	M-37	12	-	"	V662	12:45	Chantel Jones	
9	"	"	"	M-37	12	-	"	V663	14:05	John R Cross	
10	"	"	"	M-37	12	-	"	V662	14:08	Chantel Jones X	
11	"	"	"	L-37	12	-	"	V663	15:30	John R Cross	
12	"	"	"	L-37	12	-	"	V662	15:50	Chantel Jones	
RESULTS:							NOTES:				
294	CHLORIDE TEST	3		GARY KAHNEV 144							
	PAINT FILTER TEST	3		Certification of above receipt & placement							

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Paul's Son NAME John R Cross SIGNATURE John R Cross DATE 12-17-10

COMPANY CONTACT Sandy Baca PHONE 330-3568

Signatures required prior to distribution of this legal document.



Bill of Lading

MANIFEST # 37317

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 12/17/10 JOB# 10182-0001

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT							TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLs	COMPANY	TRK#	TIME	DRIVER SIGNATURE	
1	El Paso Jaquez site	LF#5	CON'T SOIL	0-37	10	-	Costant Bros Trucking	#1	8:41	E-7608	
2	"	"	"	0-37	10	-	"	#2	8:41	Jr 108	
3	"	"	"	N-37	12	-	"	#1	10:17	E-7608	
4	"	"	"	N-37	12	-	"	#2	10:17	Jr 108	
5	"	"	"	N-37	12	-	"	#2	11:57	E-7608	
6	"	"	"	N-37	12	-	"	#2	11:59	Jr 108	
7	"	"	"	M-37	12	-	"	#2	13:29	E-7608	
8	"	"	"	M-37	12	-	"	#2	13:30	Jr 108	
9	"	"	"	M-37	12	-	"	#2	15:01	E-7608	
10	"	"	"	M-37	12	-	"	#2	15:02	Jr 108	
11	"	"	"	L-37	12	-	"	#1	16:44	E-7608	
12	"	"	"	L-37	12	-	"	#2	16:45	Jr 108	
RESULTS:							NOTES:				
2014	CHLORIDE TEST	3	LANDFARM EMPLOYEE: Gary Polman @								
	PAINT FILTER TEST	3	Certification of above receipt & placement								

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO Costant Bros Trucking NAME Wallace L. Costant SIGNATURE E-7608

COMPANY CONTACT Wallace or Tracy PHONE 505 870-6251 870-2251 DATE 12/17/10

Signatures required prior to distribution of this legal document.



Bill of Lading

MANIFEST # 37325

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 12-18-10 JOB# 10182-0001

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT							TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE	
1	EXPOSO Jaquez Site	LFII-5	CONT. SOIL	L-37	18	-	Paulson	V319	808	<i>Paulson</i>	
2	"	"	"	L-37	12	-	"	V317	810	<i>John Crow</i>	
3	"	"	"	K-37	18	-	"	V319	955	<i>Man + Jon</i>	
4	"	"	"	K-37	12	-	"	U-317	955	<i>John Crow</i>	
5	"	"	"	J-37	18	-	"	V319	1135	<i>Clayton Jones</i>	
6	"	"	"	J-37	12	-	"	V317	1135	<i>John Crow</i>	
7	"	"	"	J-37	12	-	"	V317	1308	<i>John Crow</i>	
8	"	"	"	I-37	18	-	"	V319	2:05	<i>Clayton Jones</i>	
9	"	"	"	I-37	12	-	"	V317	15:30	<i>John Crow</i>	
10	"	"	"	I-37	18	-	"	V319	15:30	<i>Clayton Jones</i>	
					150						
RESULTS:		LANDFARM EMPLOYEE:		Gary Robinson		PA		NOTES: <i>Weekend receipt - Charge fee</i>			
294	CHLORIDE TEST	3									
	PAINT FILTER TEST	3	Certification of above receipt & placement								

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned generator, and that no additional materials have been added."

TRANSPORTER CO. Paulson NAME Clayton Jones SIGNATURE Clayton Jones DATE 12-18-10

COMPANY CONTACT SANDY BACA PHONE 330-3568

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Bill of Lading

MANIFEST # 37328

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 12-18-10 JOB# 10182-0001

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT							TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLs	COMPANY	TRK#	TIME	DRIVER SIGNATURE	
1	EL PASO Jaquez Site	LFH-5	Cont Soil	K-37	12	—	Coburn Brothers Trucking	#1	836	E-7 L. C. B.	
2	"	"	"	K-37	12	—	"	#2	836	Agg 0.22	
3	"	"	"	K-37	12		"	#1	1022	E-7 L. C. B.	
4	"	"	"	K-37	12		"	#2	1022	Agg 0.22	
5	"	"	"	J-37	12		"	1	1205	E-7 L. C. B.	
6	"	"	"	J-37	12		"	2	1205	Agg 0.22	
7	"	"	"	J-37	12		"	1	1349	E-7 L. C. B.	
8	"	"	"	J-37	12		"	2	1349	Agg 0.22	
9	"	"	"	I-24	12		"	1	1530	E-7 L. C. B.	
10	"	"	"	I-24	12		"	2	1530	Agg 0.22 X	
					120						
RESULTS:		NOTES: Weekend received - charge fee									
294	CHLORIDE TEST	3	LANDFARM EMPLOYEE: Gary Robinson								
	PAINT FILTER TEST	3	Certification of above receipt & placement								

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Coburn Brothers Trucking NAME Walter L. Coburn SIGNATURE E-7 L. C. B. DATE 12/10/10

COMPANY CONTACT Walter PHONE 505-870-6251

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Bill of Lading

MANIFEST # 37332

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 12-19-10 JOB# 10182-0001

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT							TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLs	COMPANY	TRK#	TIME	DRIVER SIGNATURE	
1	El Paso Jaques	LF II-5	cont Soil	H-37	12	-	Paul & Son	V-317	8:10	<i>John R Cross</i>	
2	"	"	"	H-37	12	-	"	V-317	8:12	<i>John R Cross</i>	
3	"	"	"	H-37	12	-	"	V-317	9:35	<i>John R Cross</i>	
4	"	"	"	H-37	12	-	"	V-317	9:05	<i>John R Cross</i>	
5	"	"	"	F-37	12	-	"	V-317	11:40	<i>John R Cross</i>	
6	"	"	"	F-37	12	-	"	V-317	11:40	<i>John R Cross</i>	
7	"	"	"	F-37	12	-	"	V-317	11:10	<i>John R Cross</i>	
8	"	"	"	F-37	12	-	"	V-319	13:20	<i>John R Cross</i>	
9	"	"	"	F-37	12	-	"	V-317	14:46	<i>John R Cross</i>	
10	"	"	"	F-37	12	-	"	V-319	14:46	<i>John R Cross</i>	
					120						
RESULTS:	LANDFARM EMPLOYEE: <i>Justin</i>							NOTES: <i>weekend receipt - charge fee</i>			
294	CHLORIDE TEST	3		Certification of above receipt & placement							
	PAINT FILTER TEST	3									

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Paul & Son NAME John R. Cross SIGNATURE *John R Cross* DATE 12-19-10

COMPANY CONTACT Sandy Baca PHONE 330-3568

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Bill of Lading

MANIFEST # 37335

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 12-19-10 JOB# 10182-0001

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	El Paso Jaquez	LF D-5	cont Soil	H-37	12	-	Cotant Brothers Trucking	#7	8:35	E-7 L. C. O.
2	"	"	"	H-37	12	-	"	#2	8:35	Jaquez
3	"	"	"	H-37	12	-	"	#2	10:35	E-7 L. C. O.
4	"	"	"	H-37	12	-	"	#2	10:55	Jaquez
5	"	"	"	G-37	12	-	"	#2	12:15	Jaquez
6	"	"	"	G-37	12	-	"	#2	12:15	E-7 L. C. O.*
7	"	"	"	G-37	12	-	"	#2	13:51	E-7 L. C. O.
8	"	"	"	G-37	12	-	"	#2	13:51	Jaquez
9	"	"	"	G-37	12	-	"	#1	15:25	E-7 L. C. O.
10	"	"	"	G-37	12	-	"	#2	15:25	Jaquez
					120					
RESULTS:		LANDFARM EMPLOYEE:		Certification of above receipt & placement		NOTES:				
e-294	CHLORIDE TEST	3								Weekend receipt - charge fee
	PAINT FILTER TEST	3								

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Cotant Brothers Trucking NAME Wacey L. Cotant SIGNATURE E-7 L. C. O.

COMPANY CONTACT Wacey or Jaquez PHONE 505-870-6251 870-2251 DATE 12/19/10

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Bill of Lading

MANIFEST # 37348

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 12-21-10 JOB# 10182-0001

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	El Paso Jacquez	LF 2 #5	cont soil	E37	12		Paul & Son	V317	8:10	John R Cross
2	El Paso Jacquez	res # 5	"	"	18		Paul & Son	V319	8:15	Clayton Jones
3	"	"	"	D37	20		Paul & Son	V319	10:05	Clayton Jones
4	"	"	"	"	12		Paul & Son	V317	10:20	John R Cross
5	"	"	"	"	20		Paul & Son	V319	11:20	Clayton Jones
6	"	"	"	C37	12		"	V355 V404	14:04	John R Cross
7	"	"	"	"	20		"	V319	15:20	Clayton Jones
8	"	"	"	"	12		"	V317	15:50	John R Cross
					126					
NOTES:										
RESULTS:						LANDFARM EMPLOYEE: April E Pohl				
294	CHLORIDE TEST	2								
	PAINT FILTER TEST	2								
Certification of above receipt & placement										

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Paul & Son NAME John Cross SIGNATURE John R Cross

COMPANY CONTACT Sandy Baca PHONE 330-3568 DATE 12-21-10

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Bill of Lading

MANIFEST # 37700

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 2-14-11 JOB# 10/82-001

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLs	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	El Paso Jaquez GCC1 site	LFI-5	CON'T SOIL	Q36	18	-	Prodo Feros	P3	905	R Prodo
2	" "	" "	" "	R-36	18	-	Prodo Feros	P3	1035	R Prodo
3	" "	" "	" "	R-36	18	-	" "	P3	1155	R Prodo
4	" "	" "	" "	R-36	18	-	" "	P3	1320	R Prodo
5	" "	" "	" "	R-36	18	-	" "	P3	1445	R Prodo
6	" "	" "	" "	S-36	18	-	" "	P3	1622	R Prodo
					108					
RESULTS:							NOTES:			
284	CHLORIDE TEST	2	Gary Robinson							
	PAINT FILTER TEST	2	Certification of above receipt & placement							

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Prodo Feros NAME Royce Prodo SIGNATURE R Prodo

COMPANY CONTACT Royce Prodo PHONE 947-7531 DATE 2-14-11

Signatures required prior to distribution of this legal document.



Bill of Lading

MANIFEST # 37802

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 2-23-11 JOB# 10183-0001

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT					TRANSPORTING COMPANY				
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLs	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	El Paso Jaguer CCR1	LFII-4	CONIT SOIL	C-1	18	-	ARETMA	75	8:05	[Signature]
2	"	"	"	B-1	18	-	"	75	10:05	[Signature]
3	"	"	"	D-1	18	-	"	75	12:00	[Signature]
4	"	"	"	D-1	18	-	"	75	14:00	[Signature]
5	"	"	"	E-1	18	-	"	75	16:05	[Signature]
					90					
RESULTS:										
294	CHLORIDE TEST	2								
	PAINT FILTER TEST	2								
LANDFARM EMPLOYEE:			Gary Spelman							
CERTIFICATION OF ABOVE RECEIVAL & PLACEMENT			NOTES:							

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator and that no additional materials have been added."

TRANSPORTER CO. ARETMA Outfills NAME Reyes SIGNATURE [Signature] DATE 2-23-11

COMPANY CONTACT Reyes PHONE 602-499-7074 SIGNATURE [Signature] DATE 2-23-11

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Bill of Lading

MANIFEST # 37829

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 2-25-11 JOB# 16182-0001

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT							TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLs	COMPANY	TRK#	TIME	DRIVER SIGNATURE	
1	El Paso Jaquez GCCI	LFII-4	Cont Soil	E-1	18	-	Arcton	75	10:00	[Signature]	
2	"	"	"	E-1	18	-	"	75	12:08	[Signature]	
3	"	"	"	F-1	18	-	"	75	19:20	[Signature]	
4	"	"	"	F-1	18	-	"	75	16:22	[Signature]	
					72						
RESULTS:											
CHLORIDE TEST		[Signature]									
PAINT FILTER TEST		[Signature]									
LANDFARM EMPLOYEE: [Signature] NOTES:											
Certification of above receipt & placement											

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Arcton Outfitters NAME Roger SIGNATURE [Signature] DATE 2-25-11

COMPANY CONTACT Roger PHONE 602-499-7074 SIGNATURE [Signature] DATE 2-25-11

Signatures required prior to distribution of this legal document.



Bill of Lading

MANIFEST # 37939

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 3-8-11 JOB# 10188-001

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT							TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLs	COMPANY	TRK#	TIME	DRIVER SIGNATURE	
1	El Paso Joaquer (GCCI)	LFAH-4	Cont Soil	D-3	11	-	COTANT BROTHERS TRUCKING	#2	11:00	E. L. C. O.	
2	"	"	"	D-3	11	-	"	#2	11:00	Aug 0. O.	
3	"	"	"	D-3	11	-	"	#7	12:17	E. L. C. O.	
4	"	"	"	E-3	11	-	"	#2	12:18	Aug 0. O.	
5	"	"	"	E-3	11	-	"	#7	14:30	E. L. C. O.	
6	"	"	"	E-3	11	-	"	#2	16:16	E. L. C. O.	
7	"	"	"	F-3	11	-	"	7	16:17	Aug 0. O.	
					77						
RESULTS:											
294	CHLORIDE TEST	2									
	PAINT FILTER TEST	2									
NOTES:											
LANDFARM EMPLOYEE: <u>Cary Johnson</u> (sup)											
Certification of above receipt & placement											

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. COTANT BROTHERS TRUCKING NAME WACEY L. COTANT SIGNATURE E. L. C. O. DATE 3/8/11

COMPANY CONTACT WACEY OR WACEY PHONE 505-870-6251 SIGNATURES required prior to distribution of this legal document.



Bill of Lading

MANIFEST # 37940

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 3-8-11 JOB# 10182-0001

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Blanco	LFH-4	CON'T SOIL	D-3	11	-	CBH	1	1105	[Signature]
2	Jaquez-cc1	"	"	D-3	11	-	CBH	1	1235	[Signature]
3	"	"	"	E-3	11	-	CBH	1	1415	[Signature]
4	"	"	"	F-3	11	-	CBH	1	1558	[Signature]
					44					

RESULTS: CHLORIDE TEST 1 PAINT FILTER TEST 1

LANDFARM EMPLOYEE: Gary Galinson (initials)

Certification of above receipt & placement

NOTES:

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. CB 17 NAME Joub Nalloy SIGNATURE [Signature] DATE _____

COMPANY CONTACT Bobby PHONE 9477095 SIGNATURE [Signature] DATE _____

Signatures required prior to distribution of this legal document.



Bill of Lading

MANIFEST # 37949

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 3-9-11 JOB# 10182-0001

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLs	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	El Paso Jaquez, G-cc1	LFH-4	CONC SOIL	G-3	18	-	Harwin	75	819	[Signature]
2	"	"	"	G-3	18	-	"	75	947	[Signature]
3	"	"	"	G-3	18	-	"	75	1119	[Signature]
4	"	"	"	H-3	18	-	"	75	1259	[Signature]
5	"	"	"	H-3	18	-	"	75	1435	[Signature]
6	"	"	"	I-3	18	-	"	75	1609	[Signature]
					108					
RESULTS:										
294	CHLORIDE TEST	2	LANDFARM EMPLOYEE: <u>Gary Kullman</u>							
	PAINT FILTER TEST	2	Certification of above receipt & placement							
NOTES:										

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Harwin Outfills NAME Roger SIGNATURE [Signature] DATE 3-9-11

COMPANY CONTACT Roger PHONE 602-499-7074

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Bill of Lading

37967

MANIFEST #

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 3-10-11 JOB# 10182-0001

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT					TRANSPORTING COMPANY				
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	El Paso	LFII-4	cont. soil	I-3	18	-	Amtrak	75	8:10	[Signature]
2	Jaquez	"	"	I-3	18	-	Amtrak	75	10:03	[Signature]
3	"	"	"	J-3	18	-	Amtrak	75	12:18	[Signature]
4	"	"	"	J-3	18	-	Amtrak	75	14:07	[Signature]
5	"	"	"	J-3	18	-	11	75	15:40	[Signature]
					90					
RESULTS:										
294	CHLORIDE TEST	2	LANDFARM EMPLOYEE: Gary Robinson							
	PAINT FILTER TEST	2	Certification of above receipt & placement							
NOTES:										

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Amtrak NAME Roger SIGNATURE [Signature] DATE 3-10-11

COMPANY CONTACT Roger PHONE 502-499-7074

Signatures required prior to distribution of this legal document.



Bill of Lading

MANIFEST # 37984

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE: 3-11-71 JOB# 10152 0001

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT							TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE	
1	El Paso Jaquez	LF II-4	CONIT SOIL	K-3	18	-	Amelma	75	9:23	[Signature]	
2	G-CEL	LF II-4	"	K-3	18	-	"	75	10:50	[Signature]	
3	"	"	"	K-3	18	-	"	75	12:06	[Signature]	
4	"	"	"	L-3	18	-	"	75	13:41	[Signature]	
5	"	"	"	L-3	18	-	"	75	15:15	[Signature]	
					90						
RESULTS:											
294	CHLORIDE TEST	2									
	PAINT FILTER TEST	2									
	LANDFARM EMPLOYEE:	Cary Robinson									
		Certification of above receipt & placement									
NOTES:											

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Amelma Containers NAME Roby SIGNATURE [Signature] DATE 3-11-71

COMPANY CONTACT Roby PHONE 602-499-7074 SIGNATURE [Signature] DATE 3-11-71

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White - Company Records, Yellow - Billing, Pink - Customer



Bill of Lading

MANIFEST # 38014

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 3-15-11 JOB# 10182-0001

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT					TRANSPORTING COMPANY				
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Esposito Jaquez QCC1	LFA-4	CON'T SOIL	A-4	18		Prado Farms	P3	826	R. Prado
2	"	"	"	A-4	18		Prado Farms	P3	1002	R. Prado
3	"	"	"	A4	18		Prado Farms	P3	1141	R. Prado
4	"	"	"	A4	18		Prado Farms	P3	1346	R. Prado
5	"	"	"	A4	18		Prado Farms	P3	1518	R. Prado
					90					
RESULTS:										
294	CHLORIDE TEST	2								
	PAINT FILTER TEST	2								
LANDFARM EMPLOYEE:			Gary Pulvison							
Certification of above receipt & placement										
NOTES:										

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Prado Farms NAME Regis Prado SIGNATURE R. Prado

COMPANY CONTACT Regis PHONE 947 7531 DATE 3-15-11

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White - Company Records, Yellow - Billing, Pink - Customer

10182-0001

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-138
Revised March 12, 2007

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

*Surface Waste Management Facility Operator
and Generator shall maintain and make this
documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address: El Paso Corporation, 1001 Louisiana Street, Houston, TX 77002
2. Originating Site: Jaquez Site Excavation
3. Location of Material (Street Address, City, State or ULSTR): 200 CR 4599, Blanco, NM
4. Source and Description of Waste: Excavated soils related to oilfield release of condensate and produced water. Estimated Volume 5,200 loose (yd ³) bbls Known Volume (to be entered by the operator at the end of the haul) 11,231 (yd ³) bbls
5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS I, <u>Ian Yanagisawa</u> , representative or authorized agent for <u>El Paso Tennessee Gas Pipeline Co.</u> SIGNATURE OF REPRESENTATIVE PRINT NAME COMPANY NAME do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification) <input checked="" type="checkbox"/> RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. <i>Operator Use Only: Waste Acceptance Frequency</i> <input type="checkbox"/> Monthly <input type="checkbox"/> Weekly <input checked="" type="checkbox"/> Per Load <input type="checkbox"/> RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items) <input type="checkbox"/> MSDS Information <input type="checkbox"/> RCRA Hazardous Waste Analysis <input type="checkbox"/> Process Knowledge <input type="checkbox"/> Other (Provide description in Box 4) GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS I, <u>Ian Yanagisawa</u> , representative for <u>El Paso Tennessee Gas Pipeline Co.</u> , hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.
5. Transporter: Paul & Son Construction, Inc. and Subcontractors

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Envirotech Inc. Soil Remediation Facility Permit # NM-01-0011

Address of Facility: Hilltop, New Mexico

Method of Treatment and/or Disposal:

Evaporation Injection Treating Plant Landfarm Landfill Other

Waste Acceptance Status:

APPROVED DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: April E Pohl TITLE: Land Farm Administrator DATE: 12-15-10

SIGNATURE: April E Pohl TELEPHONE NO.: 505-632-0615
Surface Waste Management Facility Authorized Agent



Key Energy Services
 Disposal/ Water
 Remit to: PO BOX 201858 DALLAS, TX 75320-1858



D346581

WT NUMBER **D346581**

WT Date 12-17-10
 S M T W T F S

Brine Water Sale Fresh Water Sale Disposal

Water Facility/ Disposal Name Key Disposal Asset # 5120001

County/ Parish SAN JUAN State NM RRC # _____

Customer Name <u>EL PASO</u> <u>IAN YANAGISAWA</u>	Lease (origin of Disposal Fluid) <u>JAGUER SITE Remediation</u> <u>ID 141998</u>
--	--

Trucking Company MER Delivery Ticket # 108430

Load	Truck (Asset #)	BBLS	Time	Driver Name (Print)	Signature
1	3325	30	7:45 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	J. EVERETT	<i>[Signature]</i>
2			<input type="checkbox"/> AM <input type="checkbox"/> PM		
3			<input type="checkbox"/> AM <input type="checkbox"/> PM		
4			<input type="checkbox"/> AM <input type="checkbox"/> PM		
5			<input type="checkbox"/> AM <input type="checkbox"/> PM		

Additional load description _____

- H2S _____ PPM No H2S Waste Oil _____ bbls
 Black Solid Content _____ % Non Exempt
 White Water ___ Light ___ Med ___ Heavy
- Clean Produced Field Saltwater Workover Brine or Dirty Saltwater
 Frac Flowback Water (Regular Frac Job) Reserve Pit Fluid (No Mud or Solids)
 Washpit Fluid (No Mud or Solids) Frac Flowback Water (fiber Frac Job)
 Gelled Workover or Frac Fluid Tank Bottoms/ Oil Based Mud
 Other WASTE WATER

BBLS (Qty)	Price per BBL	Extended Amount
30	\$4.00	\$120.00
		\$120.00

Sub Total 120
 Sales Tax _____
 Total _____



Key Energy Services
 Disposal/ Water
 Remit to: PO BOX 201858 DALLAS, TX 75320-1858



D346583

WT NUMBER **D346583**

WT Date 12/17/10
 S M T W T F S

Brine Water Sale Fresh Water Sale Disposal

Water Facility/ Disposal Name Key Disposal Asset # 5120001

County/ Parish SAN JUAN State NM RRC # _____

Customer Name <u>EL PASO</u>	<u>IAN YANAGISAWA</u>	Lease (origin of Disposal Fluid) <u>JAEVEZ SITE Remediation</u> <u>JD 141998</u>
---------------------------------	-----------------------	--

Trucking Company W&R Delivery Ticket # 109621

Load	Truck (Asset #)	BBLs	Time	Driver Name (Print)	Signature
1	3325	80	10:30 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	J EVERETT	
2	3325	45	4:50 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	J EVERETT	
3			<input type="checkbox"/> AM <input type="checkbox"/> PM		
4			<input type="checkbox"/> AM <input type="checkbox"/> PM		
5			<input type="checkbox"/> AM <input type="checkbox"/> PM		

Additional load description _____

H2S _____ PPM No H2S Waste Oil _____ bbls
 Black Solid Content _____ % Non Exempt
 White Water ___ Light ___ Med ___ Heavy

Clean Produced Field Saltwater Workover Brine or Dirty Saltwater
 Frac Flowback Water (Regular Frac Job) Reserve Pit Fluid (No Mud or Solids)
 Washpit Fluid (No Mud or Solids) Frac Flowback Water (fiber Frac Job)
 Gelled Workover or Frac Fluid Tank Bottoms/ Oil Based Mud
 Other WASTE WATER

BBLs (Qty)	Price per BBL	Extended Amount
125	\$4.00	\$500.00

Sub Total 500

Sales Tax _____

Total _____



Key Energy Services Inc.
 Disposal/ Water
 Remit to: PO BOX 201858 DALLAS, TX 75320-1858



WT NUMBER **D346587**

WT Date 12-17-10
 S M T W T E S

Brine Water Sale Fresh Water Sale Disposal

Water Facility/ Disposal Name Key Disposal Asset # 5120001
 County/ Parish SAWYER State NM RRC # _____

Customer Name <u>IAN YANAGISAWA</u> <u>EL PASO</u>	Lease (origin of Disposal Fluid) <u>Jaquel Site Remediation</u> <u>ID 141998</u>
--	--

Trucking Company MEZ Delivery Ticket # 10739

Load	Truck (Asset #)	BBLs	Time	Driver Name (Print)	Signature
1	3358	80	11:50 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	NORMAN LEE	<i>Norman Lee</i>
2			<input type="checkbox"/> AM <input type="checkbox"/> PM		
3			<input type="checkbox"/> AM <input type="checkbox"/> PM		
4			<input type="checkbox"/> AM <input type="checkbox"/> PM		
5			<input type="checkbox"/> AM <input type="checkbox"/> PM		

Additional load description _____

- H2S _____ PPM No H2S Waste Oil _____ bbls
 Black Solid Content _____ % Non Exempt
 White Water ___Light___ Med ___Heavy___
 Clean Produced Field Saltwater Workover Brine or Dirty Saltwater
 Frac Flowback Water (Regular Frac Job) Reserve Pit Fluid (No Mud or Solids)
 Washpit Fluid (No Mud or Solids) Frac Flowback Water (fiber Frac Job)
 Gelled Workover or Frac Fluid Tank Bottoms/ Oil Based Mud
 Other WASTE WATER

BBLs (Qty)	Price per BBL	Extended Amount
80	\$4.00	\$320.00

Sub Total 320
 Sales Tax _____
 Total _____



Key Energy Services Inc.
 Disposal/ Water
 Remit to: PO BOX 201858 DALLAS, TX 75320-1858



D346598

WT NUMBER **D346598**

WT Date 12-18-10
 S M T W T F (S)

Brine Water Sale Fresh Water Sale Disposal

Water Facility/ Disposal Name Key Disposal Disposal Asset # 5120001

County/ Parish S.J. State TX RRC # _____

Customer Name <u>EL Paso</u>	Lease (origin of Disposal Fluid) <u>Jaouez Job site</u>
---------------------------------	--

Trucking Company MAR Trucking Delivery Ticket # 107120

Load	Truck (Asset #)	BBLs	Time	Driver Name (Print)	Signature
1	3362	80	10:45 <input type="checkbox"/> AM <input type="checkbox"/> PM	Nelson	<i>[Signature]</i>
2	3362	40	5:25 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	Nelson	<i>[Signature]</i>
3			<input type="checkbox"/> AM <input type="checkbox"/> PM		
4			<input type="checkbox"/> AM <input type="checkbox"/> PM		
5			<input type="checkbox"/> AM <input type="checkbox"/> PM		

Additional load description ID 141998

H2S _____ PPM No H2S Waste Oil _____ bbls
 Black Solid Content _____ % Non Exempt
 White Water ___Light___ Med ___Heavy

Clean Produced Field Saltwater Workover Brine or Dirty Saltwater
 Frac Flowback Water (Regular Frac Job) Reserve Pit Fluid (No Mud or Solids)
 Washpit Fluid (No Mud or Solids) Frac Flowback Water (fiber Frac Job)
 Gelled Workover or Frac Fluid Tank Bottoms/ Oil Based Mud
 Other waste water

BBLs (Qty)	Price per BBL	Extended Amount
120	4 ⁰⁰	480 ⁰⁰

Sub Total 480⁰⁰

Sales Tax _____

Total _____



Key Energy Services Inc.
 Disposal/ Water
 Remit to: PO BOX 201858 DALLAS, TX 75320-1858



D346611

WT NUMBER D346611

WT Date 12-19-10
 (S) M T W T F S

Brine Water Sale Fresh Water Sale Disposal

Water Facility/ Disposal Name Key Disposal Disposal Asset # 5120001
 County/ Parish S, J. State WA RRC # _____

Customer Name <u>EL PASO</u>	Lease (origin of Disposal Fluid) <u>Jacquez Job site</u>
---------------------------------	---

Trucking Company M & R Trucking Delivery Ticket # 110436

Load	Truck (Asset #)	BBLs	Time	Driver Name (Print)	Signature
1	3365	80	11:35 <input type="checkbox"/> AM <input type="checkbox"/> PM	Chris Bell	<i>[Signature]</i>
2	3365	40	3:05 <input type="checkbox"/> AM <input type="checkbox"/> PM	Chris Bell	<i>[Signature]</i>
3			<input type="checkbox"/> AM <input type="checkbox"/> PM		
4			<input type="checkbox"/> AM <input type="checkbox"/> PM		
5			<input type="checkbox"/> AM <input type="checkbox"/> PM		

Additional load description ID 141998

- H2S _____ PPM No H2S Waste Oil _____ bbls
 Black Solid Content _____ % Non Exempt
 White Water ___ Light ___ Med ___ Heavy
- Clean Produced Field Saltwater Workover Brine or Dirty Saltwater
 Frac Flowback Water (Regular Frac Job) Reserve Pit Fluid (No Mud or Solids)
 Washpit Fluid (No Mud or Solids) Frac Flowback Water (fiber Frac Job)
 Gelled Workover or Frac Fluid Tank Bottoms/ Oil Based Mud
 Other Waste Water

BBLs (Qty)	Price per BBL	Extended Amount
120	4 ⁰⁰	480 ⁰⁰

Sub Total 480⁰⁰
 Sales Tax _____
 Total _____



Key Energy Services Inc.
 Disposal/ Water
 Remit to: PO BOX 201858 DALLAS, TX 75320-1858



D346614

WT NUMBER **D346614**

WT Date 12-19-10
 S M T W T F S

Brine Water Sale Fresh Water Sale Disposal

Water Facility/ Disposal Name Key Disposal Disposal Asset # 5120001

County/ Parish S.J State TX RRC # _____

Customer Name <u>EL Paso</u>	Lease (origin of Disposal Fluid) <u>Jaquez Job site</u>
---------------------------------	--

Trucking Company M+A Trucking Delivery Ticket # 110591

Load	Truck (Asset #)	BBLS	Time	Driver Name (Print)	Signature
1	3362	50	3:05 <input checked="" type="checkbox"/> AM <input checked="" type="checkbox"/> PM	Nelson	<i>[Signature]</i>
2			<input type="checkbox"/> AM <input type="checkbox"/> PM		
3			<input type="checkbox"/> AM <input type="checkbox"/> PM		
4			<input type="checkbox"/> AM <input type="checkbox"/> PM		
5			<input type="checkbox"/> AM <input type="checkbox"/> PM		

Additional load description ID 141998

H2S _____ PPM No H2S Waste Oil _____ bbls
 Black Solid Content _____ % Non Exempt
 White Water ___ Light ___ Med ___ Heavy

Clean Produced Field Saltwater Workover Brine or Dirty Saltwater
 Frac Flowback Water (Regular Frac Job) Reserve Pit Fluid (No Mud or Solids)
 Washpit Fluid (No Mud or Solids) Frac Flowback Water (fiber Frac Job)
 Gelled Workover or Frac Fluid Tank Bottoms/ Oil Based Mud
 Other Waste Water

BBLS (Qty)	Price per BBL	Extended Amount
50	4 ⁰⁰	200 ⁰⁰

Sub Total 200⁰⁰
 Sales Tax _____
 Total _____



Key Energy Services Inc.
 Disposal/ Water
 Remit to: PO BOX 201858 DALLAS, TX 75320-1858



D346626

WT NUMBER **D346626**

WT Date 12-20-10
 S (M) T W T F S

Brine Water Sale Fresh Water Sale Disposal

Water Facility/ Disposal Name Key Disposal Disposal Asset # 5120001
 County/ Parish S.J. State NM RRC # _____

Customer Name <u>EL PASO</u>	Lease (origin of Disposal Fluid) <u>Jaquez Job site</u>
---------------------------------	--

Trucking Company M+A Trucking Delivery Ticket # 110594

Load	Truck (Asset #)	BBLs	Time	Driver Name (Print)	Signature
1	3362	30	5:50 <input type="checkbox"/> AM <input type="checkbox"/> PM	F. Nelson	<i>[Signature]</i>
2			<input type="checkbox"/> AM <input type="checkbox"/> PM		
3			<input type="checkbox"/> AM <input type="checkbox"/> PM		
4			<input type="checkbox"/> AM <input type="checkbox"/> PM		
5			<input type="checkbox"/> AM <input type="checkbox"/> PM		

Additional load description ID 141998

- H2S _____ PPM No H2S Waste Oil _____ bbls
 Black Solid Content _____ % Non Exempt
 White Water ___ Light ___ Med ___ Heavy
- Clean Produced Field Saltwater Workover Brine or Dirty Saltwater
 Frac Flowback Water (Regular Frac Job) Reserve Pit Fluid (No Mud or Solids)
 Washpit Fluid (No Mud or Solids) Frac Flowback Water (fiber Frac Job)
 Gelled Workover or Frac Fluid Tank Bottoms/ Oil Based Mud
 Other Waste Water

BBLs (Qty)	Price per BBL	Extended Amount
30	4 ⁰⁰	120 ⁰⁰

Sub Total 120⁰⁰

Sales Tax _____

Total _____



Key Energy Services Inc.
 Disposal/ Water
 Remit to: PO BOX 201858 DALLAS, TX 75320-1858



D346645

WT NUMBER **D346645**

WT Date 12/23/10
 S M T W T F S

Brine Water Sale Fresh Water Sale Disposal

Water Facility/ Disposal Name Key Disposal Asset # 5120001

County/ Parish SAN JUAN State NM RRC # _____

Customer Name <u>EL PASO</u>	Lease (origin of Disposal Fluid) <u>JANUARY SITE RESTORATION</u>
---------------------------------	---

Trucking Company McR Delivery Ticket # 110598

Load	Truck (Asset #)	BBLs	Time	Driver Name (Print)	Signature
1	3362	80	12:15 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	Fernando Nelson	<i>[Signature]</i>
2			<input type="checkbox"/> AM <input type="checkbox"/> PM		
3			<input type="checkbox"/> AM <input type="checkbox"/> PM		
4			<input type="checkbox"/> AM <input type="checkbox"/> PM		
5			<input type="checkbox"/> AM <input type="checkbox"/> PM		

Additional load description _____

H2S _____ PPM No H2S Waste Oil _____ bbls
 Black Solid Content _____ % Non Exempt
 White Water ___ Light ___ Med ___ Heavy

Clean Produced Field Saltwater Workover Brine or Dirty Saltwater
 Frac Flowback Water (Regular Frac Job) Reserve Pit Fluid (No Mud or Solids)
 Washpit Fluid (No Mud or Solids) Frac Flowback Water (fiber Frac Job)
 Gelled Workover or Frac Fluid Tank Bottoms/ Oil Based Mud
 Other WASTE WATER

BBLs (Qty)	Price per BBL	Extended Amount
80	\$4.00	\$320.00

Sub Total 320

Sales Tax _____

Total _____



Waste Management of New Mexico
 San Juan County Landfill
 1580 E Elwood St
 Phoenix AZ 85040

Customer: EL PASO ENERGY CORPORATION
Account Number: 620-0000342-0495-8
Invoice Date: 04/01/2011
Invoice Number: 0005257-0495-3
Due Date: Due Upon Receipt
WM ezPay Account ID: 00009-28396-13002

Service Location: 620-342 EL Paso Energy Blanco: 200 County Rd 4599: Blanco Nm 87412							
Date	Ticket	Description	Quantity	U/M	Rate	Amount	
03/24/11	343315	Veh#:none					
		Profile fee-lf	1.00	EAC	50.00	50.00	
		Nm tax				3.16	
		Profile # 100531nm					
		Generator el paso corporation					
		Ticket Total					53.16
03/24/11	343340	Veh#:p3					
		Special wste-lf	14.00	YDS	16.50	231.00	
		Environmental fee-lf	1.00	PCT	17.33	17.33	
		Fuel surcharge-lf	1.00	PCT	16.54	16.54	
		Nm tax				14.58	
		Nm tax				1.04	
		Profile # 100531nm					
		Generator el paso corporation					
		Manifest # 18667					
		Ticket Total					280.49
03/29/11	344721	Veh#:v319					
		Special wste-lf	20.00	YDS	16.50	330.00	
		Environmental fee-lf	1.00	PCT	24.75	24.75	
		Fuel surcharge-lf	1.00	PCT	23.79	23.79	
		Nm tax				20.83	
		Nm tax				1.50	
		Profile # 100531nm					
		Generator el paso corporation					
		Manifest # 19185					
		Ticket Total					400.87
Total Current Charges							734.52

*From everyday collection to environmental protection,
 Think Green. Think Waste Management.*

FOR CHANGE OF ADDRESS OR ANY SERVICE ISSUES CONTACT NUMBER ON PAGE 1



Printed on recycled paper.

0000326-00000002-0000867

WM of NM - San Juan County Landfill
78 County Road #3140,
Aztec, NM, 87410
Ph: (505) 334-1121

Reprint Ticket # 1343315
Reprint Web Ticket # 216

Customer Name ELPASOENERGYBLANCO **Carrier** NONE No Carrier
Ticket Date 03/24/2011 **Vehicle#** NONE **Volume**
Payment Type Credit Account **Billing#** 0000342
Manual Ticket# **Grid**
PO#
Profile 100531NM(El Paso Corporation)
Generator 748133(153-ELPASOCORPORATION)

	Time	Scale	Operator	Inbound	Gross	0 lb*
In	03/24/11 02:03:00	MANUAL WT	dgrimnes		Tare	0 lb*
Out	03/24/11 02:03:00	MANUAL WT	dgrimnes		Net	0 lb
			* Manual Weight		Tons	0

Comments
Void Reason

Surcharges	Qty	UOM	Rate	Fee	Amount
PFL-PROFILE CHARGE	1	Each	50.00	3.16	\$50.00

Total Fees \$3.16
Total Ticket \$53.16



WM of NM - San Juan County
 78 County Road 3140
 Aztec, NM, 87410
 Ph: (505) 334-1121

Original
 Ticket# 1343340

Customer Name ELPASOENERGYBLANCO El Paso En Carrier PRADO FARMS PRADO FARMS
 Ticket Date 03/24/2011 Vehicle# P3 Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver
 Hauling Ticket# Check#
 Route Billing # 0000342
 State Waste Code Gen EPA ID
 Manifest 18667
 Destination Grid
 PO
 Profile 100531NM (El Paso Corporation)
 Generator 153-ELPASOCORPORATION El Paso Corporation

	Time	Scale	Operator	Inbound	Gross	
In	03/24/2011 14:07:57	Inbound 301	nbaca		Tare	35100 lb
Out	03/24/2011 14:23:05	Outbound 302	vickyq		Net	28240 lb
					Tons	6860 lb
						3.43

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 SpwasteSolid0th-Cu	100	14.00	Yards				SANJ
2 EVFt-P-Standard En	100		%				SANJ
3 FUEL-T-Fuel Surcha	100		%				SANJ

Total Tax
 Total Ticket

Driver's Signature



3-24-11 White Prado Farms

18667

SPECIAL WASTE SHIPMENT RECORD

WASTE MANAGEMENT OF NEW MEXICO, INC.
 SAN JUAN COUNTY REGIONAL LANDFILL
 PERMIT #SWM-052426, #SWM-052426SP
 #78 CR 3140 P.O. Box 1402
 Aztec, New Mexico 87410
 505/334-1121

1343340

Shipment # _____

Profile # 100531NM
 (Required)

1. Generator's Work site name and address (physical site address of waste generation)		
2. Generator's name and address		Generator's Telephone no.
3. Authorized Agent name and address (if different from #2)		Agent's Telephone no.
4. Description materials	5. Container's No. Type	6. Total Quantity (tons) (yd3)
7. Special handling instructions		
8. GENERATOR or AUTHORIZED AGENT CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway in accordance with applicable international and government regulations. I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 258.28 and is not a hazardous waste as defined by 40CFR 261 or any applicable state law.		
Generator or Agent (Printed/typed name and title)	Generator or Agents Signature	Month/Day/Year
9. Transporter 1 (Acknowledgement of receipt of materials)		
Printed/typed name & title, address, telephone no.	Driver Signature	Month/Day/Year
10. Transporter 2 (Acknowledgement of receipt of materials)		
Printed/typed name & title, address, telephone no.	Driver Signature	Month/Day/Year
11. Discrepancy indication space		
12. Waste disposal site Location co-ordinates (X,Y, Z)		
Received by name and title (Printed/typed)	SJC Landfill Rep. Signature	Month / Day / Year

3-24-11 14yds Prado Farms

18667

SPECIAL WASTE SHIPMENT RECORD

WASTE MANAGEMENT OF NEW MEXICO, INC.
SAN JUAN COUNTY REGIONAL LANDFILL
PERMIT #SWM-052426, #SWM-052426SP
#78 CR 3140 P.O. Box 1402
Aztec, New Mexico 87410
505/334-1121

Ticket # 1343340

Shipment # _____

Profile # 100531NM
(Required)

1. Generator's Work site name and address (physical site address of waste generation) <u>200 CR 4599 - Blanco, NM</u>		
2. Generator's name and address <u>El Paso Corporation</u> <u>1001 Louisiana St. Houston, TX 77002</u>		Generator's Telephone no. <u>713-420-7361</u>
3. Authorized Agent name and address (if different from #2)		Agent's Telephone no.
4. Description materials <u>Soil Stockpile liner</u>	5. Container's No. <u>1</u> Type <u>B</u>	6. Total Quantity (tons) <u>14yds</u> (yd3)
7. Special handling instructions		
8. GENERATOR or AUTHORIZED AGENT CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway in accordance with applicable international and government regulations. I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 258.28 and is not a hazardous waste as defined by 40CFR 261 or any applicable state law.		
Generator or Agent (Printed/typed name and title) <u>Roger Prado Driver</u>	Generator or Agents Signature <u>R Prado</u>	Month/Day/Year <u>3 24 11</u>
9. Transporter 1 (Acknowledgement of receipt of materials)		
Printed/typed name & title, address, telephone no. <u>Driver Roger Prado</u> <u>Prado Farms Blanco NM</u>	Driver Signature <u>R Prado</u> <u>505 9477531</u>	Month/Day/Year <u>3 24 11</u>
10. Transporter 2 (Acknowledgement of receipt of materials)		
Printed/typed name & title, address, telephone no.	Driver Signature	Month/Day/Year <u> / /</u>
11. Discrepancy indication space		
12. Waste disposal site Location co-ordinates (X,Y,Z) <u>Elev 5794 N 36° 46.062 W 108° 02.769</u>		
Received by name and title (Printed/Typed) <u>Cate Attendant</u> <u>Vicky Quintana</u>	SJC Landfill Rep. Signature <u>Vicky Quintana</u>	Month / Day / Year <u>3-24-11</u>



WM of NM - San Juan County
 78 County Road 3140
 Aztec, NM, 87410
 Ph: (505) 334-1121

Original
 Ticket# 1344721

Customer Name ELPASOENERGYBLANCO El Paso En Carrier Paulsons Paul & sons
 Ticket Date 03/29/2011 Vehicle# v319 Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver
 Hauling Ticket# Check#
 Route Billing # 0000342
 State Waste Code Gen EPA ID
 Manifest 19185
 Destination Grid
 PD
 Profile 100531NM (El Paso Corporation)
 Generator 153-ELPASOCORPORATION El Paso Corporation

	Time	Scale	Operator	Inbound	Gross	62180 lb
In	03/29/2011 11:23:00	Inbound 301	vickyq		Tare	37640 lb
Out	03/29/2011 14:49:32	Outbound 302	nbaca		Net	24540 lb
					Tons	12.27

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 SpwasteSolidOth-Cu	100	20.00	Yards				SANJ
2 EVFt-P-Standard En	100		%				SANJ
3 FUEL-T-Fuel Surcha	100		%				SANJ

Total Tax
 Total Ticket

Driver's Signature

Max L. Klohn



SPECIAL WASTE SHIPMENT RECORD

19185

WASTE MANAGEMENT OF NEW MEXICO, INC.
 SAN JUAN COUNTY REGIONAL LANDFILL
 PERMIT #SWM-052426, #SWM-052426SP
 #78 CR 3140 P.O. Box 1402
 Aztec, New Mexico 87410
 505/334-1121

Shipment # 2

Profile # 851 100531NM
 (Required)

1. Generator's Work site name and address (physical site address of waste generation) <i>Jacobs Site #220 CI 4599</i>		
2. Generator's name and address <i>El Paso Corp. 1001 Wisconsin Street Houston TX 77002</i>		Generator's Telephone no. <i>713-420-7361</i>
3. Authorized Agent name and address (if different from #2) <i>Sandy Bera 210 W Main Blount Field NM 87413</i>		Agent's Telephone no. <i>505-632-7476</i>
4. Description materials	5. Container's No. <u>1</u> Type <u>B</u>	6. Total Quantity (tons) (yd3) <i>2 yds</i>
<i>Soil test pile liner</i>	<i>End dump</i>	
7. Special handling instructions		
8. GENERATOR or AUTHORIZED AGENT CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway in accordance with applicable international and government regulations. I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 258.28 and is not a hazardous waste as defined by 40CFR 261 or any applicable state law.		
Generator or Agent (Printed/typed name and title) <i>Sandy Bera</i>	Generator or Agents Signature <i>[Signature]</i>	Month/Day/Year <i>3/28/11</i>
9. Transporter 1 (Acknowledgement of receipt of materials)		
Printed/typed name & title, address, telephone no. <i>Paul J. ... 210 W Main Blount Field 505-632-7110</i>	Driver Signature <i>MAX L. KLOHN</i>	Month/Day/Year <i>3/27/11</i>
10. Transporter 2 (Acknowledgement of receipt of materials)		
Printed/typed name & title, address, telephone no.	Driver Signature	Month/Day/Year <i>/ /</i>
11. Discrepancy indication space <i>HS date 5/11 different than date delivered</i>		
12. Waste disposal site Location co-ordinates (X,Y, Z) <i>Elev 52 N 30 46.075 W 101 03 769</i>		
Received by name and title (Printed/typed) <i>[Signature]</i>	SJC Landfill Rep. Signature <i>[Signature]</i>	Month / Day / Year <i>3-31-11</i>

Technical Report for

EL PASO CORPORATION

MWHCODE: San Juan River Basin Program

JAQUEZ SITE

Accutest Job Number: T65774

Sampling Dates: 12/15/10 - 12/20/10

Report to:

MWH
1801 California Street Suite 2900
Denver, CO 80202
jed.smith@mwhglobal.com

ATTN: Jed Smith

Total number of pages in report: **42**



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 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)

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: T65774

MWHCODE: San Juan River Basin Program

Project No: JAQUEZ SITE

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T65774-1	12/15/10	15:01	12/21/10	SO	Soil	JAQUEZ-1(14)-121510
T65774-2	12/16/10	12:05	12/21/10	SO	Soil	JAQUEZ-12(14)-121610
T65774-3	12/17/10	15:07	12/21/10	SO	Soil	JAQUEZ-16(14)-121710
T65774-4	12/17/10	16:00	12/21/10	AQ	Ground Water	JAQUEZ-GW1-NORTH-121710
T65774-5	12/19/10	15:30	12/21/10	SO	Soil	JAQUEZ-17(14)-121910
T65774-6	12/20/10	07:00	12/21/10	SO	Trip Blank Soil	122010TB01 SOIL
T65774-7	12/20/10	07:00	12/21/10	AQ	Ground Water	122010TB02 GW

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 T65774

Site: MWHCODE: San Juan River Basin Program

Report Date 1/7/2011 12:55:27 PM

6 Sample(s) and 1 Trip Blank(s) were collected on between 12/15/2010 and 12/20/2010 and were received at Accutest on 12/21/2010 properly preserved, at 4 Deg. C and intact. These Samples received an Accutest job number of T65774. 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 GC By Method SW846 8015

Matrix SO	Batch ID: GBB239
------------------	-------------------------

- All samples were analyzed within the recommended method holding time.
- Sample(s) T65751-1MS, T65751-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Volatiles by GC By Method SW846 8021B

Matrix AQ	Batch ID: GKK1757
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- Sample(s) T65775-1MS, T65775-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T65774-4 have surrogates outside control limits. Outside control limits due to matrix interference.

Matrix AQ	Batch ID: GKK1758
------------------	--------------------------

- Sample(s) T65774-4 have surrogates outside control limits. Confirmation run for surrogate recoveries.

Matrix SO	Batch ID: GKK1760
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T65774-1MS, T65774-1MSD were used as the QC samples indicated.
- Sample(s) T65774-4 have surrogates outside control limits. Confirmation run for surrogate recoveries.

Matrix SO	Batch ID: GKK1761
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- Sample(s) T65774-3MS, T65774-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T65774-4 have surrogates outside control limits. Confirmation run for surrogate recoveries.

Extractables by GC By Method SW846 8015 M

Matrix SO	Batch ID: OP17113
------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) T65774-5MS, T65774-5MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Wet Chemistry By Method SM 2540 G

Matrix SO

Batch ID: GN27673

- Sample(s) T65523-1DUP 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

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3

Client Sample ID:	JAQUEZ-1(14)-121510		
Lab Sample ID:	T65774-1	Date Sampled:	12/15/10
Matrix:	SO - Soil	Date Received:	12/21/10
Method:	SW846 8015	Percent Solids:	80.1
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0004762.D	1	12/22/10	AT	n/a	n/a	GBB239
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.13 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	7.3	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	94%		46-127%	
98-08-8	aaa-Trifluorotoluene	103%		44-120%	

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

31
3

Client Sample ID: JAQUEZ-1(14)-121510	
Lab Sample ID: T65774-1	Date Sampled: 12/15/10
Matrix: SO - Soil	Date Received: 12/21/10
Method: SW846 8021B	Percent Solids: 80.1
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK036633.D	1	12/29/10	LB	n/a	n/a	GKK1760
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.71 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.4	ug/kg	
100-41-4	Ethylbenzene	ND	4.4	ug/kg	
108-88-3	Toluene	ND	4.4	ug/kg	
1330-20-7	Xylenes (total)	ND	13	ug/kg	
	m,p-Xylene	ND	8.7	ug/kg	
95-47-6	o-Xylene	ND	4.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	90%		21-163%
98-08-8	aaa-Trifluorotoluene	129%		39-170%

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:	JAQUEZ-1(14)-121510	
Lab Sample ID:	T65774-1	Date Sampled: 12/15/10
Matrix:	SO - Soil	Date Received: 12/21/10
Method:	SW846 8015 M SW846 3550B	Percent Solids: 80.1
Project:	MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF203160.D	1	01/05/11	EM	12/22/10	OP17113	GIB1138
Run #2							

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

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	42.7	4.1	mg/kg	
	TPH (> C28-C40)	ND	4.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	75%		33-115%

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

32
3

Client Sample ID: JAQUEZ-12(14)-121610	
Lab Sample ID: T65774-2	Date Sampled: 12/16/10
Matrix: SO - Soil	Date Received: 12/21/10
Method: SW846 8015	Percent Solids: 83.7
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0004763.D	1	12/22/10	AT	n/a	n/a	GBB239
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.50 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	6.4	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	94%		46-127%	
98-08-8	aaa-Trifluorotoluene	104%		44-120%	

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

32
3

Client Sample ID: JAQUEZ-12(14)-121610	Date Sampled: 12/16/10
Lab Sample ID: T65774-2	Date Received: 12/21/10
Matrix: SO - Soil	Percent Solids: 83.7
Method: SW846 8021B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK036642.D	1	12/29/10	LB	n/a	n/a	GKK1760
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.90 g	5.0 ml
Run #2		

Purgeable Aromatics

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%		21-163%
98-08-8	aaa-Trifluorotoluene	129%		39-170%

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

32
3

Client Sample ID: JAQUEZ-12(14)-121610	
Lab Sample ID: T65774-2	Date Sampled: 12/16/10
Matrix: SO - Soil	Date Received: 12/21/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 83.7
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF203161.D	1	01/05/11	EM	12/22/10	OP17113	GIF1138
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	25.9	4.0	mg/kg	
	TPH (> C28-C40)	ND	4.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	71%		33-115%

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: JAQUEZ-16(14)-121710	
Lab Sample ID: T65774-3	Date Sampled: 12/17/10
Matrix: SO - Soil	Date Received: 12/21/10
Method: SW846 8015	Percent Solids: 84.4
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0004764.D	1	12/22/10	AT	n/a	n/a	GBB239
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.48 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	6.3	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	93%		46-127%	
98-08-8	aaa-Trifluorotoluene	102%		44-120%	

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: JAQUEZ-16(14)-121710	
Lab Sample ID: T65774-3	Date Sampled: 12/17/10
Matrix: SO - Soil	Date Received: 12/21/10
Method: SW846 8021B	Percent Solids: 84.4
Project: MWHCODE: San Juan River Basin Program	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK036680.D	1	12/30/10	LB	n/a	n/a	GKK1761
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.11 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.6	ug/kg	
100-41-4	Ethylbenzene	ND	4.6	ug/kg	
108-88-3	Toluene	ND	4.6	ug/kg	
1330-20-7	Xylenes (total)	ND	14	ug/kg	
	m,p-Xylene	ND	9.3	ug/kg	
95-47-6	o-Xylene	ND	4.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%		21-163%
98-08-8	aaa-Trifluorotoluene	121%		39-170%

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: JAQUEZ-16(14)-121710	
Lab Sample ID: T65774-3	Date Sampled: 12/17/10
Matrix: SO - Soil	Date Received: 12/21/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 84.4
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF203162.D	1	01/05/11	EM	12/22/10	OP17113	GIB1138
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.7 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	14.2	3.9	mg/kg	
	TPH (> C28-C40)	ND	3.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	71%		33-115%

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: JAQUEZ-GW1-NORTH-121710		Date Sampled: 12/17/10
Lab Sample ID: T65774-4		Date Received: 12/21/10
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8021B		
Project: MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK036582.D	1	12/27/10	LB	n/a	n/a	GKK1757
Run #2 ^a	KK036591.D	1	12/28/10	LB	n/a	n/a	GKK1758

	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	32.4	1.0	ug/l	
100-41-4	Ethylbenzene	30.4	1.0	ug/l	
108-88-3	Toluene	141	1.0	ug/l	
1330-20-7	Xylenes (total)	338	3.0	ug/l	
95-47-6	o-Xylene	54.6	1.0	ug/l	
	m,p-Xylene	283	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%	99%	58-125%
98-08-8	aaa-Trifluorotoluene	1685% ^b	2292% ^b	73-139%

(a) Confirmation run for surrogate recoveries.

(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

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: JAQUEZ-17(14)-121910	
Lab Sample ID: T65774-5	Date Sampled: 12/19/10
Matrix: SO - Soil	Date Received: 12/21/10
Method: SW846 8015	Percent Solids: 82.9
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0004765.D	1	12/22/10	AT	n/a	n/a	GBB239
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.49 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	6.5	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	93%		46-127%	
98-08-8	aaa-Trifluorotoluene	101%		44-120%	

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: JAQUEZ-17(14)-121910	
Lab Sample ID: T65774-5	Date Sampled: 12/19/10
Matrix: SO - Soil	Date Received: 12/21/10
Method: SW846 8021B	Percent Solids: 82.9
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK036645.D	1	12/29/10	LB	n/a	n/a	GKK1760
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.50 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.4	ug/kg	
100-41-4	Ethylbenzene	ND	4.4	ug/kg	
108-88-3	Toluene	ND	4.4	ug/kg	
1330-20-7	Xylenes (total)	ND	13	ug/kg	
	m,p-Xylene	ND	8.8	ug/kg	
95-47-6	o-Xylene	ND	4.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%		21-163%
98-08-8	aaa-Trifluorotoluene	121%		39-170%

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: JAQUEZ-17(14)-121910	
Lab Sample ID: T65774-5	Date Sampled: 12/19/10
Matrix: SO - Soil	Date Received: 12/21/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 82.9
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF203163.D	1	01/05/11	EM	12/22/10	OP17113	GIF1138
Run #2							

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

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	8.75	4.0	mg/kg	
	TPH (> C28-C40)	ND	4.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	76%		33-115%

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:	122010TB01 SOIL	
Lab Sample ID:	T65774-6	Date Sampled: 12/20/10
Matrix:	SO - Trip Blank Soil	Date Received: 12/21/10
Method:	SW846 8021B	Percent Solids: n/a
Project:	MWHCODE: San Juan River Basin Program	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK036641.D	1	12/29/10	LB	n/a	n/a	GKK1760
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

Purgeable Aromatics

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		21-163%
98-08-8	aaa-Trifluorotoluene	123%		39-170%

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: 122010TB02 GW	
Lab Sample ID: T65774-7	Date Sampled: 12/20/10
Matrix: AQ - Ground Water	Date Received: 12/21/10
Method: SW846 8021B	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	KK036580.D	1	12/27/10	LB	n/a	n/a	GKK1757
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	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		58-125%
98-08-8	aaa-Trifluorotoluene	105%		73-139%

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

SAMPLE INSPECTION FORM

Accutest Job Number: T65774 Client: MWH Date/Time Received: 12/21/10 0940

of Coolers Received: 1 Thermometer #: IRGun04 Temperature Adjustment Factor: 0

Cooler Temperatures (initial/adjusted): #1: 4.0°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? _____
 Number of 5035 kits? _____
 Number of lab-filtered metals? _____

Summary of Discrepancies:

Non-Accutest sample vials received, Non-Accutest Water Trip Blank received.

TECHNICIAN SIGNATURE/DATE: Dariusz Haddleston 12/21/10

INFORMATION AND SAMPLE LABELING VERIFIED BY: GC 12/21/10

♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ **CORRECTIVE ACTIONS** ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦

Client Representative Notified: _____ Date: _____

By Accutest Representative: _____ Via: Phone Email

Client Instructions: _____

i:\mwalker\form\samplemanagement SM023 Revised 9/11/10

SAMPLE RECEIPT LOG

JOB #: T65774 DATE/TIME RECEIVED: 12/21/10 0940
 CLIENT: MWH INITIALS: DRA

COOLER#	SAMPLE ID	FIELD ID	DATE	MATRIX	VOL	BOTTLE #	LOCATION	PRESERV	PH
1	1	Jaquez-1(14)-121510	12-15-10 1501	soil	4oz	1	2-46	① 2 3 4 5 6 7 8	<2 >12
	1	↓ ↓ ↓	↓ ↓	↓	↓	2	VR	① 2 3 4 5 6 7 8	<2 >12
	2	Jaquez-12(14) 12-16-10	12-16-10 1205	↓	↓	1	2-46	① 2 3 4 5 6 7 8	<2 >12
	2	↓ ↓ ↓	↓ ↓	↓	↓	2	VR	① 2 3 4 5 6 7 8	<2 >12
	3	Jaquez-16(14) 121710	12-17-10 1507	↓	↓	1	2-46	① 2 3 4 5 6 7 8	<2 >12
	3	↓ ↓ ↓	↓ ↓	↓	↓	2	VR	① 2 3 4 5 6 7 8	<2 >12
	4	Jaquez GW1-NORTH- 121710	12-17-10 1600	W	40ml	1-3	VR	① 2 3 4 5 6 7 8	<2 >12
	5	Jaquez-17(14) 121910	12-19-10 1530	soil	4oz	1	2-46	① 2 3 4 5 6 7 8	<2 >12
	5	↓ ↓ ↓	↓ ↓	↓	↓	2	VR	① 2 3 4 5 6 7 8	<2 >12
	6	_____	_____	STB	40ml	1-2	VR	① 2 3 4 5 6 7 8	<2 >12
	7	_____	_____	WTB	40ml	1-2	VR	① 2 3 4 5 6 7 8	<2 >12
<i>DRA</i> 12/21/10								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

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 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: T65774
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB239-MB	BB0004742.DI		12/22/10	AT	n/a	n/a	GBB239

The QC reported here applies to the following samples:

Method: SW846 8015

T65774-1, T65774-2, T65774-3, T65774-5

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

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	94% 46-127%
98-08-8	aaa-Trifluorotoluene	103% 44-120%

5.1.1
5

Method Blank Summary

Job Number: T65774
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1757-MB	KK036558.D 1		12/27/10	LB	n/a	n/a	GKK1757

The QC reported here applies to the following samples:

Method: SW846 8021B

T65774-4, T65774-7

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	109%	58-125%
98-08-8	aaa-Trifluorotoluene	135%	73-139%

Method Blank Summary

Job Number: T65774
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1760-MB	KK036632.D 1		12/29/10	LB	n/a	n/a	GKK1760

The QC reported here applies to the following samples:

Method: SW846 8021B

T65774-1, T65774-2, T65774-5, T65774-6

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

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	97%	21-163%
98-08-8	aaa-Trifluorotoluene	124%	39-170%

Method Blank Summary

Job Number: T65774
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1761-MB	KK036679.D 1		12/30/10	LB	n/a	n/a	GKK1761

The QC reported here applies to the following samples:

Method: SW846 8021B

T65774-3

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

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	94%	21-163%
98-08-8	aaa-Trifluorotoluene	116%	39-170%

Blank Spike Summary

Job Number: T65774
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB239-BS	BB0004739.DI		12/22/10	AT	n/a	n/a	GBB239

The QC reported here applies to the following samples:

Method: SW846 8015

T65774-1, T65774-2, T65774-3, T65774-5

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.418	105	78-115

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	97%	46-127%
98-08-8	aaa-Trifluorotoluene	110%	44-120%

5.2.1
5

Blank Spike Summary

Job Number: T65774
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1757-BS	KK036555.D 1		12/27/10	LB	n/a	n/a	GKK1757

The QC reported here applies to the following samples:

Method: SW846 8021B

T65774-4, T65774-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	20.9	105	86-121
100-41-4	Ethylbenzene	20	21.2	106	81-116
108-88-3	Toluene	20	21.2	106	87-117
1330-20-7	Xylenes (total)	60	63.6	106	85-115
95-47-6	o-Xylene	20	21.4	107	87-116
	m,p-Xylene	40	42.2	106	84-116

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	97%	58-125%
98-08-8	aaa-Trifluorotoluene	104%	73-139%

5.2.2
5

Blank Spike Summary

Job Number: T65774
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1760-BS	KK036628.D 1		12/29/10	LB	n/a	n/a	GKK1760

The QC reported here applies to the following samples:

Method: SW846 8021B

T65774-1, T65774-2, T65774-5, T65774-6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	20	22.2	111	73-132
100-41-4	Ethylbenzene	20	23.0	115	70-133
108-88-3	Toluene	20	22.4	112	74-133
1330-20-7	Xylenes (total)	60	66.9	112	73-134
	m,p-Xylene	40	44.6	112	70-134
95-47-6	o-Xylene	20	22.3	112	76-131

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	96%	21-163%
98-08-8	aaa-Trifluorotoluene	119%	39-170%

Blank Spike Summary

Job Number: T65774
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1761-BS	KK036675.D 1		12/30/10	LB	n/a	n/a	GKK1761

The QC reported here applies to the following samples:

Method: SW846 8021B

T65774-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	20	20.4	102	73-132
100-41-4	Ethylbenzene	20	20.9	105	70-133
108-88-3	Toluene	20	20.5	103	74-133
1330-20-7	Xylenes (total)	60	62.4	104	73-134
	m,p-Xylene	40	41.5	104	70-134
95-47-6	o-Xylene	20	20.8	104	76-131

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	95%	21-163%
98-08-8	aaa-Trifluorotoluene	122%	39-170%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T65774
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T65751-1MS	BB0004748.D5		12/22/10	AT	n/a	n/a	GBB239
T65751-1MSD	BB0004749.D5		12/22/10	AT	n/a	n/a	GBB239
T65751-1	BB0004747.D5		12/22/10	AT	n/a	n/a	GBB239

The QC reported here applies to the following samples:

Method: SW846 8015

T65774-1, T65774-2, T65774-3, T65774-5

CAS No.	Compound	T65751-1 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	438	642	1080	100	1080	100	0	78-115/14

CAS No.	Surrogate Recoveries	MS	MSD	T65751-1	Limits
460-00-4	4-Bromofluorobenzene	104%	108%	98%	46-127%
98-08-8	aaa-Trifluorotoluene	111%	114%	104%	44-120%

5.3.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T65774
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T65775-1MS	KK036562.D 1		12/27/10	LB	n/a	n/a	GKK1757
T65775-1MSD	KK036563.D 1		12/27/10	LB	n/a	n/a	GKK1757
T65775-1	KK036578.D 1		12/27/10	LB	n/a	n/a	GKK1757

The QC reported here applies to the following samples:

Method: SW846 8021B

T65774-4, T65774-7

CAS No.	Compound	T65775-1 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	1.0 U	20	22.5	113	22.2	111	1	86-121/19
100-41-4	Ethylbenzene	1.0 U	20	22.9	115	22.6	113	1	81-116/14
108-88-3	Toluene	1.0 U	20	22.8	114	22.5	113	1	87-117/16
1330-20-7	Xylenes (total)	3.0 U	60	68.2	114	67.4	112	1	85-115/12
95-47-6	o-Xylene	1.0 U	20	22.8	114	22.5	113	1	87-116/16
	m,p-Xylene	2.0 U	40	45.4	114	44.9	112	1	84-116/13

CAS No.	Surrogate Recoveries	MS	MSD	T65775-1	Limits
460-00-4	4-Bromofluorobenzene	105%	103%	98%	58-125%
98-08-8	aaa-Trifluorotoluene	110%	108%	104%	73-139%

5.3.2
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T65774
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T65774-1MS	KK036635.D 1		12/29/10	LB	n/a	n/a	GKK1760
T65774-1MSD	KK036636.D 1		12/29/10	LB	n/a	n/a	GKK1760
T65774-1	KK036633.D 1		12/29/10	LB	n/a	n/a	GKK1760

The QC reported here applies to the following samples:

Method: SW846 8021B

T65774-1, T65774-2, T65774-5, T65774-6

CAS No.	Compound	T65774-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	23.6	17.7	75	13.6	59	26	41-129/33
100-41-4	Ethylbenzene	ND	23.6	22.5	95	21.1	92	6	15-139/36
108-88-3	Toluene	ND	23.6	20.0	85	16.2	71	21	26-141/38
1330-20-7	Xylenes (total)	ND	70.9	66.6	94	62.2	91	7	22-132/33
	m,p-Xylene	ND	47.3	44.3	94	41.4	91	7	24-133/41
95-47-6	o-Xylene	ND	23.6	22.3	94	20.8	91	7	25-140/35

CAS No.	Surrogate Recoveries	MS	MSD	T65774-1	Limits
460-00-4	4-Bromofluorobenzene	90%	91%	90%	21-163%
98-08-8	aaa-Trifluorotoluene	126%	128%	129%	39-170%

5.3.3
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T65774
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T65774-3MS	KK036682.D 1		12/30/10	LB	n/a	n/a	GKK1761
T65774-3MSD	KK036683.D 1		12/30/10	LB	n/a	n/a	GKK1761
T65774-3	KK036680.D 1		12/30/10	LB	n/a	n/a	GKK1761

The QC reported here applies to the following samples:

Method: SW846 8021B

T65774-3

CAS No.	Compound	T65774-3 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	22.7	20.8	91	18.9	87	10	41-129/33
100-41-4	Ethylbenzene	ND	22.7	21.1	93	20.2	93	4	15-139/36
108-88-3	Toluene	ND	22.7	20.8	91	19.4	89	7	26-141/38
1330-20-7	Xylenes (total)	ND	68.2	63.0	92	60.3	92	4	22-132/33
	m,p-Xylene	ND	45.5	41.6	91	39.7	91	5	24-133/41
95-47-6	o-Xylene	ND	22.7	21.4	94	20.7	95	3	25-140/35

CAS No.	Surrogate Recoveries	MS	MSD	T65774-3	Limits
460-00-4	4-Bromofluorobenzene	94%	95%	93%	21-163%
98-08-8	aaa-Trifluorotoluene	121%	123%	121%	39-170%

5.3.4
5

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: T65774
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17113-MB	IF203156.D	1	01/05/11	EM	12/22/10	OP17113	GIB1138

The QC reported here applies to the following samples:

Method: SW846 8015 M

T65774-1, T65774-2, T65774-3, T65774-5

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

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	74% 33-115%

6.1.1
6

Blank Spike Summary

Job Number: T65774
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17113-BS	IF203157.D	1	01/05/11	EM	12/22/10	OP17113	GIF1138

The QC reported here applies to the following samples:

Method: SW846 8015 M

T65774-1, T65774-2, T65774-3, T65774-5

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	33.3	25.4	76	45-107

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	77%	33-115%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T65774
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17113-MS	IF203158.D	1	01/05/11	EM	12/22/10	OP17113	GIB1138
OP17113-MSD	IF203159.D	1	01/05/11	EM	12/22/10	OP17113	GIF1138
T65774-5	IF203163.D	1	01/05/11	EM	12/22/10	OP17113	GIF1138

The QC reported here applies to the following samples:

Method: SW846 8015 M

T65774-1, T65774-2, T65774-3, T65774-5

CAS No.	Compound	T65774-5 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	8.75	39.3	29.2	52	28.8	50	1	45-107/34

CAS No.	Surrogate Recoveries	MS	MSD	T65774-5	Limits
84-15-1	o-Terphenyl	88%	82%	76%	33-115%

6.3.1

6

Report of Analysis

Client Sample ID:	JAQUEZ 18(14)-122010		
Lab Sample ID:	T65933-1	Date Sampled:	12/20/10
Matrix:	SO - Soil	Date Received:	12/23/10
Method:	SW846 8015	Percent Solids:	81.0
Project:	MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	HH0002286.D	1	12/23/10	AT	n/a	n/a	GHH115
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.61 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	6.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	91%		46-127%	
98-08-8	aaa-Trifluorotoluene	104%		44-120%	

(a) Sample was received unpreserved and outside the 48 hour preservation time.

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:	JAQUEZ 18(14)-122010		
Lab Sample ID:	T65933-1	Date Sampled:	12/20/10
Matrix:	SO - Soil	Date Received:	12/23/10
Method:	SW846 8021B	Percent Solids:	81.0
Project:	MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK036686.D	1	12/30/10	LB	n/a	n/a	GKK1761
Run #2							

	Initial Weight	Final Volume
Run #1	5.45 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.5	ug/kg	
100-41-4	Ethylbenzene	ND	4.5	ug/kg	
108-88-3	Toluene	ND	4.5	ug/kg	
1330-20-7	Xylenes (total)	ND	14	ug/kg	
	m,p-Xylene	ND	9.1	ug/kg	
95-47-6	o-Xylene	ND	4.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%		21-163%
98-08-8	aaa-Trifluorotoluene	123%		39-170%

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: JAQUEZ 18(14)-122010	
Lab Sample ID: T65933-1	Date Sampled: 12/20/10
Matrix: SO - Soil	Date Received: 12/23/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 81.0
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF203107.D	1	01/03/11	EM	12/28/10	OP17066	GIB1136
Run #2							

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

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	4.1	mg/kg	
	TPH (> C28-C40)	ND	4.1	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	105%		33-115%	

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:	JAQUEZ 19(15)-122110		
Lab Sample ID:	T65933-2	Date Sampled:	12/20/10
Matrix:	SO - Soil	Date Received:	12/23/10
Method:	SW846 8015	Percent Solids:	77.7
Project:	MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	HH0002287.D	1	12/23/10	AT	n/a	n/a	GHH115
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.74 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	7.0	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	95%		46-127%	
98-08-8	aaa-Trifluorotoluene	100%		44-120%	

(a) Sample was received unpreserved and outside the 48 hour preservation time.

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:	JAQUEZ 19(15)-122110		
Lab Sample ID:	T65933-2	Date Sampled:	12/20/10
Matrix:	SO - Soil	Date Received:	12/23/10
Method:	SW846 8021B	Percent Solids:	77.7
Project:	MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK036687.D	1	12/30/10	LB	n/a	n/a	GKK1761
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	5.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	ug/kg	
108-88-3	Toluene	ND	5.0	ug/kg	
1330-20-7	Xylenes (total)	ND	15	ug/kg	
	m,p-Xylene	ND	10	ug/kg	
95-47-6	o-Xylene	ND	5.0	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%		21-163%
98-08-8	aaa-Trifluorotoluene	124%		39-170%

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: JAQUEZ 19(15)-122110	
Lab Sample ID: T65933-2	Date Sampled: 12/20/10
Matrix: SO - Soil	Date Received: 12/23/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 77.7
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF203108.D	1	01/03/11	EM	12/28/10	OP17066	GIF1136
Run #2							

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

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	4.3	mg/kg	
	TPH (> C28-C40)	ND	4.3	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	83%		33-115%	

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: JAQUEZ 22(15)-122110	
Lab Sample ID: T65933-3	Date Sampled: 12/20/10
Matrix: SO - Soil	Date Received: 12/23/10
Method: SW846 8015	Percent Solids: 77.0
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH0002288.D	1	12/23/10	AT	n/a	n/a	GHH115
Run #2							

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

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	7.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		46-127%
98-08-8	aaa-Trifluorotoluene	104%		44-120%

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:	JAQUEZ 22(15)-122110		
Lab Sample ID:	T65933-3	Date Sampled:	12/20/10
Matrix:	SO - Soil	Date Received:	12/23/10
Method:	SW846 8021B	Percent Solids:	77.0
Project:	MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK036688.D	1	12/30/10	LB	n/a	n/a	GKK1761
Run #2							

	Initial Weight	Final Volume
Run #1	5.76 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.5	ug/kg	
100-41-4	Ethylbenzene	ND	4.5	ug/kg	
108-88-3	Toluene	ND	4.5	ug/kg	
1330-20-7	Xylenes (total)	ND	14	ug/kg	
	m,p-Xylene	ND	9.0	ug/kg	
95-47-6	o-Xylene	ND	4.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%		21-163%
98-08-8	aaa-Trifluorotoluene	126%		39-170%

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: JAQUEZ 22(15)-122110	
Lab Sample ID: T65933-3	Date Sampled: 12/20/10
Matrix: SO - Soil	Date Received: 12/23/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 77.0
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF203109.D	1	01/03/11	EM	12/28/10	OP17066	GIB1136
Run #2							

	Initial Weight	Final Volume
Run #1	30.7 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	4.2	mg/kg	
	TPH (> C28-C40)	ND	4.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	101%		33-115%

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: JAQUEZ 23(15)-122110	
Lab Sample ID: T65933-4	Date Sampled: 12/20/10
Matrix: SO - Soil	Date Received: 12/23/10
Method: SW846 8015	Percent Solids: 77.8
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH0002291.D	1	12/23/10	AT	n/a	n/a	GHH115
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.05 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	7.8	mg/kg	

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
 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:	JAQUEZ 23(15)-122110		
Lab Sample ID:	T65933-4	Date Sampled:	12/20/10
Matrix:	SO - Soil	Date Received:	12/23/10
Method:	SW846 8021B	Percent Solids:	77.8
Project:	MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK036689.D	1	12/30/10	LB	n/a	n/a	GKK1761
Run #2							

	Initial Weight	Final Volume
Run #1	5.37 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.8	ug/kg	
100-41-4	Ethylbenzene	ND	4.8	ug/kg	
108-88-3	Toluene	ND	4.8	ug/kg	
1330-20-7	Xylenes (total)	ND	14	ug/kg	
	m,p-Xylene	ND	9.6	ug/kg	
95-47-6	o-Xylene	ND	4.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%		21-163%
98-08-8	aaa-Trifluorotoluene	123%		39-170%

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: JAQUEZ 23(15)-122110	
Lab Sample ID: T65933-4	Date Sampled: 12/20/10
Matrix: SO - Soil	Date Received: 12/23/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 77.8
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF203110.D	1	01/03/11	EM	12/28/10	OP17066	GIF1136
Run #2							

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

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	4.2	mg/kg	
	TPH (> C28-C40)	ND	4.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	73%		33-115%

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:	JAQUEZ 24(15)-122110		
Lab Sample ID:	T65933-5	Date Sampled:	12/20/10
Matrix:	SO - Soil	Date Received:	12/23/10
Method:	SW846 8015	Percent Solids:	83.8
Project:	MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH0002292.D	1	12/23/10	AT	n/a	n/a	GHH115
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.16 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	6.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	93%		46-127%	
98-08-8	aaa-Trifluorotoluene	103%		44-120%	

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:	JAQUEZ 24(15)-122110		
Lab Sample ID:	T65933-5	Date Sampled:	12/20/10
Matrix:	SO - Soil	Date Received:	12/23/10
Method:	SW846 8021B	Percent Solids:	83.8
Project:	MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK036690.D	1	12/30/10	LB	n/a	n/a	GKK1761
Run #2							

	Initial Weight	Final Volume
Run #1	5.39 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.4	ug/kg	
100-41-4	Ethylbenzene	ND	4.4	ug/kg	
108-88-3	Toluene	ND	4.4	ug/kg	
1330-20-7	Xylenes (total)	ND	13	ug/kg	
	m,p-Xylene	ND	8.9	ug/kg	
95-47-6	o-Xylene	ND	4.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%		21-163%
98-08-8	aaa-Trifluorotoluene	125%		39-170%

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: JAQUEZ 24(15)-122110	
Lab Sample ID: T65933-5	Date Sampled: 12/20/10
Matrix: SO - Soil	Date Received: 12/23/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 83.8
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF203111.D	1	01/03/11	EM	12/28/10	OP17066	GIB1136
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	3.9	mg/kg	
	TPH (> C28-C40)	ND	3.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	82%		33-115%	

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: JAQUEZ 25(20)-122110	
Lab Sample ID: T65933-6	Date Sampled: 12/20/10
Matrix: SO - Soil	Date Received: 12/23/10
Method: SW846 8015	Percent Solids: 80.3
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH0002293.D	1	12/24/10	AT	n/a	n/a	GHH115
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.43 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	7.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		46-127%
98-08-8	aaa-Trifluorotoluene	105%		44-120%

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:	JAQUEZ 25(20)-122110		
Lab Sample ID:	T65933-6	Date Sampled:	12/20/10
Matrix:	SO - Soil	Date Received:	12/23/10
Method:	SW846 8021B	Percent Solids:	80.3
Project:	MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK036691.D	1	12/30/10	LB	n/a	n/a	GKK1761
Run #2							

	Initial Weight	Final Volume
Run #1	5.42 g	5.0 ml
Run #2		

Purgeable Aromatics

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		21-163%
98-08-8	aaa-Trifluorotoluene	125%		39-170%

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: JAQUEZ 25(20)-122110	
Lab Sample ID: T65933-6	Date Sampled: 12/20/10
Matrix: SO - Soil	Date Received: 12/23/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 80.3
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF203112.D	1	01/03/11	EM	12/28/10	OP17066	GIF1136
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	4.1	mg/kg	
	TPH (> C28-C40)	ND	4.1	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	84%		33-115%	

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:	JAQUEZ 8(9)-121510		
Lab Sample ID:	T65933-7	Date Sampled:	12/20/10
Matrix:	SO - Soil	Date Received:	12/23/10
Method:	SW846 8015	Percent Solids:	78.3
Project:	MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	HH0002282.D	1	12/23/10	AT	n/a	n/a	GHH115
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.34 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	27.5	7.4	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	99%		46-127%	
98-08-8	aaa-Trifluorotoluene	129% ^b		44-120%	

(a) Sample was received unpreserved and outside the 48 hour preservation time.

(b) Outside control limits due to matrix interference. Confirmed by MS/MSD.

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:	JAQUEZ 8(9)-121510		
Lab Sample ID:	T65933-7	Date Sampled:	12/20/10
Matrix:	SO - Soil	Date Received:	12/23/10
Method:	SW846 8021B	Percent Solids:	78.3
Project:	MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK036698.D	1	12/31/10	LB	n/a	n/a	GKK1761
Run #2							

	Initial Weight	Final Volume
Run #1	5.25 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.9	ug/kg	
100-41-4	Ethylbenzene ^a	11.3	4.9	ug/kg	
108-88-3	Toluene	ND	4.9	ug/kg	
1330-20-7	Xylenes (total)	ND	15	ug/kg	
	m,p-Xylene	ND	9.7	ug/kg	
95-47-6	o-Xylene	ND	4.9	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%		21-163%
98-08-8	aaa-Trifluorotoluene	125%		39-170%

(a) More than 40% RPD for detected concentrations between two GC columns.

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: JAQUEZ 8(9)-121510	
Lab Sample ID: T65933-7	Date Sampled: 12/20/10
Matrix: SO - Soil	Date Received: 12/23/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 78.3
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF203113.D	1	01/03/11	EM	12/28/10	OP17066	GIB1136
Run #2							

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

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	65.4	4.2	mg/kg	
	TPH (> C28-C40)	21.6	4.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	93%		33-115%	

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:	122210TB01-GROUNDWATER		
Lab Sample ID:	T65933-8	Date Sampled:	12/22/10
Matrix:	AQ - Ground Water	Date Received:	12/23/10
Method:	SW846 8021B	Percent Solids:	n/a
Project:	MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK036579.D	1	12/27/10	LB	n/a	n/a	GKK1757
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	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		58-125%
98-08-8	aaa-Trifluorotoluene	102%		73-139%

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: JAQUEZ-31(9)-122210	
Lab Sample ID: T65933-9	Date Sampled: 12/22/10
Matrix: SO - Soil	Date Received: 12/23/10
Method: SW846 8015	Percent Solids: 78.8
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH0002294.D	1	12/24/10	AT	n/a	n/a	GHH115
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.34 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	7.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%		46-127%
98-08-8	aaa-Trifluorotoluene	101%		44-120%

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:	JAQUEZ-31(9)-122210		
Lab Sample ID:	T65933-9	Date Sampled:	12/22/10
Matrix:	SO - Soil	Date Received:	12/23/10
Method:	SW846 8021B	Percent Solids:	78.8
Project:	MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK036692.D	1	12/30/10	LB	n/a	n/a	GKK1761
Run #2							

	Initial Weight	Final Volume
Run #1	5.80 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.4	ug/kg	
100-41-4	Ethylbenzene	ND	4.4	ug/kg	
108-88-3	Toluene	ND	4.4	ug/kg	
1330-20-7	Xylenes (total)	ND	13	ug/kg	
	m,p-Xylene	ND	8.8	ug/kg	
95-47-6	o-Xylene	ND	4.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	89%		21-163%
98-08-8	aaa-Trifluorotoluene	124%		39-170%

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: JAQUEZ-31(9)-122210	
Lab Sample ID: T65933-9	Date Sampled: 12/22/10
Matrix: SO - Soil	Date Received: 12/23/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 78.8
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF203114.D	1	01/03/11	EM	12/28/10	OP17066	GIF1136
Run #2							

	Initial Weight	Final Volume
Run #1	30.6 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	4.2	mg/kg	
	TPH (> C28-C40)	ND	4.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	92%		33-115%	

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:	JAQUEZ-33(14)-122210		
Lab Sample ID:	T65933-10	Date Sampled:	12/22/10
Matrix:	AQ - Ground Water	Date Received:	12/23/10
Method:	SW846 8021B	Percent Solids:	n/a
Project:	MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK036581.D	1	12/27/10	LB	n/a	n/a	GKK1757
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	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	87%		58-125%
98-08-8	aaa-Trifluorotoluene	93%		73-139%

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: JAQUEZ-32(11)-122210	
Lab Sample ID: T65933-11	Date Sampled: 12/22/10
Matrix: SO - Soil	Date Received: 12/23/10
Method: SW846 8015	Percent Solids: 80.3
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH0002295.D	1	12/24/10	AT	n/a	n/a	GHH115
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.59 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	6.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	95%		46-127%
98-08-8	aaa-Trifluorotoluene	101%		44-120%

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:	JAQUEZ-32(11)-122210		
Lab Sample ID:	T65933-11	Date Sampled:	12/22/10
Matrix:	SO - Soil	Date Received:	12/23/10
Method:	SW846 8021B	Percent Solids:	80.3
Project:	MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK036693.D	1	12/31/10	LB	n/a	n/a	GKK1761
Run #2							

	Initial Weight	Final Volume
Run #1	5.69 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.4	ug/kg	
100-41-4	Ethylbenzene	ND	4.4	ug/kg	
108-88-3	Toluene ^a	ND	4.4	ug/kg	
1330-20-7	Xylenes (total)	ND	13	ug/kg	
	m,p-Xylene	ND	8.8	ug/kg	
95-47-6	o-Xylene	ND	4.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		21-163%
98-08-8	aaa-Trifluorotoluene	124%		39-170%

(a) More than 40% RPD for detected concentrations between two GC columns.

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: JAQUEZ-32(11)-122210	
Lab Sample ID: T65933-11	Date Sampled: 12/22/10
Matrix: SO - Soil	Date Received: 12/23/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 80.3
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF203115.D	1	01/03/11	EM	12/28/10	OP17066	GIB1136
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	4.1	mg/kg	
	TPH (> C28-C40)	ND	4.1	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	90% ^a		33-115%	

(a) A recovery adjusted due to double spiking.

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:	122210TB02-SOIL	
Lab Sample ID:	T65933-12	Date Sampled: 12/22/10
Matrix:	AQ - Trip Blank Water	Date Received: 12/23/10
Method:	SW846 8021B	Percent Solids: n/a
Project:	MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK036559.D	1	12/27/10	LB	n/a	n/a	GKK1757
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	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%		58-125%
98-08-8	aaa-Trifluorotoluene	99%		73-139%

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

Technical Report for

EL PASO CORPORATION

MWHCODE: San Juan River Basin Program

JAQUEZ SITE

Accutest Job Number: T65972

Sampling Date: 12/23/10

Report to:

MWH
1801 California Street Suite 2900
Denver, CO 80202
jed.smith@mwhglobal.com

ATTN: Jed Smith

Total number of pages in report: **26**



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 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: T65972

MWHCODE: San Juan River Basin Program
Project No: JAQUEZ SITE

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T65972-1	12/23/10	11:20	12/24/10	SO	Soil	JAQUEZ-BH-1(16.25')-122310
T65972-2	12/23/10	10:35	12/24/10	SO	Soil	JAQUEZ-BH-2(16.5')-122310

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 T65972

Site: MWHCODE: San Juan River Basin Program

Report Date 1/7/2011 12:47:21 PM

2 Sample(s) were collected on 12/23/2010 and were received at Accutest on 12/24/2010 properly preserved, at 2.5 Deg. C and intact. These Samples received an Accutest job number of T65972. 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 GC By Method SW846 8015

Matrix SO	Batch ID: GBB242
------------------	-------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T65972-1MS, T65972-1MSD were used as the QC samples indicated.

Volatiles by GC By Method SW846 8021B

Matrix SO	Batch ID: GKK1761
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T65774-3MS, T65774-3MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8015 M

Matrix SO	Batch ID: OP17066
------------------	--------------------------

- 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) T65933-11MS, T65933-11MSD were used as the QC samples indicated.

Wet Chemistry By Method SM 2540 G

Matrix SO	Batch ID: GN27739
------------------	--------------------------

- Sample(s) T65933-1DUP 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:	JAQUEZ-BH-1(16.25')-122310		
Lab Sample ID:	T65972-1	Date Sampled:	12/23/10
Matrix:	SO - Soil	Date Received:	12/24/10
Method:	SW846 8015	Percent Solids:	79.3
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0004815.D	1	12/27/10	AT	n/a	n/a	GBB242
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	Units	Q
	TPH-GRO (C6-C10)	ND	7.5	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	93%		46-127%	
98-08-8	aaa-Trifluorotoluene	103%		44-120%	

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

3.1
3

Client Sample ID:	JAQUEZ-BH-1(16.25')-122310		
Lab Sample ID:	T65972-1	Date Sampled:	12/23/10
Matrix:	SO - Soil	Date Received:	12/24/10
Method:	SW846 8021B	Percent Solids:	79.3
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK036694.D	1	12/31/10	LB	n/a	n/a	GKK1761
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.17 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.9	ug/kg	
100-41-4	Ethylbenzene	ND	4.9	ug/kg	
108-88-3	Toluene	ND	4.9	ug/kg	
1330-20-7	Xylenes (total)	ND	15	ug/kg	
	m,p-Xylene	ND	9.8	ug/kg	
95-47-6	o-Xylene	ND	4.9	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	87%		21-163%
98-08-8	aaa-Trifluorotoluene	122%		39-170%

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

3.1
3

Client Sample ID: JAQUEZ-BH-1(16.25')-122310	
Lab Sample ID: T65972-1	Date Sampled: 12/23/10
Matrix: SO - Soil	Date Received: 12/24/10
Method: SW846 8015 M SW846 3550B	Percent Solids: 79.3
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF203116.D	1	01/03/11	EM	12/28/10	OP17066	GIF1136
Run #2							

	Initial Weight	Final Volume
Run #1	30.6 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	4.1	mg/kg	
	TPH (> C28-C40)	ND	4.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	89%		33-115%

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

32
3

Client Sample ID:	JAQUEZ-BH-2(16.5')-122310		
Lab Sample ID:	T65972-2	Date Sampled:	12/23/10
Matrix:	SO - Soil	Date Received:	12/24/10
Method:	SW846 8015	Percent Solids:	76.5
Project:	MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0004819.D	1	12/27/10	AT	n/a	n/a	GBB242
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.31 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	7.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	93%		46-127%	
98-08-8	aaa-Trifluorotoluene	102%		44-120%	

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

32
3

Client Sample ID:	JAQUEZ-BH-2(16.5')-122310		
Lab Sample ID:	T65972-2	Date Sampled:	12/23/10
Matrix:	SO - Soil	Date Received:	12/24/10
Method:	SW846 8021B	Percent Solids:	76.5
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK036695.D	1	12/31/10	LB	n/a	n/a	GKK1761
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.62 g	5.0 ml
Run #2		

Purgeable Aromatics

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	89%		21-163%
98-08-8	aaa-Trifluorotoluene	121%		39-170%

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

32
3

Client Sample ID:	JAQUEZ-BH-2(16.5')-122310		
Lab Sample ID:	T65972-2	Date Sampled:	12/23/10
Matrix:	SO - Soil	Date Received:	12/24/10
Method:	SW846 8015 M SW846 3550B	Percent Solids:	76.5
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF203117.D	1	01/03/11	EM	12/28/10	OP17066	GIB1136
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	4.4	mg/kg	
	TPH (> C28-C40)	ND	4.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	83%		33-115%

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

SAMPLE INSPECTION FORM

Accutest Job Number: T65972 Client: MWH Date/Time Received: 12/24/10 1020

of Coolers Received: 1 Thermometer #: IRGunc04 Temperature Adjustment Factor: 0

Cooler Temperatures (initial/adjusted): #1: 2.5°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 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

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

Summary of Discrepancies:

TECHNICIAN SIGNATURE/DATE: *James Middleton* 12/24/10

INFORMATION AND SAMPLE LABELING VERIFIED BY: _____

♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ **CORRECTIVE ACTIONS** ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦

Client Representative Notified: _____ Date: _____

By Accutest Representative: _____ Via: Phone Email

Client Instructions: _____

4.1
4

GC 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: T65972
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB242-MB	BB0004804.DI		12/27/10	AT	n/a	n/a	GBB242

The QC reported here applies to the following samples:

Method: SW846 8015

T65972-1, T65972-2

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

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	93%	46-127%
98-08-8	aaa-Trifluorotoluene	103%	44-120%

Method Blank Summary

Job Number: T65972
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1761-MB	KK036679.D 1		12/30/10	LB	n/a	n/a	GKK1761

The QC reported here applies to the following samples:

Method: SW846 8021B

T65972-1, T65972-2

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

CAS No.	Surrogate Recoveries	Results	Limits
460-00-4	4-Bromofluorobenzene	94%	21-163%
98-08-8	aaa-Trifluorotoluene	116%	39-170%

Blank Spike Summary

Job Number: T65972
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB242-BS	BB0004801.DI		12/27/10	AT	n/a	n/a	GBB242

The QC reported here applies to the following samples:

Method: SW846 8015

T65972-1, T65972-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.363	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%

Blank Spike Summary

Job Number: T65972
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1761-BS	KK036675.D 1		12/30/10	LB	n/a	n/a	GKK1761

The QC reported here applies to the following samples:

Method: SW846 8021B

T65972-1, T65972-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	20	20.4	102	73-132
100-41-4	Ethylbenzene	20	20.9	105	70-133
108-88-3	Toluene	20	20.5	103	74-133
1330-20-7	Xylenes (total)	60	62.4	104	73-134
	m,p-Xylene	40	41.5	104	70-134
95-47-6	o-Xylene	20	20.8	104	76-131

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	95%	21-163%
98-08-8	aaa-Trifluorotoluene	122%	39-170%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T65972
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T65972-1MS	BB0004816.DI		12/27/10	AT	n/a	n/a	GBB242
T65972-1MSD	BB0004817.DI		12/27/10	AT	n/a	n/a	GBB242
T65972-1	BB0004815.DI		12/27/10	AT	n/a	n/a	GBB242

The QC reported here applies to the following samples:

Method: SW846 8015

T65972-1, T65972-2

CAS No.	Compound	T65972-1 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	30	27.6	92	27.7	92	0	78-115/14

CAS No.	Surrogate Recoveries	MS	MSD	T65972-1	Limits
460-00-4	4-Bromofluorobenzene	96%	96%	93%	46-127%
98-08-8	aaa-Trifluorotoluene	107%	107%	103%	44-120%

5.3.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T65972
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T65774-3MS	KK036682.D 1		12/30/10	LB	n/a	n/a	GKK1761
T65774-3MSD	KK036683.D 1		12/30/10	LB	n/a	n/a	GKK1761
T65774-3	KK036680.D 1		12/30/10	LB	n/a	n/a	GKK1761

The QC reported here applies to the following samples:

Method: SW846 8021B

T65972-1, T65972-2

CAS No.	Compound	T65774-3 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	22.7	20.8	91	18.9	87	10	41-129/33
100-41-4	Ethylbenzene	ND	22.7	21.1	93	20.2	93	4	15-139/36
108-88-3	Toluene	ND	22.7	20.8	91	19.4	89	7	26-141/38
1330-20-7	Xylenes (total)	ND	68.2	63.0	92	60.3	92	4	22-132/33
	m,p-Xylene	ND	45.5	41.6	91	39.7	91	5	24-133/41
95-47-6	o-Xylene	ND	22.7	21.4	94	20.7	95	3	25-140/35

CAS No.	Surrogate Recoveries	MS	MSD	T65774-3	Limits
460-00-4	4-Bromofluorobenzene	94%	95%	93%	21-163%
98-08-8	aaa-Trifluorotoluene	121%	123%	121%	39-170%

5.3.2
5

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: T65972
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17066-MB	IF203103.D	1	01/03/11	EM	12/28/10	OP17066	GIB1136

The QC reported here applies to the following samples:

Method: SW846 8015 M

T65972-1, T65972-2

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

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	102% 33-115%

Blank Spike Summary

Job Number: T65972
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17066-BS	IF203104.D	1	01/03/11	EM	12/28/10	OP17066	GIF1136

The QC reported here applies to the following samples:

Method: SW846 8015 M

T65972-1, T65972-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	33.1	21.4	65	45-107

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	83%	33-115%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T65972
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17066-MS	IF203105.D	1	01/03/11	EM	12/28/10	OP17066	GIB1136
OP17066-MSD	IF203106.D	1	01/03/11	EM	12/28/10	OP17066	GIF1136
T65933-11	IF203115.D	1	01/03/11	EM	12/28/10	OP17066	GIB1136

The QC reported here applies to the following samples:

Method: SW846 8015 M

T65972-1, T65972-2

CAS No.	Compound	T65933-11 mg/kg	Spike Q	mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	ND	41.1	31.6	77	31.2	76	1	45-107/34	

CAS No.	Surrogate Recoveries	MS	MSD	T65933-11	Limits
84-15-1	o-Terphenyl	90%	86%	90% ^a	33-115%

(a) A recovery adjusted due to double spiking.

Technical Report for

EL PASO CORPORATION

MWHCODE: San Juan River Basin Program

JAQUEZ SITE

Accutest Job Number: T66658

Sampling Dates: 01/03/11 - 01/05/11

Report to:

MWH
1801 California Street Suite 2900
Denver, CO 80202
jed.smith@mwhglobal.com

ATTN: Jed Smith

Total number of pages in report: **50**



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 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: T66658

MWHCODE: San Juan River Basin Program

Project No: JAQUEZ SITE

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T66658-1	01/04/11	14:46	01/07/11	SO	Soil	JAQUEZ-49(10)010411
T66658-2	01/04/11	16:16	01/07/11	SO	Soil	JAQUEZ-55(9)010411
T66658-3	01/05/11	17:30	01/07/11	SO	Soil	JAQUEZ-66(9)010511
T66658-4	01/05/11	17:35	01/07/11	SO	Soil	JAQUEZ-67(9)010511
T66658-5	01/03/11	13:50	01/07/11	SO	Soil	JAQUEZ-40(7)010311
T66658-6	01/03/11	13:50	01/07/11	AQ	Trip Blank Water	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 T66658

Site: MWHCODE: San Juan River Basin Program

Report Date 1/18/2011 9:11:23 AM

5 Sample(s) and 1 Trip Blank were collected on between 01/03/2011 and 01/05/2011 and were received at Accutest on 01/07/2011 properly preserved, at 5.6 Deg. C and intact. These Samples received an Accutest job number of T66658. 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 GC By Method SW846 8015

Matrix SO

Batch ID: GBB252

- All samples were analyzed within the recommended method holding time.
- Sample(s) T66658-3MS, T66658-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- 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: GHH124

- All samples were analyzed within the recommended method holding time.
- Sample(s) T66684-2MS, T66684-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- T66658-1, T66658-2 and T66658-5: Sample were received unpreserved and outside the 48 hour preservation time.

Volatiles by GC By Method SW846 8021B

Matrix AQ	Batch ID: GKK1768
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T66618-1MS, T66618-1MSD were used as the QC samples indicated.
- Sample(s) T66658-3, T66658-3MS, T66658-3MSD, T66658-4 have surrogates outside control limits. Confirmation run for surrogate recoveries.

Matrix SO	Batch ID: GKK1769
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T66862-1MS, T66862-1MSD were used as the QC samples indicated.
- Sample(s) T66658-3, T66658-3MS, T66658-3MSD, T66658-4 have surrogates outside control limits. Confirmation run for surrogate recoveries.
- T66658-1 and T66658-5: Sample were received unpreserved and outside the 48 hour preservation time.

Matrix SO	Batch ID: GKK1770
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T66658-2MS, T66658-2MSD were used as the QC samples indicated.
- Sample(s) T66658-3, T66658-3MS, T66658-3MSD, T66658-4 have surrogates outside control limits. Confirmation run for surrogate recoveries.
- T66658-2: Sample was received unpreserved and outside the 48 hour preservation time.
- T66658-2 for Ethylbenzene: More than 40% RPD for detected concentrations between two GC columns.

Matrix SO	Batch ID: GKK1771
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- Sample(s) T66658-3MS, T66658-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T66658-3, T66658-3MS, T66658-3MSD, T66658-4 have surrogates outside control limits. Confirmation run for surrogate recoveries.

Extractables by GC By Method SW846 8015 M

Matrix SO	Batch ID: OP17150
------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) T66658-1MS, T66658-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Wet Chemistry By Method SM 2540 G

Matrix SO	Batch ID: GN27948
------------------	--------------------------

- Sample(s) T66621-20DUP were used as the QC samples for Solids, Percent.

Matrix SO	Batch ID: GN27997
------------------	--------------------------

- Sample(s) T66784-1DUP 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

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Client Sample ID: JAQUEZ-49(10)010411	
Lab Sample ID: T66658-1	Date Sampled: 01/04/11
Matrix: SO - Soil	Date Received: 01/07/11
Method: SW846 8015	Percent Solids: 79.4
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	HH0002387.D	1	01/10/11	LB	n/a	n/a	GHH124
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.47 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	7.1	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	89%		46-127%	
98-08-8	aaa-Trifluorotoluene	92%		44-120%	

(a) Sample was received unpreserved and outside the 48 hour preservation time.

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: JAQUEZ-49(10)010411	
Lab Sample ID: T66658-1	Date Sampled: 01/04/11
Matrix: SO - Soil	Date Received: 01/07/11
Method: SW846 8021B	Percent Solids: 79.4
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK036884.D	1	01/12/11	AT	n/a	n/a	GKK1769
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.21 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.8	ug/kg	
100-41-4	Ethylbenzene	ND	4.8	ug/kg	
108-88-3	Toluene	ND	4.8	ug/kg	
1330-20-7	Xylenes (total)	ND	15	ug/kg	
	m,p-Xylene	ND	9.7	ug/kg	
95-47-6	o-Xylene	ND	4.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%		21-163%
98-08-8	aaa-Trifluorotoluene	134%		39-170%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

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

3.1
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Client Sample ID: JAQUEZ-49(10)010411	
Lab Sample ID: T66658-1	Date Sampled: 01/04/11
Matrix: SO - Soil	Date Received: 01/07/11
Method: SW846 8015 M SW846 3550B	Percent Solids: 79.4
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF203252.D	1	01/10/11	EM	01/10/11	OP17150	GIB1142
Run #2							

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

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	4.2	mg/kg	
	TPH (> C28-C40)	ND	4.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	68%		33-115%

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

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3

Client Sample ID: JAQUEZ-55(9)010411	
Lab Sample ID: T66658-2	Date Sampled: 01/04/11
Matrix: SO - Soil	Date Received: 01/07/11
Method: SW846 8015	Percent Solids: 90.7
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	HH0002392.D	1	01/10/11	LB	n/a	n/a	GHH124
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.30 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	5.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	87%		46-127%	
98-08-8	aaa-Trifluorotoluene	93%		44-120%	

(a) Sample was received unpreserved and outside the 48 hour preservation time.

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

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Client Sample ID: JAQUEZ-55(9)010411	
Lab Sample ID: T66658-2	Date Sampled: 01/04/11
Matrix: SO - Soil	Date Received: 01/07/11
Method: SW846 8021B	Percent Solids: 90.7
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK036898.D	1	01/12/11	AT	n/a	n/a	GKK1770
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.56 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.0	ug/kg	
100-41-4	Ethylbenzene ^b	7.7	4.0	ug/kg	
108-88-3	Toluene	ND	4.0	ug/kg	
1330-20-7	Xylenes (total)	14.5	12	ug/kg	
	m,p-Xylene	9.9	7.9	ug/kg	
95-47-6	o-Xylene	4.6	4.0	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%		21-163%
98-08-8	aaa-Trifluorotoluene	153%		39-170%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

(b) More than 40% RPD for detected concentrations between two GC columns.

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

32
3

Client Sample ID: JAQUEZ-55(9)010411	
Lab Sample ID: T66658-2	Date Sampled: 01/04/11
Matrix: SO - Soil	Date Received: 01/07/11
Method: SW846 8015 M SW846 3550B	Percent Solids: 90.7
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF203253.D	1	01/10/11	EM	01/10/11	OP17150	GIF1142
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.7 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	4.13	3.6	mg/kg	
	TPH (> C28-C40)	ND	3.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	81%		33-115%

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:	JAQUEZ-66(9)010511		
Lab Sample ID:	T66658-3	Date Sampled:	01/05/11
Matrix:	SO - Soil	Date Received:	01/07/11
Method:	SW846 8015	Percent Solids:	85.1
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0005009.D	20	01/13/11	LB	n/a	n/a	GBB252
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.23 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	600	130	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	105%		46-127%
98-08-8	aaa-Trifluorotoluene	109%		44-120%

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:	JAQUEZ-66(9)010511		
Lab Sample ID:	T66658-3	Date Sampled:	01/05/11
Matrix:	SO - Soil	Date Received:	01/07/11
Method:	SW846 8021B	Percent Solids:	85.1
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK036917.D	1	01/13/11	AT	n/a	n/a	GKK1771
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.23 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	260	ug/kg	
100-41-4	Ethylbenzene	1620	260	ug/kg	
108-88-3	Toluene	3540	260	ug/kg	
1330-20-7	Xylenes (total)	26100	780	ug/kg	
	m,p-Xylene	19100	520	ug/kg	
95-47-6	o-Xylene	7040	260	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	107%		21-163%
98-08-8	aaa-Trifluorotoluene	2482% ^a		39-170%

(a) Outside control limits due to matrix interference. Confirmed by MS/MSD.

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: JAQUEZ-66(9)010511	
Lab Sample ID: T66658-3	Date Sampled: 01/05/11
Matrix: SO - Soil	Date Received: 01/07/11
Method: SW846 8015 M SW846 3550B	Percent Solids: 85.1
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF203264.D	1	01/11/11	EM	01/10/11	OP17150	GIB1142
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	286	3.9	mg/kg	
	TPH (> C28-C40)	38.0	3.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	77%		33-115%

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:	JAQUEZ-67(9)010511		
Lab Sample ID:	T66658-4	Date Sampled:	01/05/11
Matrix:	SO - Soil	Date Received:	01/07/11
Method:	SW846 8015	Percent Solids:	87.5
Project:	MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0005008.D	10	01/13/11	LB	n/a	n/a	GBB252
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.26 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	255	61	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		46-127%
98-08-8	aaa-Trifluorotoluene	105%		44-120%

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: JAQUEZ-67(9)010511		Date Sampled: 01/05/11
Lab Sample ID: T66658-4		Date Received: 01/07/11
Matrix: SO - Soil		Percent Solids: 87.5
Method: SW846 8021B		
Project: MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK036921.D	1	01/13/11	AT	n/a	n/a	GKK1771
Run #2 ^a	KK036922.D	1	01/13/11	AT	n/a	n/a	GKK1771

	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

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	250	ug/kg	
100-41-4	Ethylbenzene	728	250	ug/kg	
108-88-3	Toluene	2030	250	ug/kg	
1330-20-7	Xylenes (total)	12100	740	ug/kg	
	m,p-Xylene	9250	490	ug/kg	
95-47-6	o-Xylene	2860	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	103%	105%	21-163%
98-08-8	aaa-Trifluorotoluene	1081% ^b	1033% ^b	39-170%

- (a) Confirmation run for surrogate recoveries.
- (b) Outside control limits due to matrix interference. Confirmed by reanalysis.

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

3.4
3

Client Sample ID: JAQUEZ-67(9)010511	
Lab Sample ID: T66658-4	Date Sampled: 01/05/11
Matrix: SO - Soil	Date Received: 01/07/11
Method: SW846 8015 M SW846 3550B	Percent Solids: 87.5
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF203265.D	1	01/11/11	EM	01/10/11	OP17150	GIF1142
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	129	3.8	mg/kg	
	TPH (> C28-C40)	17.6	3.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	66%		33-115%

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: JAQUEZ-40(7)010311	
Lab Sample ID: T66658-5	Date Sampled: 01/03/11
Matrix: SO - Soil	Date Received: 01/07/11
Method: SW846 8015	Percent Solids: 87.4
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	HH0002386.D	1	01/10/11	LB	n/a	n/a	GHH124
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.78 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	5.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	87%		46-127%	
98-08-8	aaa-Trifluorotoluene	94%		44-120%	

(a) Sample was received unpreserved and outside the 48 hour preservation time.

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:	JAQUEZ-40(7)010311		
Lab Sample ID:	T66658-5	Date Sampled:	01/03/11
Matrix:	SO - Soil	Date Received:	01/07/11
Method:	SW846 8021B	Percent Solids:	87.4
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK036885.D	1	01/12/11	AT	n/a	n/a	GKK1769
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.01 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.6	ug/kg	
100-41-4	Ethylbenzene	ND	4.6	ug/kg	
108-88-3	Toluene	ND	4.6	ug/kg	
1330-20-7	Xylenes (total)	ND	14	ug/kg	
	m,p-Xylene	ND	9.1	ug/kg	
95-47-6	o-Xylene	ND	4.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	78%		21-163%
98-08-8	aaa-Trifluorotoluene	118%		39-170%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

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: JAQUEZ-40(7)010311	
Lab Sample ID: T66658-5	Date Sampled: 01/03/11
Matrix: SO - Soil	Date Received: 01/07/11
Method: SW846 8015 M SW846 3550B	Percent Solids: 87.4
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF203254.D	1	01/10/11	EM	01/10/11	OP17150	GIB1142
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	3.8	mg/kg	
	TPH (> C28-C40)	4.52	3.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	61%		33-115%

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

3.6
3

Client Sample ID: TRIP BLANK	
Lab Sample ID: T66658-6	Date Sampled: 01/03/11
Matrix: AQ - Trip Blank Water	Date Received: 01/07/11
Method: SW846 8021B	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	KK036842.D	1	01/10/11	AT	n/a	n/a	GKK1768
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	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	90%		58-125%
98-08-8	aaa-Trifluorotoluene	106%		73-139%

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



CHAIN OF CUSTODY

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

Fed-Ex Tracking # 8744 76531594	Bottle Order Control #
Accutest Quote #	Accutest Job # T66658

Client / Reporting Information		Project Information		Requested Analyses										Matrix Codes			
Company Name MWH		Project Name / No. San Juan River Basin Program - Jaquez Site		BTEX (8021B/5035) include m, p, o- & o-xylene TYPH/5035/8015 TERPH/8015										DW - Drinking Water			
Project Contact Jed Smith E-Mail: jed.smith@mwhglobal.com		Bill to El Paso Corp Invoice Attn: Norma Ramos												GW - Ground Water			
Address 1801 California Street, Suite 2900		Address 1001 Louisiana Street, Rm S1904B												WW - Wastewater			
City Denver State: CO Zip: 80202		City Hou State: TX Zip: 77002												SO - Soil			
Phone No. 303-291-2276 Fax No.		Phone No. 303-291-2276 Fax No.												SL - Sludge			
Sample Name Brooke Herb / Ashley Ager		Client Purchase Order #		OI - Oil													
Accutest Sample #	Field ID / Point of Collection	Date	Time	Matrix	# of bottles	HCl	NH3	HNO3	H2SO4	NH4NO3	MCH	NO3	NO2	LAB USE ONLY			
1	Jaquez-49(10)010411	1/4/2011	14:40	SD	2												
2	Jaquez-55(9)010411	1/4/2011	16:10	SD	2												
3	Jaquez-66(9)010511	1/5/2011	17:30	SD	2									HOLD			
4	Jaquez-67(9)010511	1/5/2011	17:35	SD	2									HOLD			
5	Jaquez-40(7)010311	1/3/2011	13:50	SD	2												
6	Thp Blank																
Turnaround Time (Business days)		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		Approved By/ Date:		<input type="checkbox"/> Commercial "A" <input checked="" type="checkbox"/> Commercial "B" <input type="checkbox"/> Reduced Tier 1 <input type="checkbox"/> Full Data Package		<input type="checkbox"/> TRRP-13 <input type="checkbox"/> EDD Format <input type="checkbox"/> Other		If samples are received unpreserved, please notify MWH regarding holding time!! Hold samples Jaquez 66 & 67 per Jed Smith instruction									
Real time analytical data available via Lablink																	
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY																	
Relinquished by Sampler: 1 Brooke Herb		Date Time: 1/6/11 1520		Received By: 1		Relinquished By: 2 FedEx		Date Time: 1/7/11 0920		Received By: 2 ALGC		Date Time: Norma Ramos					
Relinquished by:		Date Time:		Received By:		Relinquished By:		Date Time:		Received By:		Date Time:					
Relinquished by:		Date Time:		Received By:		Custody Seal #		Preserved where applicable		On Ice		Cooler Temp. 5.6°C					

4.1
4

T66658: Chain of Custody

Page 1 of 3

SAMPLE INSPECTION FORM

Accutest Job Number: T66658 Client: MWH Date/Time Received: 1/7/11 0920

of Coolers Received: 1 Thermometer #: IRGun04 Temperature Adjustment Factor: 0

Cooler Temperatures (initial/adjusted): #1: 5.6°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? _____
 Number of 5035 kits? _____
 Number of lab-filtered metals? _____

Summary of Discrepancies:

TECHNICIAN SIGNATURE/DATE: *Dunee Huchellester* 1/7/11

INFORMATION AND SAMPLE LABELING VERIFIED BY: _____

♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ **CORRECTIVE ACTIONS** ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦

Client Representative Notified: _____ Date: _____

By Accutest Representative: _____ Via: Phone Email

Client Instructions:

i:\mwalker\form\samplemanagement SM023 Revised B/11/10

4.1
4

GC 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: T66658
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GHH124-MB	HH0002383.D		01/10/11	LB	n/a	n/a	GHH124

The QC reported here applies to the following samples:

Method: SW846 8015

T66658-1, T66658-2, T66658-5

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

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	90%	46-127%
98-08-8	aaa-Trifluorotoluene	92%	44-120%

5.1.1
5

Method Blank Summary

Job Number: T66658
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB252-MB	BB0005007.DI		01/13/11	LB	n/a	n/a	GBB252

The QC reported here applies to the following samples:

Method: SW846 8015

T66658-3, T66658-4

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

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

Method Blank Summary

Job Number: T66658
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1768-MB	KK036837.D 1		01/10/11	AT	n/a	n/a	GKK1768

The QC reported here applies to the following samples:

Method: SW846 8021B

T66658-6

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	107%	58-125%
98-08-8	aaa-Trifluorotoluene	124%	73-139%

Method Blank Summary

Job Number: T66658
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1769-MB	KK036871.D 1		01/11/11	AT	n/a	n/a	GKK1769

The QC reported here applies to the following samples:

Method: SW846 8021B

T66658-1, T66658-5

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

CAS No.	Surrogate Recoveries	Results	Limits
460-00-4	4-Bromofluorobenzene	97%	21-163%
98-08-8	aaa-Trifluorotoluene	122%	39-170%

Method Blank Summary

Job Number: T66658
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1770-MB	KK036897.D 1		01/12/11	AT	n/a	n/a	GKK1770

The QC reported here applies to the following samples:

Method: SW846 8021B

T66658-2

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

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	98%	21-163%
98-08-8	aaa-Trifluorotoluene	124%	39-170%

Method Blank Summary

Job Number: T66658
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1771-MB	KK036916.D 1		01/13/11	AT	n/a	n/a	GKK1771

The QC reported here applies to the following samples:

Method: SW846 8021B

T66658-3, T66658-4

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

CAS No.	Surrogate Recoveries	Result	Limits
460-00-4	4-Bromofluorobenzene	93%	21-163%
98-08-8	aaa-Trifluorotoluene	127%	39-170%

Blank Spike Summary

Job Number: T66658
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GHH124-BS	HH0002380.D		01/10/11	LB	n/a	n/a	GHH124

The QC reported here applies to the following samples:

Method: SW846 8015

T66658-1, T66658-2, T66658-5

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.375	94	78-115

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	90%	46-127%
98-08-8	aaa-Trifluorotoluene	98%	44-120%

Blank Spike Summary

Job Number: T66658
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB252-BS	BB0005004.DI		01/13/11	LB	n/a	n/a	GBB252

The QC reported here applies to the following samples:

Method: SW846 8015

T66658-3, T66658-4

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.335	84	78-115

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	91%	46-127%
98-08-8	aaa-Trifluorotoluene	102%	44-120%

Blank Spike Summary

Job Number: T66658
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1768-BS	KK036834.D 1		01/10/11	AT	n/a	n/a	GKK1768

The QC reported here applies to the following samples:

Method: SW846 8021B

T66658-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	20.5	103	86-121
100-41-4	Ethylbenzene	20	19.1	96	81-116
108-88-3	Toluene	20	19.4	97	87-117
1330-20-7	Xylenes (total)	60	55.3	92	85-115
95-47-6	o-Xylene	20	19.1	96	87-116
	m,p-Xylene	40	36.2	91	84-116

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	82%	58-125%
98-08-8	aaa-Trifluorotoluene	96%	73-139%

5.2.3
5

Blank Spike Summary

Job Number: T66658
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1769-BS	KK036868.D 1		01/11/11	AT	n/a	n/a	GKK1769

The QC reported here applies to the following samples:

Method: SW846 8021B

T66658-1, T66658-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	20	21.6	108	73-132
100-41-4	Ethylbenzene	20	21.8	109	70-133
108-88-3	Toluene	20	21.5	108	74-133
1330-20-7	Xylenes (total)	60	65.0	108	73-134
	m,p-Xylene	40	43.2	108	70-134
95-47-6	o-Xylene	20	21.8	109	76-131

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	100%	21-163%
98-08-8	aaa-Trifluorotoluene	124%	39-170%

Blank Spike Summary

Job Number: T66658
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1770-BS	KK036893.D 1		01/12/11	AT	n/a	n/a	GKK1770

The QC reported here applies to the following samples:

Method: SW846 8021B

T66658-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	20	21.0	105	73-132
100-41-4	Ethylbenzene	20	21.4	107	70-133
108-88-3	Toluene	20	21.3	107	74-133
1330-20-7	Xylenes (total)	60	63.7	106	73-134
	m,p-Xylene	40	42.6	107	70-134
95-47-6	o-Xylene	20	21.1	106	76-131

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	93%	21-163%
98-08-8	aaa-Trifluorotoluene	120%	39-170%

Blank Spike Summary

Job Number: T66658
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1771-BS	KK036912.D 1		01/13/11	AT	n/a	n/a	GKK1771

The QC reported here applies to the following samples:

Method: SW846 8021B

T66658-3, T66658-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	20	21.9	110	73-132
100-41-4	Ethylbenzene	20	22.1	111	70-133
108-88-3	Toluene	20	22.0	110	74-133
1330-20-7	Xylenes (total)	60	65.9	110	73-134
	m,p-Xylene	40	43.8	110	70-134
95-47-6	o-Xylene	20	22.2	111	76-131

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	99%	21-163%
98-08-8	aaa-Trifluorotoluene	127%	39-170%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T66658
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T66684-2MS	HH0002388.D		01/10/11	LB	n/a	n/a	GHH124
T66684-2MSD	HH0002389.D		01/10/11	LB	n/a	n/a	GHH124
T66684-2	HH0002385.D		01/10/11	LB	n/a	n/a	GHH124

The QC reported here applies to the following samples:

Method: SW846 8015

T66658-1, T66658-2, T66658-5

CAS No.	Compound	T66684-2 mg/kg	Spike Q	mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	6.72	J	44.2	45.2	87	44.8	86	1	78-115/14

CAS No.	Surrogate Recoveries	MS	MSD	T66684-2	Limits
460-00-4	4-Bromofluorobenzene	86%	89%	87%	46-127%
98-08-8	aaa-Trifluorotoluene	99%	96%	92%	44-120%

5.3.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T66658
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T66658-3MS	BB0005011.D20		01/13/11	LB	n/a	n/a	GBB252
T66658-3MSD	BB0005012.D20		01/13/11	LB	n/a	n/a	GBB252
T66658-3	BB0005009.D20		01/13/11	LB	n/a	n/a	GBB252

The QC reported here applies to the following samples:

Method: SW846 8015

T66658-3, T66658-4

CAS No.	Compound	T66658-3 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	600	519	934	64*	992	75*	6	78-115/14

CAS No.	Surrogate Recoveries	MS	MSD	T66658-3	Limits
460-00-4	4-Bromofluorobenzene	109%	108%	105%	46-127%
98-08-8	aaa-Trifluorotoluene	106%	108%	109%	44-120%

5.3.2
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T66658
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T66618-1MS	KK036844.D 1		01/10/11	AT	n/a	n/a	GKK1768
T66618-1MSD	KK036845.D 1		01/10/11	AT	n/a	n/a	GKK1768
T66618-1	KK036843.D 1		01/10/11	AT	n/a	n/a	GKK1768

The QC reported here applies to the following samples:

Method: SW846 8021B

T66658-6

CAS No.	Compound	T66618-1 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	1.0 U	20	21.5	108	20.1	101	7	86-121/19
100-41-4	Ethylbenzene	1.0 U	20	19.7	99	19.4	97	2	81-116/14
108-88-3	Toluene	0.29	J 20	18.8	93	18.9	93	1	87-117/16
1330-20-7	Xylenes (total)	3.0 U	60	56.1	94	55.3	92	1	85-115/12
95-47-6	o-Xylene	1.0 U	20	19.5	98	19.3	97	1	87-116/16
	m,p-Xylene	2.0 U	40	36.6	92	35.9	90	2	84-116/13

CAS No.	Surrogate Recoveries	MS	MSD	T66618-1	Limits
460-00-4	4-Bromofluorobenzene	87%	94%	84%	58-125%
98-08-8	aaa-Trifluorotoluene	106%	113%	104%	73-139%

5.3.3
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T66658
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T66862-1MS	KK036873.D 1		01/11/11	AT	n/a	n/a	GKK1769
T66862-1MSD	KK036874.D 1		01/11/11	AT	n/a	n/a	GKK1769
T66862-1	KK036872.D 1		01/11/11	AT	n/a	n/a	GKK1769

The QC reported here applies to the following samples:

Method: SW846 8021B

T66658-1, T66658-5

CAS No.	Compound	T66862-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	22.1	16.3	74	18.3	77	12	41-129/33
100-41-4	Ethylbenzene	ND	22.1	15.6	70	18.3	77	16	15-139/36
108-88-3	Toluene	ND	22.1	16.0	72	17.9	76	11	26-141/38
1330-20-7	Xylenes (total)	ND	66.4	46.7	70	55.4	78	17	22-132/33
	m,p-Xylene	ND	44.3	30.8	70	36.3	77	16	24-133/41
95-47-6	o-Xylene	ND	22.1	15.9	72	19.0	80	18	25-140/35

CAS No.	Surrogate Recoveries	MS	MSD	T66862-1	Limits
460-00-4	4-Bromofluorobenzene	89%	85%	89%	21-163%
98-08-8	aaa-Trifluorotoluene	114%	113%	121%	39-170%

5.3.4
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T66658
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T66658-2MS	KK036899.D 1		01/12/11	AT	n/a	n/a	GKK1770
T66658-2MSD	KK036900.D 1		01/12/11	AT	n/a	n/a	GKK1770
T66658-2 ^a	KK036898.D 1		01/12/11	AT	n/a	n/a	GKK1770

The QC reported here applies to the following samples:

Method: SW846 8021B

T66658-2

CAS No.	Compound	T66658-2 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	21.8	13.1	60	11.8	54	10	41-129/33
100-41-4	Ethylbenzene	7.7	21.8	23.0	70	21.4	62	7	15-139/36
108-88-3	Toluene	1.7	21.8	14.8	60	13.5	54	9	26-141/38
1330-20-7	Xylenes (total)	14.5	65.4	65.1	77	61.0	70	7	22-132/33
	m,p-Xylene	9.9	43.6	43.6	77	40.1	69	8	24-133/41
95-47-6	o-Xylene	4.6	21.8	21.5	78	20.9	74	3	25-140/35

CAS No.	Surrogate Recoveries	MS	MSD	T66658-2	Limits
460-00-4	4-Bromofluorobenzene	95%	96%	93%	21-163%
98-08-8	aaa-Trifluorotoluene	127%	135%	153%	39-170%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

5.3.5
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T66658
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T66658-3MS	KK036918.D 1		01/13/11	AT	n/a	n/a	GKK1771
T66658-3MSD	KK036919.D 1		01/13/11	AT	n/a	n/a	GKK1771
T66658-3	KK036917.D 1		01/13/11	AT	n/a	n/a	GKK1771

The QC reported here applies to the following samples:

Method: SW846 8021B

T66658-3, T66658-4

CAS No.	Compound	T66658-3 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	204	1300	1520	101	1410	93	8	41-129/33
100-41-4	Ethylbenzene	1620	1300	2700	83	2720	85	1	15-139/36
108-88-3	Toluene	3540	1300	4750	93	4490	73	6	26-141/38
1330-20-7	Xylenes (total)	26100	3900	29500	87	28500	62	3	22-132/33
	m,p-Xylene	19100	2600	21200	81	20500	54	3	24-133/41
95-47-6	o-Xylene	7040	1300	8280	95	8050	78	3	25-140/35

CAS No.	Surrogate Recoveries	MS	MSD	T66658-3	Limits
460-00-4	4-Bromofluorobenzene	124%	131%	107%	21-163%
98-08-8	aaa-Trifluorotoluene	1951% * a	1789% * a	2482% * a	39-170%

(a) Outside control limits due to matrix interference. Confirmed by MS/MSD.

5.3.6
5

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: T66658
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17150-MB	IF203248.D	1	01/10/11	EM	01/10/11	OP17150	GIB1142

The QC reported here applies to the following samples:

Method: SW846 8015 M

T66658-1, T66658-2, T66658-3, T66658-4, T66658-5

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

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

Blank Spike Summary

Job Number: T66658
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17150-BS	IF203249.D	1	01/10/11	EM	01/10/11	OP17150	GIF1142

The QC reported here applies to the following samples:

Method: SW846 8015 M

T66658-1, T66658-2, T66658-3, T66658-4, T66658-5

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	33.3	19.2	58	45-107

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	69%	33-115%

6.2.1
6

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T66658
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17150-MS	IF203250.D	1	01/10/11	EM	01/10/11	OP17150	GIB1142
OP17150-MSD	IF203251.D	1	01/10/11	EM	01/10/11	OP17150	GIF1142
T66658-1	IF203252.D	1	01/10/11	EM	01/10/11	OP17150	GIB1142

The QC reported here applies to the following samples:

Method: SW846 8015 M

T66658-1, T66658-2, T66658-3, T66658-4, T66658-5

CAS No.	Compound	T66658-1 mg/kg	Spike Q	mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	ND	42	30.0	71	33.0	79	10	45-107/34	

CAS No.	Surrogate Recoveries	MS	MSD	T66658-1	Limits
84-15-1	o-Terphenyl	65%	111%	68%	33-115%

6.3.1
6

Table 1
Northern Excavation Left-In-Place Soil
Sample Analytical Data - February 10-11, 2011
El Paso Corporation Jaquez Site, San Juan County, New Mexico

Soil Sample	Sample Type	Depth (ft. bgs)	Date	Analytical Parameter										
				Benzene	Toluene	Ethylbenzene	Total Xylenes	m,p-Xylene	o-Xylene	Total BTEX	TPH (C6-C10)	TPH (C10-C28)	TPH (>C28-C40)	Total TPH
				Units==>	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
NMOCD Standard==>				10	NA	NA	NA	NA	NA	50	100	100	100	100
JAQUEZ-111(17)021011	Excavation Sidewall Grab	17'	2/10/2011	ND (0.53)	1.78	2.68	28.9	22.3	6.56	33.4	1,230	1,740	528	3,498
JAQUEZ-BH4(12)021111	Soil Boring	12'	2/11/2011	ND (0.005)	ND (0.005)	ND (0.005)	0.0546	0.0382	0.0164	0.0546	ND (7.2)	6.1	14.2	20.3

Notes:

1,230 = Concentration exceeds the applicable NMOCD standard.

1. "ND" indicates that the analyte was not detected above the reporting limit (shown in parentheses).
2. "BGS" = below ground surface.
3. "NMOCD" = New Mexico Energy, Minerals and Natural Resources Department, Oil Conservation Division

Report of Analysis

Client Sample ID:	JAQUEZ-BH4(12)021111	
Lab Sample ID:	T69036-4	Date Sampled: 02/11/11
Matrix:	SO - Soil	Date Received: 02/15/11
Method:	SW846 8015	Percent Solids: 77.1
Project:	MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	BB0005615.D	1	02/16/11	AT	n/a	n/a	GBB278
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.63 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	7.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	92%		46-127%	
98-08-8	aaa-Trifluorotoluene	100%		44-120%	

(a) Sample was received unpreserved and outside the 48 hour preservation time.

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:	JAQUEZ-BH4(12)021111		
Lab Sample ID:	T69036-4	Date Sampled:	02/11/11
Matrix:	SO - Soil	Date Received:	02/15/11
Method:	SW846 8021B	Percent Solids:	77.1
Project:	MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK037496.D	1	02/17/11	LB	n/a	n/a	GKK1796
Run #2							

	Initial Weight	Final Volume
Run #1	5.19 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	5.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	ug/kg	
108-88-3	Toluene	ND	5.0	ug/kg	
1330-20-7	Xylenes (total)	54.6	15	ug/kg	
	m,p-Xylene	38.2	10	ug/kg	
95-47-6	o-Xylene	16.4	5.0	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	83%		21-163%
98-08-8	aaa-Trifluorotoluene	126%		39-170%

(a) Sample received in a bulk jar. Not preserved within 48 hours.

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: JAQUEZ-BH4(12)021111	
Lab Sample ID: T69036-4	Date Sampled: 02/11/11
Matrix: SO - Soil	Date Received: 02/15/11
Method: SW846 8015 M SW846 3550B	Percent Solids: 77.1
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF204138.D	1	02/16/11	HD	02/15/11	OP17466	GIB1160
Run #2							

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

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	6.05	4.3	mg/kg	
	TPH (> C28-C40)	14.2	4.3	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	80%		33-115%	

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:	JAQUEZ-11(17)021011	
Lab Sample ID:	T69036-6	Date Sampled: 02/10/11
Matrix:	SO - Soil	Date Received: 02/15/11
Method:	SW846 8015	Percent Solids: 85.0
Project:	MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	BB0005587.D	40	02/15/11	AT	n/a	n/a	GBB277
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.07 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	1230	270	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	131% ^b		46-127%	
98-08-8	aaa-Trifluorotoluene	116%		44-120%	

(a) Sample was received unpreserved and outside the 48 hour preservation time.

(b) Outside control limits due to matrix interference. Confirmed by MS/MSD.

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:	JAQUEZ-11(17)021011		
Lab Sample ID:	T69036-6	Date Sampled:	02/10/11
Matrix:	SO - Soil	Date Received:	02/15/11
Method:	SW846 8021B	Percent Solids:	85.0
Project:	MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK037501.D	2	02/17/11	LB	n/a	n/a	GKK1796
Run #2 ^b	KK037497.D	40	02/17/11	LB	n/a	n/a	GKK1796

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.07 g	5.0 ml	100 ul
Run #2	5.07 g	5.0 ml	100 ul

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	530	ug/kg	
100-41-4	Ethylbenzene ^c	2680	530	ug/kg	
108-88-3	Toluene ^c	1780	530	ug/kg	
1330-20-7	Xylenes (total)	28900	1600	ug/kg	
	m,p-Xylene ^c	22300	1100	ug/kg	
95-47-6	o-Xylene	6560	530	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	226% ^d	94%	21-163%
98-08-8	aaa-Trifluorotoluene	198% ^d	115%	39-170%

(a) Sample received in a bulk jar. Not preserved within 48 hours.

(b) Sample received in a bulk jar. Not preserved within 48 hours. Sample used for QC purpose only.

(c) More than 40% RPD for detected concentrations between two GC columns.

(d) Outside control limits due to matrix interference. Confirmed by reanalysis.

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: JAQUEZ-11(17)021011	
Lab Sample ID: T69036-6	Date Sampled: 02/10/11
Matrix: SO - Soil	Date Received: 02/15/11
Method: SW846 8015 M SW846 3550B	Percent Solids: 85.0
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF204160.D	50	02/17/11	HD	02/15/11	OP17466	GIB1161
Run #2							

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

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	1740	190	mg/kg	
	TPH (> C28-C40)	528	190	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
 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

Technical Report for

EL PASO CORPORATION

MWHCODE: San Juan River Basin Program

JAQUEZ SITE

Accutest Job Number: T69036

Sampling Dates: 02/10/11 - 02/13/11

Report to:

MWH
1801 California Street Suite 2900
Denver, CO 80202
jed.smith@mwhglobal.com

ATTN: Jed Smith

Total number of pages in report: **54**



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 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: T69036

MWHCODE: San Juan River Basin Program

Project No: JAQUEZ SITE

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T69036-1	02/10/11	17:00 BH	02/15/11	SO	Soil	JAQUEZ-113(12)021011
T69036-2	02/11/11	12:45 BH	02/15/11	SO	Soil	JAQUEZ-114(9) 021111
T69036-3	02/11/11	13:02 BH	02/15/11	SO	Soil	JAQUEZ-115(4)021111
T69036-4	02/11/11	17:30 BH	02/15/11	SO	Soil	JAQUEZ-BH4(12)021111
T69036-5	02/13/11	09:30 BH	02/15/11	SO	Soil	JAQUEZ-124(P)021311
T69036-6	02/10/11	16:35 BH	02/15/11	SO	Soil	JAQUEZ-11(17)021011

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 T69036

Site: MWHCODE: San Juan River Basin Program

Report Date 3/3/2011 9:02:35 AM

6 Sample(s) were collected on between 02/10/2011 and 02/13/2011 and were received at Accutest on 02/15/2011 properly preserved, at 1.5 Deg. C and intact. These Samples received an Accutest job number of T69036. 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 GC By Method SW846 8015

Matrix SO **Batch ID:** GBB277

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T69036-6MS, T69036-6MSD were used as the QC samples indicated.
- Matrix Spike Duplicate Recovery(s) for TPH-GRO (C6-C10) are outside control limits. Probable cause due to matrix interference.
- Sample(s) T69036-6, T69036-6MS, T69036-6MSD have surrogates outside control limits. Probable cause due to matrix interference.
- T69036-6: Sample was received unpreserved and outside the 48 hour preservation time.

Matrix SO **Batch ID:** GBB278

- All samples were analyzed within the recommended method holding time.
- Sample(s) T69036-4MS, T69036-4MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T69036-6MS, T69036-6MSD have surrogates outside control limits. Probable cause due to matrix interference.
- T69036-3: Sample was received unpreserved and outside the 48 hour preservation time.
- T69036-4: Sample was received unpreserved and outside the 48 hour preservation time.

Matrix SO **Batch ID:** GBB279

- All samples were analyzed within the recommended method holding time.
- Sample(s) T69036-1MS, T69036-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T69036-6MS, T69036-6MSD have surrogates outside control limits. Probable cause due to matrix interference.
- T69036-5: Sample was received unpreserved and outside the 48 hour preservation time.
- T69036-1: Sample was received unpreserved and outside the 48 hour preservation time.
- T69036-2: Sample was received unpreserved and outside the 48 hour preservation time.

Volatiles by GC By Method SW846 8021B

Matrix SO**Batch ID:** GKK1796

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T69036-6MS, T69036-6MSD were used as the QC samples indicated.
- Sample(s) T69036-1, T69036-6, T69036-1 have surrogates outside control limits. Outside control limits due to matrix interference. Confirmed by reanalysis.
- T69036-6: Sample received in a bulk jar. Not preserved within 48 hours.
- T69036-4: Sample received in a bulk jar. Not preserved within 48 hours.
- T69036-6 for Toluene: More than 40% RPD for detected concentrations between two GC columns.
- T69036-6 for Ethylbenzene: More than 40% RPD for detected concentrations between two GC columns.
- T69036-6 for m,p-Xylene: More than 40% RPD for detected concentrations between two GC columns.

Matrix SO**Batch ID:** GKK1801

- All samples were analyzed within the recommended method holding time.
- Sample(s) T69036-2MS, T69036-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T69036-1, T69036-6, T69036-1 have surrogates outside control limits. Outside control limits due to matrix interference. Confirmed by reanalysis.
- T69036-5: Sample was received unpreserved and outside the 48 hour preservation time.
- T69036-3: Sample was received unpreserved and outside the 48 hour preservation time.
- T69036-2: Sample was received unpreserved and outside the 48 hour preservation time.

Matrix SO**Batch ID:** GKK1802

- All samples were analyzed within the recommended method holding time.
- Sample(s) T69202-1MS, T69202-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T69036-1, T69036-6, T69036-1 have surrogates outside control limits. Outside control limits due to matrix interference. Confirmed by reanalysis.
- T69036-1: Sample was received unpreserved and outside the 48 hour preservation time.
- T69036-1 for Ethylbenzene: More than 40% RPD for detected concentrations between two GC columns.
- T69036-1 for Toluene: More than 40% RPD for detected concentrations between two GC columns.

Extractables by GC By Method SW846 8015 M

Matrix SO**Batch ID:** OP17466

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) T69036-4MS, T69036-4MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T69036-6 have surrogates outside control limits. Outside control limits due to dilution.

Wet Chemistry By Method SM 2540 G

Matrix SO	Batch ID: GN28800
------------------	--------------------------

- Sample(s) T69036-4DUP were used as the QC samples for Solids, Percent.

Matrix SO	Batch ID: GN28855
------------------	--------------------------

- Sample(s) T68846-4DUP were used as the QC samples for Solids, Percent.

Matrix SO	Batch ID: GN28885
------------------	--------------------------

- Sample(s) T69324-1DUP 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: JAQUEZ-113(12)021011	
Lab Sample ID: T69036-1	Date Sampled: 02/10/11
Matrix: SO - Soil	Date Received: 02/15/11
Method: SW846 8015	Percent Solids: 83.8
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	BB0005646.D	10	02/17/11	AT	n/a	n/a	GBB279
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.15 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	166	68	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	112%		46-127%	
98-08-8	aaa-Trifluorotoluene	106%		44-120%	

(a) Sample was received unpreserved and outside the 48 hour preservation time.

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:	JAQUEZ-113(12)021011		
Lab Sample ID:	T69036-1	Date Sampled:	02/10/11
Matrix:	SO - Soil	Date Received:	02/15/11
Method:	SW846 8021B	Percent Solids:	83.8
Project:	MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK037675.D	1	02/24/11	LB	n/a	n/a	GKK1802
Run #2 ^b	KK037681.D	1	02/24/11	LB	n/a	n/a	GKK1802

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.15 g	5.0 ml	100 ul
Run #2	5.15 g	5.0 ml	100 ul

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	270	ug/kg	
100-41-4	Ethylbenzene ^c	2760	270	ug/kg	
108-88-3	Toluene ^c	1490	270	ug/kg	
1330-20-7	Xylenes (total)	6470	810	ug/kg	
	m,p-Xylene	4370	540	ug/kg	
95-47-6	o-Xylene	2110	270	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	103%	98%	21-163%
98-08-8	aaa-Trifluorotoluene	526% ^d	512% ^d	39-170%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

(b) Confirmation run for surrogate recoveries. Sample was received unpreserved and outside the 48 hour preservation time.

(c) More than 40% RPD for detected concentrations between two GC columns.

(d) Outside control limits due to matrix interference. Confirmed by reanalysis.

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:	JAQUEZ-113(12)021011		
Lab Sample ID:	T69036-1	Date Sampled:	02/10/11
Matrix:	SO - Soil	Date Received:	02/15/11
Method:	SW846 8015 M SW846 3550B	Percent Solids:	83.8
Project:	MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ10958.D	1	03/01/11	HD	02/15/11	OP17466	GJB143
Run #2							

	Initial Weight	Final Volume
Run #1	30.6 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	253	3.9	mg/kg	
	TPH (> C28-C40)	52.9	3.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	95%		33-115%	

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

32
3

Client Sample ID: JAQUEZ-114(9) 021111	
Lab Sample ID: T69036-2	Date Sampled: 02/11/11
Matrix: SO - Soil	Date Received: 02/15/11
Method: SW846 8015	Percent Solids: 83.6
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	BB0005644.D	1	02/17/11	AT	n/a	n/a	GBB279
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.20 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	6.7	mg/kg	
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%	

(a) Sample was received unpreserved and outside the 48 hour preservation time.

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: JAQUEZ-114(9) 021111	
Lab Sample ID: T69036-2	Date Sampled: 02/11/11
Matrix: SO - Soil	Date Received: 02/15/11
Method: SW846 8021B	Percent Solids: 83.6
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK037645.D	1	02/23/11	LB	n/a	n/a	GKK1801
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.28 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.5	ug/kg	
100-41-4	Ethylbenzene	ND	4.5	ug/kg	
108-88-3	Toluene	ND	4.5	ug/kg	
1330-20-7	Xylenes (total)	ND	14	ug/kg	
	m,p-Xylene	ND	9.1	ug/kg	
95-47-6	o-Xylene	ND	4.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	90%		21-163%
98-08-8	aaa-Trifluorotoluene	126%		39-170%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

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

32
3

Client Sample ID: JAQUEZ-114(9) 021111	
Lab Sample ID: T69036-2	Date Sampled: 02/11/11
Matrix: SO - Soil	Date Received: 02/15/11
Method: SW846 8015 M SW846 3550B	Percent Solids: 83.6
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ10959.D	1	03/01/11	HD	02/15/11	OP17466	GJF143
Run #2							

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

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	4.0	mg/kg	
	TPH (> C28-C40)	ND	4.0	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	74%		33-115%	

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:	JAQUEZ-115(4)021111		
Lab Sample ID:	T69036-3	Date Sampled:	02/11/11
Matrix:	SO - Soil	Date Received:	02/15/11
Method:	SW846 8015	Percent Solids:	82.1
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	BB0005619.D	1	02/16/11	AT	n/a	n/a	GBB278
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.68 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	6.5	mg/kg	
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%	

(a) Sample was received unpreserved and outside the 48 hour preservation time.

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:	JAQUEZ-115(4)021111		
Lab Sample ID:	T69036-3	Date Sampled:	02/11/11
Matrix:	SO - Soil	Date Received:	02/15/11
Method:	SW846 8021B	Percent Solids:	82.1
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK037646.D	1	02/23/11	LB	n/a	n/a	GKK1801
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.59 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.4	ug/kg	
100-41-4	Ethylbenzene	ND	4.4	ug/kg	
108-88-3	Toluene	ND	4.4	ug/kg	
1330-20-7	Xylenes (total)	ND	13	ug/kg	
	m,p-Xylene	ND	8.7	ug/kg	
95-47-6	o-Xylene	ND	4.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	87%		21-163%
98-08-8	aaa-Trifluorotoluene	122%		39-170%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

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:	JAQUEZ-115(4)021111		
Lab Sample ID:	T69036-3	Date Sampled:	02/11/11
Matrix:	SO - Soil	Date Received:	02/15/11
Method:	SW846 8015 M SW846 3550B	Percent Solids:	82.1
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ11002.D	1	03/02/11	HD	02/15/11	OP17466	GJB143
Run #2							

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

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	87%		33-115%

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

3.4
3

Client Sample ID: JAQUEZ-BH4(12)021111	
Lab Sample ID: T69036-4	Date Sampled: 02/11/11
Matrix: SO - Soil	Date Received: 02/15/11
Method: SW846 8015	Percent Solids: 77.1
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	BB0005615.D	1	02/16/11	AT	n/a	n/a	GBB278
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.63 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	7.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	92%		46-127%	
98-08-8	aaa-Trifluorotoluene	100%		44-120%	

(a) Sample was received unpreserved and outside the 48 hour preservation time.

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: JAQUEZ-BH4(12)021111	
Lab Sample ID: T69036-4	Date Sampled: 02/11/11
Matrix: SO - Soil	Date Received: 02/15/11
Method: SW846 8021B	Percent Solids: 77.1
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK037496.D	1	02/17/11	LB	n/a	n/a	GKK1796
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.19 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	5.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	ug/kg	
108-88-3	Toluene	ND	5.0	ug/kg	
1330-20-7	Xylenes (total)	54.6	15	ug/kg	
	m,p-Xylene	38.2	10	ug/kg	
95-47-6	o-Xylene	16.4	5.0	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	83%		21-163%
98-08-8	aaa-Trifluorotoluene	126%		39-170%

(a) Sample received in a bulk jar. Not preserved within 48 hours.

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

3.4
3

Client Sample ID:	JAQUEZ-BH4(12)021111		
Lab Sample ID:	T69036-4	Date Sampled:	02/11/11
Matrix:	SO - Soil	Date Received:	02/15/11
Method:	SW846 8015 M SW846 3550B	Percent Solids:	77.1
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF204138.D	1	02/16/11	HD	02/15/11	OP17466	GIB1160
Run #2	JJ11003.D	1	03/02/11	HD	02/15/11	OP17466	GJF143

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

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	6.05	4.3	mg/kg	
	TPH (> C28-C40)	10.2 ^a	4.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	80%	100%	33-115%

(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

3.5
3

Client Sample ID: JAQUEZ-124(P)021311	
Lab Sample ID: T69036-5	Date Sampled: 02/13/11
Matrix: SO - Soil	Date Received: 02/15/11
Method: SW846 8015	Percent Solids: 90.3
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	BB0005645.D	1	02/17/11	AT	n/a	n/a	GBB279
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.41 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	5.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	92%		46-127%	
98-08-8	aaa-Trifluorotoluene	100%		44-120%	

(a) Sample was received unpreserved and outside the 48 hour preservation time.

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:	JAQUEZ-124(P)021311	
Lab Sample ID:	T69036-5	Date Sampled: 02/13/11
Matrix:	SO - Soil	Date Received: 02/15/11
Method:	SW846 8021B	Percent Solids: 90.3
Project:	MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK037647.D	1	02/23/11	LB	n/a	n/a	GKK1801
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.24 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.2	ug/kg	
100-41-4	Ethylbenzene	ND	4.2	ug/kg	
108-88-3	Toluene	ND	4.2	ug/kg	
1330-20-7	Xylenes (total)	ND	13	ug/kg	
	m,p-Xylene	ND	8.5	ug/kg	
95-47-6	o-Xylene	ND	4.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	85%		21-163%
98-08-8	aaa-Trifluorotoluene	121%		39-170%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

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:	JAQUEZ-124(P)021311		
Lab Sample ID:	T69036-5	Date Sampled:	02/13/11
Matrix:	SO - Soil	Date Received:	02/15/11
Method:	SW846 8015 M SW846 3550B	Percent Solids:	90.3
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ10962.D	1	03/01/11	HD	02/15/11	OP17466	GJB143
Run #2							

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

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	3.7	mg/kg	
	TPH (> C28-C40)	ND	3.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	89%		33-115%

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

3.6
3

Client Sample ID: JAQUEZ-11(17)021011	
Lab Sample ID: T69036-6	Date Sampled: 02/10/11
Matrix: SO - Soil	Date Received: 02/15/11
Method: SW846 8015	Percent Solids: 85.0
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	BB0005587.D	40	02/15/11	AT	n/a	n/a	GBB277
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.07 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	1230	270	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	131% ^b		46-127%	
98-08-8	aaa-Trifluorotoluene	116%		44-120%	

(a) Sample was received unpreserved and outside the 48 hour preservation time.
 (b) Outside control limits due to matrix interference. Confirmed by MS/MSD.

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:	JAQUEZ-11(17)021011		
Lab Sample ID:	T69036-6	Date Sampled:	02/10/11
Matrix:	SO - Soil	Date Received:	02/15/11
Method:	SW846 8021B	Percent Solids:	85.0
Project:	MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK037501.D	2	02/17/11	LB	n/a	n/a	GKK1796
Run #2 ^b	KK037497.D	40	02/17/11	LB	n/a	n/a	GKK1796

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.07 g	5.0 ml	100 ul
Run #2	5.07 g	5.0 ml	100 ul

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	530	ug/kg	
100-41-4	Ethylbenzene ^c	2680	530	ug/kg	
108-88-3	Toluene ^c	1780	530	ug/kg	
1330-20-7	Xylenes (total)	28900	1600	ug/kg	
	m,p-Xylene ^c	22300	1100	ug/kg	
95-47-6	o-Xylene	6560	530	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	226% ^d	94%	21-163%
98-08-8	aaa-Trifluorotoluene	198% ^d	115%	39-170%

(a) Sample received in a bulk jar. Not preserved within 48 hours.

(b) Sample received in a bulk jar. Not preserved within 48 hours. Sample used for QC purpose only.

(c) More than 40% RPD for detected concentrations between two GC columns.

(d) Outside control limits due to matrix interference. Confirmed by reanalysis.

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

3.6
3

Client Sample ID: JAQUEZ-11(17)021011	
Lab Sample ID: T69036-6	Date Sampled: 02/10/11
Matrix: SO - Soil	Date Received: 02/15/11
Method: SW846 8015 M SW846 3550B	Percent Solids: 85.0
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF204160.D	50	02/17/11	HD	02/15/11	OP17466	GIB1161
Run #2	JJ10963.D	50	03/01/11	HD	02/15/11	OP17466	GJF143

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

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	1740	190	mg/kg	
	TPH (> C28-C40)	506 ^a	190	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	0% ^b	95%	33-115%

(a) Result is from Run# 2

(b) Outside control limits due to dilution.

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

SAMPLE INSPECTION FORM

Accutest Job Number: T69036 Client: MWH Date/Time Received: 2-15-11 9:20
 # of Coolers Received: 2 Thermometer #: IR Gwn 04/110 Temperature Adjustment Factor: 0.0 / -0.5°C
 Cooler Temperatures (initial/adjusted): #1 ^{5.8°C} 5.8°C #2 ^{2.0°C / 1.5°C} 2.0°C / 1.5°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 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

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

Summary of Discrepancies: ① COC says 5035 but lab did not receive 5035 kits.

TECHNICIAN SIGNATURE/DATE: [Signature] 2-15-11
 INFORMATION AND SAMPLE LABELING VERIFIED BY: [Signature] DRA 2/15/11

CORRECTIVE ACTIONS

Client Representative Notified: Jed Smith Date: 2-15-11
 By Accutest Representative: [Signature] Via: Phone Email
 Client Instructions: Push two samples 2 days - Report the DRO/ORO to c40

\\mwalker\form\samplemanagement SM023 Revised 8/11/10

SAMPLE RECEIPT LOG

JOB #: T69036 DATE/TIME RECEIVED: 2-15-11 920

CLIENT: MWH INITIALS: EC

COOLER#	SAMPLE ID	FIELD ID	DATE	MATRIX	VOL	BOTTLE #	LOCATION	PRESERV	PH
1	1	Jaquez 113(12)021011	2-14-11 1700	S	802	1	294	05 2 3 4 5 6 7 8	<2 >12
					4	2	VR	05 2 3 4 5 6 7 8	<2 >12
	2	Jaquez 114(9)021111	2-11-11 1245		8	1	294	05 2 3 4 5 6 7 8	<2 >12
					4	2	VR	05 2 3 4 5 6 7 8	<2 >12
	3	Jaquez 115(4)021111	2-11-11 1302		8	1	294	05 2 3 4 5 6 7 8	<2 >12
					4	2	VR	05 2 3 4 5 6 7 8	<2 >12
	4	Jaquez 114(12)021111	2-11-11 1730		8	1	294	05 2 3 4 5 6 7 8	<2 >12
					4	2	VR	05 2 3 4 5 6 7 8	<2 >12
	5	Jaquez 124(9)SL021311	2-13-11 930		8	1	294	05 2 3 4 5 6 7 8	<2 >12
					4	2	VR	05 2 3 4 5 6 7 8	<2 >12
EC 2-15-11									
								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
								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 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: T69036
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB277-MB	BB0005571.DI		02/15/11	AT	n/a	n/a	GBB277

The QC reported here applies to the following samples:

Method: SW846 8015

T69036-6

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

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	96%	46-127%
98-08-8	aaa-Trifluorotoluene	105%	44-120%

Method Blank Summary

Job Number: T69036
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB278-MB	BB0005614.DI		02/16/11	AT	n/a	n/a	GBB278

The QC reported here applies to the following samples:

Method: SW846 8015

T69036-3, T69036-4

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

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	92% 46-127%
98-08-8	aaa-Trifluorotoluene	101% 44-120%

Method Blank Summary

Job Number: T69036
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB279-MB	BB0005643.DI		02/17/11	AT	n/a	n/a	GBB279

The QC reported here applies to the following samples:

Method: SW846 8015

T69036-1, T69036-2, T69036-5

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

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	90%	46-127%
98-08-8	aaa-Trifluorotoluene	100%	44-120%

Method Blank Summary

Job Number: T69036
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1796-MB	KK037495.D 1		02/17/11	LB	n/a	n/a	GKK1796

The QC reported here applies to the following samples:

Method: SW846 8021B

T69036-4, T69036-6

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

CAS No.	Surrogate Recoveries	Results	Limits
460-00-4	4-Bromofluorobenzene	80%	21-163%
98-08-8	aaa-Trifluorotoluene	101%	39-170%

Method Blank Summary

Job Number: T69036
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1801-MB	KK037635.D 1		02/23/11	LB	n/a	n/a	GKK1801

The QC reported here applies to the following samples:

Method: SW846 8021B

T69036-2, T69036-3, T69036-5

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

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	89%	21-163%
98-08-8	aaa-Trifluorotoluene	120%	39-170%

Method Blank Summary

Job Number: T69036
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1802-MB	KK037672.D 1		02/24/11	LB	n/a	n/a	GKK1802

The QC reported here applies to the following samples:

Method: SW846 8021B

T69036-1

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

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	91%	21-163%
98-08-8	aaa-Trifluorotoluene	112%	39-170%

Blank Spike Summary

Job Number: T69036
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB277-BS	BB0005568.DI		02/15/11	AT	n/a	n/a	GBB277

The QC reported here applies to the following samples:

Method: SW846 8015

T69036-6

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.348	87	78-115

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	96%	46-127%
98-08-8	aaa-Trifluorotoluene	110%	44-120%

Blank Spike Summary

Job Number: T69036
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB278-BS	BB0005610.DI		02/16/11	AT	n/a	n/a	GBB278

The QC reported here applies to the following samples:

Method: SW846 8015

T69036-3, T69036-4

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.366	92	78-115

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	94%	46-127%
98-08-8	aaa-Trifluorotoluene	105%	44-120%

Blank Spike Summary

Job Number: T69036
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB279-BS	BB0005640.DI		02/17/11	AT	n/a	n/a	GBB279

The QC reported here applies to the following samples:

Method: SW846 8015

T69036-1, T69036-2, T69036-5

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.378	95	78-115

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	94%	46-127%
98-08-8	aaa-Trifluorotoluene	107%	44-120%

Blank Spike Summary

Job Number: T69036
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1796-BS	KK037492.D 1		02/17/11	LB	n/a	n/a	GKK1796

The QC reported here applies to the following samples:

Method: SW846 8021B

T69036-4, T69036-6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	20	18.5	93	73-132
100-41-4	Ethylbenzene	20	18.8	94	70-133
108-88-3	Toluene	20	18.7	94	74-133
1330-20-7	Xylenes (total)	60	56.0	93	73-134
	m,p-Xylene	40	37.3	93	70-134
95-47-6	o-Xylene	20	18.7	94	76-131

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	87%	21-163%
98-08-8	aaa-Trifluorotoluene	106%	39-170%

Blank Spike Summary

Job Number: T69036
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1802-BS	KK037668.D 1		02/24/11	LB	n/a	n/a	GKK1802

The QC reported here applies to the following samples:

Method: SW846 8021B

T69036-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	20	18.3	92	73-132
100-41-4	Ethylbenzene	20	18.0	90	70-133
108-88-3	Toluene	20	18.1	91	74-133
1330-20-7	Xylenes (total)	60	55.0	92	73-134
	m,p-Xylene	40	36.4	91	70-134
95-47-6	o-Xylene	20	18.6	93	76-131

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	91%	21-163%
98-08-8	aaa-Trifluorotoluene	118%	39-170%

Blank Spike/Blank Spike Duplicate Summary

Job Number: T69036
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1801-BS	KK037632.D 1		02/23/11	LB	n/a	n/a	GKK1801
GKK1801-BSD	KK037633.D 1		02/23/11	LB	n/a	n/a	GKK1801

The QC reported here applies to the following samples:

Method: SW846 8021B

T69036-2, T69036-3, T69036-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	20	20.5	103	19.2	96	7	73-132/30
100-41-4	Ethylbenzene	20	21.2	106	19.5	98	8	70-133/30
108-88-3	Toluene	20	20.6	103	19.1	96	8	74-133/30
1330-20-7	Xylenes (total)	60	63.0	105	58.3	97	8	73-134/30
	m,p-Xylene	40	42.2	106	38.8	97	8	70-134/30
95-47-6	o-Xylene	20	20.8	104	19.5	98	6	76-131/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	96%	95%	21-163%
98-08-8	aaa-Trifluorotoluene	122%	121%	39-170%

5.3.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69036
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T69036-6MS	BB0005588.D40		02/15/11	AT	n/a	n/a	GBB277
T69036-6MSD	BB0005589.D40		02/15/11	AT	n/a	n/a	GBB277
T69036-6 ^a	BB0005587.D40		02/15/11	AT	n/a	n/a	GBB277

The QC reported here applies to the following samples:

Method: SW846 8015

T69036-6

CAS No.	Compound	T69036-6 mg/kg	Spike Q	mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	1230	1070	2060	78	2030	75*	1	78-115/14	

CAS No.	Surrogate Recoveries	MS	MSD	T69036-6	Limits
460-00-4	4-Bromofluorobenzene	133%* b	135%* b	131%* b	46-127%
98-08-8	aaa-Trifluorotoluene	118%	118%	116%	44-120%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

(b) Outside control limits due to matrix interference. Confirmed by MS/MSD.

5.4.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69036
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T69036-4MS	BB0005616.DI		02/16/11	AT	n/a	n/a	GBB278
T69036-4MSD	BB0005617.DI		02/16/11	AT	n/a	n/a	GBB278
T69036-4 ^a	BB0005615.DI		02/16/11	AT	n/a	n/a	GBB278

The QC reported here applies to the following samples:

Method: SW846 8015

T69036-3, T69036-4

CAS No.	Compound	T69036-4 mg/kg	Spike Q	mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	2.06	29	27.5	88	27.3	87	1	78-115/14	

CAS No.	Surrogate Recoveries	MS	MSD	T69036-4	Limits
460-00-4	4-Bromofluorobenzene	94%	94%	92%	46-127%
98-08-8	aaa-Trifluorotoluene	108%	108%	100%	44-120%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

5.4.2
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69036
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T69036-1MS	BB0005647.D10		02/17/11	AT	n/a	n/a	GBB279
T69036-1MSD	BB0005648.D10		02/17/11	AT	n/a	n/a	GBB279
T69036-1 ^a	BB0005646.D10		02/17/11	AT	n/a	n/a	GBB279

The QC reported here applies to the following samples:

Method: SW846 8015

T69036-1, T69036-2, T69036-5

CAS No.	Compound	T69036-1 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	166	270	404	88	399	86	1	78-115/14

CAS No.	Surrogate Recoveries	MS	MSD	T69036-1	Limits
460-00-4	4-Bromofluorobenzene	113%	110%	112%	46-127%
98-08-8	aaa-Trifluorotoluene	113%	112%	106%	44-120%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

5.4.3
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69036
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T69036-6MS	KK037498.D	40	02/17/11	LB	n/a	n/a	GKK1796
T69036-6MSD	KK037499.D	40	02/17/11	LB	n/a	n/a	GKK1796
T69036-6 ^a	KK037501.D	2	02/17/11	LB	n/a	n/a	GKK1796
T69036-6 ^b	KK037497.D	40	02/17/11	LB	n/a	n/a	GKK1796

The QC reported here applies to the following samples:

Method: SW846 8021B

T69036-4, T69036-6

CAS No.	Compound	T69036-6 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	53500	46100	86	43800	82	5	41-129/33
100-41-4	Ethylbenzene	2680	53500	48300	85	46400	82	4	15-139/36
108-88-3	Toluene	1780	53500	49200	89	47300	85	4	26-141/38
1330-20-7	Xylenes (total)	28900	160000	160000	82	158000	80	1	22-132/33
	m,p-Xylene	22300	107000	109000	81	106000	78	3	24-133/41
95-47-6	o-Xylene	6560	53500	50800	83	51400	84	1	25-140/35

CAS No.	Surrogate Recoveries	MS	MSD	T69036-6	T69036-6	Limits
460-00-4	4-Bromofluorobenzene	89%	95%	226%* ^c	94%	21-163%
98-08-8	aaa-Trifluorotoluene	111%	114%	198%* ^c	115%	39-170%

- (a) Sample received in a bulk jar. Not preserved within 48 hours.
- (b) Sample received in a bulk jar. Not preserved within 48 hours. Sample used for QC purpose only.
- (c) Outside control limits due to matrix interference. Confirmed by reanalysis.

5.4.4
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69036
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T69036-2MS	KK037650.D 1		02/23/11	LB	n/a	n/a	GKK1801
T69036-2MSD	KK037651.D 1		02/23/11	LB	n/a	n/a	GKK1801
T69036-2 ^a	KK037645.D 1		02/23/11	LB	n/a	n/a	GKK1801

The QC reported here applies to the following samples:

Method: SW846 8021B

T69036-2, T69036-3, T69036-5

CAS No.	Compound	T69036-2 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	21.4	9.5	44	8.6	43	10	41-129/33
100-41-4	Ethylbenzene	ND	21.4	15.8	74	14.4	72	9	15-139/36
108-88-3	Toluene	ND	21.4	9.9	46	8.9	44	11	26-141/38
1330-20-7	Xylenes (total)	ND	64.2	35.4	55	33.7	56	5	22-132/33
	m,p-Xylene	ND	42.8	21.4	50	20.8	52	3	24-133/41
95-47-6	o-Xylene	ND	21.4	14.0	65	12.9	64	8	25-140/35

CAS No.	Surrogate Recoveries	MS	MSD	T69036-2	Limits
460-00-4	4-Bromofluorobenzene	89%	89%	90%	21-163%
98-08-8	aaa-Trifluorotoluene	123%	123%	126%	39-170%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

5.4.5
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69036
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T69202-1MS	KK037676.D 1		02/24/11	LB	n/a	n/a	GKK1802
T69202-1MSD	KK037677.D 1		02/24/11	LB	n/a	n/a	GKK1802
T69202-1	KK037673.D 1		02/24/11	LB	n/a	n/a	GKK1802

The QC reported here applies to the following samples:

Method: SW846 8021B

T69036-1

CAS No.	Compound	T69202-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	4.5 U	23.2	22.6	97	20.4	95	10	41-129/33
100-41-4	Ethylbenzene	4.5 U	23.2	24.7	107	22.8	106	8	15-139/36
108-88-3	Toluene	4.5 U	23.2	24.9	107	22.8	106	9	26-141/38
1330-20-7	Xylenes (total)	13 U	69.5	77.9	112	72.7	113	7	22-132/33
	m,p-Xylene	8.9 U	46.4	53.5	115	50.5	118	6	24-133/41
95-47-6	o-Xylene	4.5 U	23.2	24.3	105	22.2	104	9	25-140/35

CAS No.	Surrogate Recoveries	MS	MSD	T69202-1	Limits
460-00-4	4-Bromofluorobenzene	87%	82%	79%	21-163%
98-08-8	aaa-Trifluorotoluene	121%	120%	113%	39-170%

5.4.6
5

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: T69036
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17466-MB	IF204134.D	1	02/16/11	HD	02/15/11	OP17466	GIB1160

The QC reported here applies to the following samples:

Method: SW846 8015 M

T69036-1, T69036-2, T69036-3, T69036-4, T69036-5, T69036-6

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

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	70% 33-115%

6.1.1
6

Blank Spike Summary

Job Number: T69036
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17466-BS	IF204156.D	1	02/17/11	HD	02/15/11	OP17466	GIB1161

The QC reported here applies to the following samples:

Method: SW846 8015 M

T69036-1, T69036-2, T69036-3, T69036-4, T69036-5, T69036-6

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	33.2	23.3	70	45-107

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

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69036
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17466-MS	IF204136.D	1	02/16/11	HD	02/15/11	OP17466	GIB1160
OP17466-MSD	IF204158.D	1	02/17/11	HD	02/15/11	OP17466	GIB1161
T69036-4	IF204138.D	1	02/16/11	HD	02/15/11	OP17466	GIB1160
T69036-4	JJ11003.D	1	03/02/11	HD	02/15/11	OP17466	GJF143

The QC reported here applies to the following samples:

Method: SW846 8015 M

T69036-1, T69036-2, T69036-3, T69036-4, T69036-5, T69036-6

CAS No.	Compound	T69036-4 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	6.05	42.9	32.0	61	28.4	52	12	45-107/34

CAS No.	Surrogate Recoveries	MS	MSD	T69036-4	T69036-4	Limits
84-15-1	o-Terphenyl	87%	85%	80%	100%	33-115%

6.3.1
6

Technical Report for

EL PASO CORPORATION

MWHCODE: San Juan River Basin Program

JAQUEZ SITE

Accutest Job Number: T69164

Sampling Date: 02/14/11

Report to:

MWH
1801 California Street Suite 2900
Denver, CO 80202
jed.smith@mwhglobal.com

ATTN: Jed Smith

Total number of pages in report: **24**



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 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: T69164

MWHCODE: San Juan River Basin Program
Project No: JAQUEZ SITE

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T69164-1	02/14/11	15:15	02/16/11	SO	Soil	JAQUEZ 132(6)021411

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 T69164

Site: MWHCODE: San Juan River Basin Program

Report Date 3/3/2011 9:06:51 AM

1 Sample(s) were collected on 02/14/2011 and were received at Accutest on 02/16/2011 properly preserved, at 4.8 Deg. C and intact. These Samples received an Accutest job number of T69164. 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 GC By Method SW846 8015

Matrix SO	Batch ID: GBB279
------------------	-------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T69036-1MS, T69036-1MSD were used as the QC samples indicated.

Volatiles by GC By Method SW846 8021B

Matrix SO	Batch ID: GKK1802
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T69202-1MS, T69202-1MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8015 M

Matrix SO	Batch ID: OP17514
------------------	--------------------------

- 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) T69384-2MS, T69384-2MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for TPH (C10-C28) are outside control limits. Probable cause due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for TPH (C10-C28) are outside control limits. Probable cause due to matrix interference.
- RPD(s) for MSD for TPH (C10-C28) are outside control limits for sample OP17514-MSD. Probable cause due to sample homogeneity.

Wet Chemistry By Method SM 2540 G

Matrix SO	Batch ID: GN28886
------------------	--------------------------

- Sample(s) T69164-1DUP 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: JAQUEZ 132(6)021411	
Lab Sample ID: T69164-1	Date Sampled: 02/14/11
Matrix: SO - Soil	Date Received: 02/16/11
Method: SW846 8015	Percent Solids: 82.6
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0005651.D	1	02/17/11	AT	n/a	n/a	GBB279
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.48 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	6.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	93%		46-127%	
98-08-8	aaa-Trifluorotoluene	101%		44-120%	

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

3.1
3

Client Sample ID: JAQUEZ 132(6)021411	
Lab Sample ID: T69164-1	Date Sampled: 02/14/11
Matrix: SO - Soil	Date Received: 02/16/11
Method: SW846 8021B	Percent Solids: 82.6
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK037683.D	1	02/24/11	LB	n/a	n/a	GKK1802
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.40 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.5	ug/kg	
100-41-4	Ethylbenzene	ND	4.5	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.5	ug/kg	
108-88-3	Toluene	ND	4.5	ug/kg	
1330-20-7	Xylenes (total)	ND	13	ug/kg	
	m,p-Xylene	ND	9.0	ug/kg	
95-47-6	o-Xylene	ND	4.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	87%		21-163%
98-08-8	aaa-Trifluorotoluene	119%		39-170%

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

3.1
3

Client Sample ID: JAQUEZ 132(6)021411	
Lab Sample ID: T69164-1	Date Sampled: 02/14/11
Matrix: SO - Soil	Date Received: 02/16/11
Method: SW846 8015 M SW846 3550B	Percent Solids: 82.6
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF204291.D	1	02/22/11	HD	02/21/11	OP17514	GIB1164
Run #2	JJ10965.D	1	03/01/11	HD	02/21/11	OP17514	GJF143

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

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	57%	58%	33-115%

(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

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 #
 Accutest Quote #
 Matrix Order Control #
 Accutest Job # **T69164**

Client / Reporting Information		Project Information										Requested Analyses										Matrix Codes									
Company Name MWH		Project Name: San Juan River Basin Program - Jaquez Site										BTEX (80218/5035) include m,p,o & xylene TYPH/5035/8015 TEPH/8015										DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment LIQ - 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. Suite 2900		Billing Information (If different from Report to)																													
City State Zip Denver CO 80202		Company Name El Paso Corp																													
Project Contact Jed Smith jed.smith@mwhglobal.com		Street Address 1001 Louisiana Street, Rm S1904B																													
Phone # 303-291-2276		City State Zip Hou Tx 77002																													
Sampler(s) Name(s) Knolke Herb		Project Manager Norma Ramos																													
Accutest Sample #	Field ID / Point of Collection	Date	Time	Sampled By	Matrix	# of bottles	HD	NIQH	ZAN/NIQH	HNDS	HSQA	MSSE	DI Water	MEQH	NAHSQA	ENCORE	OTHER	LAB USE ONLY													
1	Jaquez B32(w)021411	2/14/11	15:15	BDH	SO	2																									
Turnaround Time (Business days)		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		Approved By (Accutest PM): / Date: _____ _____ _____ _____										<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> TRRP <input checked="" type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> EDD Format <input type="checkbox"/> FULT1 (Level 3+4) <input type="checkbox"/> Other _____ <input type="checkbox"/> REDT1 (Level 3+4) <input type="checkbox"/> Commercial "C" Commercial "A" = Results Only Commercial "B" = Results + QC Summary Commercial "C" = Results + QC & Surrogate Summary										Please Return Corder to: LT Environmental 2243 N. Main # 3 Durango CO 81301									
Sample Custody must be documented below each time samples change possession, including courier delivery.																															
Relinquished by Sampler [Signature]		Date Time: 2/15/11 10:30		Received By: 1		Relinquished By: 2 FEDEX		Date Time: 0910 2/16/11		Received By: ALG / Pamela Huchelster																					
Relinquished by Sampler: 3		Date Time:		Received By: 3		Relinquished By:		Date Time:		Received By:																					
Relinquished by: 5		Date Time:		Received By: 5		Custody Seal #		<input type="checkbox"/> Intact Preserved where applicable <input type="checkbox"/> Not Intact <input type="checkbox"/>		On/ice <input checked="" type="checkbox"/> Cooler Temp. 4.8°C																					

4.1
4

T69164: Chain of Custody

Page 1 of 3

SAMPLE INSPECTION FORM

Accutest Job Number: T69164 Client: MWH Date/Time Received: 2/16/11 0910
 # of Coolers Received: 1 Thermometer #: IRGun04 Temperature Adjustment Factor: 0

Cooler Temperatures (initial/adjusted): #1: 4.8°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 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

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

Summary of Discrepancies:

TECHNICIAN SIGNATURE/DATE: Daniel Hackel/Horton 2/16/11

INFORMATION AND SAMPLE LABELING VERIFIED BY: GC 2-16-11

♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ **CORRECTIVE ACTIONS** ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦

Client Representative Notified: _____ Date: _____

By Accutest Representative: _____ Via: Phone Email

Client Instructions:

\\mwalker\form\samplemanagement SM023 Revised 8/11/10

SAMPLE RECEIPT LOG

JOB #: T69164 DATE/TIME RECEIVED: 2/16/11 0910

CLIENT: MWH INITIALS: ORA

COOLER#	SAMPLE ID	FIELD ID	DATE	MATRIX	VOL	BOTTLE #	LOCATION	PRESERV	PH
1	1	Jaquez 132(6) 021411	2-14-11 1515	soil	8oz	1	2-95	① 5 2 3 4 6 7 8	<2 >12
1	1	↓ ↓ ↓ ↓	↓ ↓	↓	4oz	2	VR	① 5 2 3 4 6 7 8	<2 >12

ORA
2/16/11

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 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: T69164
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB279-MB	BB0005643.DI		02/17/11	AT	n/a	n/a	GBB279

The QC reported here applies to the following samples:

Method: SW846 8015

T69164-1

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

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	90%	46-127%
98-08-8	aaa-Trifluorotoluene	100%	44-120%

Method Blank Summary

Job Number: T69164
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1802-MB	KK037672.D 1		02/24/11	LB	n/a	n/a	GKK1802

The QC reported here applies to the following samples:

Method: SW846 8021B

T69164-1

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.0	ug/kg	
100-41-4	Ethylbenzene	ND	4.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.0	ug/kg	
108-88-3	Toluene	ND	4.0	ug/kg	
1330-20-7	Xylenes (total)	ND	12	ug/kg	
	m,p-Xylene	ND	8.0	ug/kg	
95-47-6	o-Xylene	ND	4.0	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	91%	21-163%
98-08-8	aaa-Trifluorotoluene	112%	39-170%

Blank Spike Summary

Job Number: T69164
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB279-BS	BB0005640.DI		02/17/11	AT	n/a	n/a	GBB279

The QC reported here applies to the following samples:

Method: SW846 8015

T69164-1

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.378	95	78-115

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	94%	46-127%
98-08-8	aaa-Trifluorotoluene	107%	44-120%

Blank Spike Summary

Job Number: T69164
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1802-BS	KK037668.D 1		02/24/11	LB	n/a	n/a	GKK1802

The QC reported here applies to the following samples:

Method: SW846 8021B

T69164-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	20	18.3	92	73-132
100-41-4	Ethylbenzene	20	18.0	90	70-133
1634-04-4	Methyl Tert Butyl Ether	20	20.1	101	70-137
108-88-3	Toluene	20	18.1	91	74-133
1330-20-7	Xylenes (total)	60	55.0	92	73-134
	m,p-Xylene	40	36.4	91	70-134
95-47-6	o-Xylene	20	18.6	93	76-131

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	91%	21-163%
98-08-8	aaa-Trifluorotoluene	118%	39-170%

5.2.2
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69164
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T69036-1MS	BB0005647.D10		02/17/11	AT	n/a	n/a	GBB279
T69036-1MSD	BB0005648.D10		02/17/11	AT	n/a	n/a	GBB279
T69036-1 ^a	BB0005646.D10		02/17/11	AT	n/a	n/a	GBB279

The QC reported here applies to the following samples:

Method: SW846 8015

T69164-1

CAS No.	Compound	T69036-1 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	166	270	404	88	399	86	1	78-115/14

CAS No.	Surrogate Recoveries	MS	MSD	T69036-1	Limits
460-00-4	4-Bromofluorobenzene	113%	110%	112%	46-127%
98-08-8	aaa-Trifluorotoluene	113%	112%	106%	44-120%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

5.3.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69164
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T69202-1MS	KK037676.D 1		02/24/11	LB	n/a	n/a	GKK1802
T69202-1MSD	KK037677.D 1		02/24/11	LB	n/a	n/a	GKK1802
T69202-1	KK037673.D 1		02/24/11	LB	n/a	n/a	GKK1802

The QC reported here applies to the following samples:

Method: SW846 8021B

T69164-1

CAS No.	Compound	T69202-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	4.5 U	23.2	22.6	97	20.4	95	10	41-129/33
100-41-4	Ethylbenzene	4.5 U	23.2	24.7	107	22.8	106	8	15-139/36
1634-04-4	Methyl Tert Butyl Ether	4.5 U	23.2	20.3	88	18.6	87	9	55-127/39
108-88-3	Toluene	4.5 U	23.2	24.9	107	22.8	106	9	26-141/38
1330-20-7	Xylenes (total)	13 U	69.5	77.9	112	72.7	113	7	22-132/33
	m,p-Xylene	8.9 U	46.4	53.5	115	50.5	118	6	24-133/41
95-47-6	o-Xylene	4.5 U	23.2	24.3	105	22.2	104	9	25-140/35

CAS No.	Surrogate Recoveries	MS	MSD	T69202-1	Limits
460-00-4	4-Bromofluorobenzene	87%	82%	79%	21-163%
98-08-8	aaa-Trifluorotoluene	121%	120%	113%	39-170%

5.3.2
5

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: T69164
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17514-MB	IF204281.D	1	02/22/11	HD	02/21/11	OP17514	GIB1164

The QC reported here applies to the following samples:

Method: SW846 8015 M

T69164-1

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

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	87% 33-115%

Method Blank Summary

Job Number: T69164
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17514-MB	JJ10964.D	1	03/01/11	HD	02/21/11	OP17514	GJB143

The QC reported here applies to the following samples:

Method: SW846 8015 M

T69164-1

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

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	89% 33-115%

Blank Spike Summary

Job Number: T69164
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17514-BSP	IF204263.D	1	02/21/11	HD	02/21/11	OP17514	GIB1163

The QC reported here applies to the following samples:

Method: SW846 8015 M

T69164-1

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	33.1	23.3	70	45-107

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	78%	33-115%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69164
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17514-MS	IF204289.D	1	02/22/11	HD	02/21/11	OP17514	GIB1164
OP17514-MSD	IF204265.D	1	02/21/11	HD	02/21/11	OP17514	GIB1163
T69384-2	IF204293.D	2	02/22/11	HD	02/21/11	OP17514	GIB1164
T69384-2	JJ10967.D	2	03/01/11	HD	02/21/11	OP17514	GJF143

The QC reported here applies to the following samples:

Method: SW846 8015 M

T69164-1

CAS No.	Compound	T69384-2 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	50.9	41.3	53.2	6*	109	140*	69*	45-107/34

CAS No.	Surrogate Recoveries	MS	MSD	T69384-2	T69384-2	Limits
84-15-1	o-Terphenyl	62%	93%	62%	65%	33-115%

6.3.1
6

Technical Report for

EL PASO CORPORATION

MWHCODE: San Juan River Basin Program

JAQUEZ SITE

Accutest Job Number: T69384

Sampling Date: 02/16/11

Report to:

MWH
1801 California Street Suite 2900
Denver, CO 80202
jed.smith@mwhglobal.com

ATTN: Jed Smith

Total number of pages in report: **55**



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 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: T69384

MWHCODE: San Juan River Basin Program

Project No: JAQUEZ SITE

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T69384-1	02/16/11	18:00	02/18/11	SO	Soil	JAQUEZ 138(6) 021611
T69384-2	02/16/11	16:10	02/18/11	SO	Soil	JAQUEZ 143(7) 021611
T69384-3	02/16/11	11:00	02/18/11	AQ	Ground Water	JAQUEZ 133(GW4) 021611
T69384-4	02/16/11	07:00	02/18/11	AQ	Trip Blank Water	TRIP BLANK 021611 TB01

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 T69384

Site: MWHCODE: San Juan River Basin Program

Report Date 3/7/2011 4:42:54 PM

3 Sample(s) were collected on 02/16/2011 and were received at Accutest on 02/18/2011 properly preserved, at 5.8 Deg. C and intact. These Samples received an Accutest job number of T69384. 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 GC By Method SW846 8015

Matrix AQ

Batch ID: GBB284

- All samples were analyzed within the recommended method holding time.
- Sample(s) T69384-3MS, T69384-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix SO

Batch ID: GHH141

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T69384-1MS, T69384-1MSD were used as the QC samples indicated.

Matrix SO

Batch ID: GHH142

- All samples were analyzed within the recommended method holding time.
- Sample(s) T69384-2MS, T69384-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- 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.

Volatiles by GC By Method SW846 8021B

Matrix AQ

Batch ID: GKK1798

- All samples were analyzed within the recommended method holding time.
- Sample(s) T68595-2MS, T68595-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T68595-2MS, T68595-2MSD, T69308-1MS, T69384-1, T69384-2, T69384-3 have surrogates outside control limits. Confirmation run for surrogate recoveries.
- T68595-2MS for aaa-Trifluorotoluene: Outside control limits biased low.
- T68595-2MSD for aaa-Trifluorotoluene: Outside control limits biased low.
- T69384-3 for aaa-Trifluorotoluene: Outside control limits due to matrix interference. Confirmed by reanalysis.

Matrix AQ

Batch ID: GKK1799

- All samples were analyzed within the recommended method holding time.
- Sample(s) T69308-1MS, T69308-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T68595-2MS, T68595-2MSD, T69308-1MS, T69384-1, T69384-2, T69384-3 have surrogates outside control limits. Confirmation run for surrogate recoveries.
- T69384-3 for aaa-Trifluorotoluene: Outside control limits due to matrix interference. Confirmed by reanalysis.
- T69308-1MS for aaa-Trifluorotoluene: Outside control limits biased low.

Matrix SO

Batch ID: GKK1801

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T69036-2MS, T69036-2MSD were used as the QC samples indicated.
- Sample(s) T68595-2MS, T68595-2MSD, T69308-1MS, T69384-1, T69384-2, T69384-3 have surrogates outside control limits. Confirmation run for surrogate recoveries.
- T69384-2: Confirmation run for surrogate recoveries.
- T69384-2 for Toluene: More than 40% RPD for detected concentrations between two GC columns.
- T69384-2 for aaa-Trifluorotoluene: Outside control limits due to matrix interference. Confirmed by reanalysis.

Matrix SO

Batch ID: GKK1802

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T69202-1MS, T69202-1MSD were used as the QC samples indicated.
- Sample(s) T68595-2MS, T68595-2MSD, T69308-1MS, T69384-1, T69384-2, T69384-3 have surrogates outside control limits. Confirmation run for surrogate recoveries.
- T69384-1 for Toluene: More than 40% RPD for detected concentrations between two GC columns.
- T69384-1 for Ethylbenzene: More than 40% RPD for detected concentrations between two GC columns.
- T69384-1 for aaa-Trifluorotoluene: Outside control limits due to matrix interference. Confirmed by reanalysis.

Matrix SO

Batch ID: GKK1803

- Sample(s) T68595-2MS, T68595-2MSD, T69308-1MS, T69384-1, T69384-2, T69384-3 have surrogates outside control limits. Confirmation run for surrogate recoveries.
- T69384-1: Confirmation run for surrogate recoveries.

Extractables by GC By Method SW846 8015 M

Matrix AQ**Batch ID:** OP17517

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) T69384-3MS, T69384-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for TPH (C10-C28) are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Matrix SO**Batch ID:** OP17514

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) T69384-2MS, T69384-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for TPH (C10-C28) are outside control limits. Probable cause due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for TPH (C10-C28) are outside control limits. Probable cause due to matrix interference.
- RPD(s) for MSD for TPH (C10-C28) are outside control limits for sample OP17514-MSD. Probable cause due to sample homogeneity.

Wet Chemistry By Method SM 2540 G

Matrix SO**Batch ID:** GN28904

- Sample(s) T69384-2DUP were used as the QC samples for Solids, Percent.

Matrix SO**Batch ID:** GN29093

- Sample(s) T69740-17DUP 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: JAQUEZ 138(6) 021611	
Lab Sample ID: T69384-1	Date Sampled: 02/16/11
Matrix: SO - Soil	Date Received: 02/18/11
Method: SW846 8015	Percent Solids: 82.8
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH0002646.D	1	02/18/11	AT	n/a	n/a	GHH141
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.36 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	6.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	80%		46-127%	
98-08-8	aaa-Trifluorotoluene	89%		44-120%	

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:	JAQUEZ 138(6) 021611		
Lab Sample ID:	T69384-1	Date Sampled:	02/16/11
Matrix:	SO - Soil	Date Received:	02/18/11
Method:	SW846 8021B	Percent Solids:	82.8
Project:	MWHCODE: San Juan River Basin Program		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK037684.D	1	02/24/11	LB	n/a	n/a	GKK1802
Run #2 ^a	KK037708.D	1	02/25/11	LB	n/a	n/a	GKK1803

	Initial Weight	Final Volume
Run #1	5.20 g	5.0 ml
Run #2	5.24 g	5.0 ml

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	7.9	4.6	ug/kg	
100-41-4	Ethylbenzene ^b	4.7	4.6	ug/kg	
108-88-3	Toluene ^b	ND	4.6	ug/kg	
1330-20-7	Xylenes (total)	49.2	14	ug/kg	
	m,p-Xylene	36.6	9.3	ug/kg	
95-47-6	o-Xylene	12.6	4.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	95%	100%	21-163%
98-08-8	aaa-Trifluorotoluene	1578% ^c	1333% ^c	39-170%

(a) Confirmation run for surrogate recoveries.

(b) More than 40% RPD for detected concentrations between two GC columns.

(c) Outside control limits due to matrix interference. Confirmed by reanalysis.

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

3.1
3

Client Sample ID: JAQUEZ 138(6) 021611	
Lab Sample ID: T69384-1	Date Sampled: 02/16/11
Matrix: SO - Soil	Date Received: 02/18/11
Method: SW846 8015 M SW846 3550B	Percent Solids: 82.8
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ10966.D	1	03/01/11	HD	02/21/11	OP17514	GJB143
Run #2							

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

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	4.0	mg/kg	
	TPH (> C28-C40)	5.44	4.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	72%		33-115%

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

32
3

Client Sample ID: JAQUEZ 143(7) 021611	
Lab Sample ID: T69384-2	Date Sampled: 02/16/11
Matrix: SO - Soil	Date Received: 02/18/11
Method: SW846 8015	Percent Solids: 80.1
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH0002660.D	20	02/21/11	AT	n/a	n/a	GHH142
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.06 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	844	150	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	93%		46-127%	
98-08-8	aaa-Trifluorotoluene	96%		44-120%	

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: JAQUEZ 143(7) 021611	
Lab Sample ID: T69384-2	Date Sampled: 02/16/11
Matrix: SO - Soil	Date Received: 02/18/11
Method: SW846 8021B	Percent Solids: 80.1
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK037639.D	1	02/23/11	LB	n/a	n/a	GKK1801
Run #2 ^a	KK037644.D	1	02/23/11	LB	n/a	n/a	GKK1801

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.06 g	5.0 ml	100 ul
Run #2	5.06 g	5.0 ml	100 ul

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	2070	300	ug/kg	
100-41-4	Ethylbenzene	2080	300	ug/kg	
108-88-3	Toluene ^b	366	300	ug/kg	
1330-20-7	Xylenes (total)	16100	890	ug/kg	
	m,p-Xylene	13000	590	ug/kg	
95-47-6	o-Xylene	3120	300	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	108%	111%	21-163%
98-08-8	aaa-Trifluorotoluene	4028% ^c	3990% ^c	39-170%

- (a) Confirmation run for surrogate recoveries.
- (b) More than 40% RPD for detected concentrations between two GC columns.
- (c) Outside control limits due to matrix interference. Confirmed by reanalysis.

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

32
3

Client Sample ID:	JAQUEZ 143(7) 021611		
Lab Sample ID:	T69384-2	Date Sampled:	02/16/11
Matrix:	SO - Soil	Date Received:	02/18/11
Method:	SW846 8015 M SW846 3550B	Percent Solids:	80.1
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF204293.D	2	02/22/11	HD	02/21/11	OP17514	GIB1164
Run #2	JJ10967.D	2	03/01/11	HD	02/21/11	OP17514	GJF143

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

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	50.9	8.2	mg/kg	
	TPH (> C28-C40)	16.1 ^a	8.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	62%	65%	33-115%

(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

Client Sample ID:	JAQUEZ 133(GW4) 021611		
Lab Sample ID:	T69384-3	Date Sampled:	02/16/11
Matrix:	AQ - Ground Water	Date Received:	02/18/11
Method:	SW846 8015	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	BB0005763.D	50	02/22/11	AT	n/a	n/a	GBB284
Run #2							

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

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	17.3	2.5	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	93%		42-123%	
98-08-8	aaa-Trifluorotoluene	101%		51-130%	

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: JAQUEZ 133(GW4) 021611	
Lab Sample ID: T69384-3	Date Sampled: 02/16/11
Matrix: AQ - Ground Water	Date Received: 02/18/11
Method: SW846 8021B	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	KK037536.D	1	02/19/11	AT	n/a	n/a	GKK1798
Run #2	KK037565.D	5	02/21/11	LB	n/a	n/a	GKK1799

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	301 ^a	5.0	ug/l	
100-41-4	Ethylbenzene	179	1.0	ug/l	
108-88-3	Toluene	147	1.0	ug/l	
1330-20-7	Xylenes (total)	1560 ^a	15	ug/l	
95-47-6	o-Xylene	267 ^a	5.0	ug/l	
	m,p-Xylene	1290 ^a	10	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	79%	82%	58-125%
98-08-8	aaa-Trifluorotoluene	3359% ^b	1027% ^b	73-139%

- (a) Result is from Run# 2
- (b) Outside control limits due to matrix interference. Confirmed by reanalysis.

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: JAQUEZ 133(GW4) 021611	
Lab Sample ID: T69384-3	Date Sampled: 02/16/11
Matrix: AQ - Ground Water	Date Received: 02/18/11
Method: SW846 8015 M SW846 3510C	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	IF204261.D	1	02/21/11	HD	02/21/11	OP17517	GIB1163
Run #2	JJ10969.D	1	03/02/11	HD	02/21/11	OP17517	GJF143

Run #	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2	980 ml	1.0 ml

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	6.06	0.10	mg/l	
	TPH (> C28-C40)	1.10 ^a	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	98%	71%	25-112%

(a) Result is from Run# 2

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

J = Indicates an estimated value
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 N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- LRC Form

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 # **T69384**

Client / Reporting Information		Project Information		Requested Analyses												Matrix Codes																																																																																
Company Name MWH - Jed Smith		Project Name Jaquez		<p style="writing-mode: vertical-rl; transform: rotate(180deg);"> BTEX (60216/5035) incl. nat m.p.e.o.-xylenes TTPH/5035/8015 TERP/8015 </p>												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 1801 California St		Street El Paso Corp																																																																																														
City State Zip Denver CO 80202		City State El Paso Corp																																																																																														
Project Contact Jed Smith		Project #																																																																																														
Phone # 303 291 2276		Client Purchase Order #																																																																																														
Sampler(s) Name(s) Brooke Herb		Project Manager Jed Smith		Billing Information (If different from Report to)												LAB USE ONLY																																																																																
Street Address 1001 Louisiana St		City State Zip Houston TX 77002		Number of preserved Bottles																																																																																												
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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 T/A data available VIA Lablink		Approved By (Accutest PM) / Date: _____ _____ _____		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> TRRP <input checked="" type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> EDD Format <input type="checkbox"/> FULT1 (Level 3+4) <input type="checkbox"/> Other _____ <input type="checkbox"/> REDT1 (Level 3+4) <input type="checkbox"/> Commercial "C" Commercial "A" = Results Only Commercial "B" = Results + QC Summary Commercial "C" = Results + QC & Surrogate Summary												HOLD GW sample until direction received from Jed Smith																																																																																
Sample Custody must be documented below each time samples change possession, including courier delivery.																																																																																																
Relinquished by Sampler [Signature]		Date Time 2-17-11/0730		Received By [Signature]		Date Time 2-17-11/12:02		Relinquished By [Signature]		Date Time 2-17-11/12:02		Received By [Signature]		Date Time 2-17-11/12:02																																																																																		
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Custody Seal #		<input type="checkbox"/> Intact		<input type="checkbox"/> Not Intact		Preserved where applicable		<input type="checkbox"/> On Ice		Cooler Temp. 12.5 °C																																																																																						

4.1
4

T69384: Chain of Custody

Page 1 of 3

SAMPLE INSPECTION FORM

Accutest Job Number: T69384 Client: MWH Date/Time Received: 2-18-11 1005
 # of Coolers Received: 1 Thermometer #: IRG 44 Temperature Adjustment Factor: 0.0
 Cooler Temperatures (initial/adjusted): #1: 5.8°C #2: _____ #3: _____ #4: _____ #5: _____
 #6: _____ #7: _____ #8: _____ #9: _____ #10: _____ #11: _____ #12: _____
 Method of Delivery: FEDEX UPS 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 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

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

Summary of Discrepancies:

① No label on trip blank, ID on bag of trip blank sent. Trip blank not made at Accutest.

TECHNICIAN SIGNATURE/DATE: [Signature] 2-18-11

INFORMATION AND SAMPLE LABELING VERIFIED BY: _____

♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ **CORRECTIVE ACTIONS** ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦

Client Representative Notified: Ted Smith Date: 2-22-11

By Accutest Representative: Georgia Jones Via: Phone Email

Client Instructions: Analyze samples 253 from a new basin

I:\mwalker\form\samplemanagement SM023 Revised 8/11/10

Appendix A Laboratory Data Package Cover Page

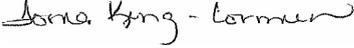
This data package is for Job No. T69384 and laboratory batch no(s): GBB284, GHH141, GHH142, GKK1798, GKK1799, GKK1801, GKK1802, GKK1803, OP17517, OP17514, GN28904 AND GN29093 consist of

- This signature page, the laboratory review checklist, and the following reportable data:
 - R1 Field chain-of-custody documentation;
 - R2 Sample identification cross-reference;
 - R3 Test reports (analytical data sheets) for each environmental sample that includes:
 - a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
 - b) dilution factors,
 - c) preparation methods,
 - d) cleanup methods, and
 - e) if required for the project, tentatively identified compounds (TICs).
 - R4 Surrogate recovery data including:
 - a) Calculated recovery (%R), and
 - b) The laboratory's surrogate QC limits.
 - R5 Test reports/summary forms for blank samples;
 - R6 Test reports/summary forms for laboratory control samples (LCSs) including:
 - a) LCS spiking amounts,
 - b) Calculated %R for each analyte, and
 - c) The laboratory's LCS QC limits.
 - R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a) Samples associated with the MS/MSD clearly identified,
 - b) MS/MSD spiking amounts,
 - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d) Calculated %Rs and relative percent differences (RPDs), and
 - e) The laboratory's MS/MSD QC limits
 - R8 Laboratory analytical duplicate (if applicable) recovery and precision:
 - a) The amount of analyte measured in the duplicate,
 - b) The calculated RPD, and
 - c) The laboratory's QC limits for analytical duplicates.
 - R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;
 - R10 Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Report. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld.

Check, if applicable: This laboratory meets an exception under 30 TAC&25.6 and was last inspection by TCEQ or _____ on Oct. 2008. Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Tonia King-Cormier		QA Manager	03/07/2011
Name (Printed)	Signature	Official Title (printed)	Date

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data							
Laboratory Name: Accutest Laboratories Gulf Coast			LRC Date: 03/07/2011				
Project Name: MWHCODE: San Juan River Basin Program			Laboratory Job Number: T69384				
Reviewer Name: Tonia King-Cormier			Prep Batch Number(s): GBB284,GHH141,GHH142,GKK1798, GKK1799,GKK1801,GKK1802,GKK1803,OP17517,OP17514,GN28904 AND GN29093				
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soil/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			2
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			2
		Were MS/MSD RPDs within laboratory QC limits?		X			2
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?			X		
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL minimize the matrix interference affects on the sample results?	X				
		Is the Laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

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Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: Accutest Laboratories Gulf Coast	LRC Date: 03/07/2011
Project Name: MWHCODE: San Juan River Basin Program	Laboratory Job Number: T69384
Reviewer Name: Tonia King-Cormier	Prep Batch Number(s): GBB284,GHH141,GHH142, GKK1798,GKK1799,GKK1801,GKK1802,GKK1803,OP17517,OP17514,G N28904 AND GN29093

# ¹	A ²	Description	Yes	No	NA ₃	NR ⁴	ER ⁵
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
S2	OI	Has the initial calibration curve been verified using an appropriate second source standard?	X				
		Initial and continuing calibration verification (ICCV and CCV) and continuing calibration					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
S3	O	Mass spectral tuning:					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS):					
		Were IS area counts and retention times within the method-required QC limits?			X		
S5	OI	Raw data (NELAC section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
S6	O	Were data associated with manual integrations flagged on the raw data?	X				
		Dual column confirmation					
S7	O	Did dual column confirmation results meet the method-required QC?		X			2
		Tentatively identified compounds (TICs):					
S8	I	If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
		Interference Check Sample (ICS) results:					
S9	I	Were percent recoveries within method QC limits?			X		
		Serial dilutions, post digestion spikes, and method of standard additions					
S10	OI	Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
		Method detection limit (MDL) studies					
S11	OI	Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S12	OI	Proficiency test reports:					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S13	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S14	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S15	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	X				
S16	OI	Is documentation of the analyst's competency up-to-date and on file?	X				
		Verification/validation documentation for methods (NELAC Chap 5)					
S17	OI	Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
		Laboratory standard operating procedures (SOPs):					
S18	OI	Are laboratory SOPs current and on file for each method performed?	X				

Appendix A (cont'd): Laboratory Review Checklist: Exception Reports	
Laboratory Name: Accutest Laboratories Gulf Coast	LRC Date: 03/07/2011
Project Name: MWHCODE: San Juan River Basin Program	Laboratory Job Number: T69384
Reviewer Name: Tonia King-Cormier	Prep Batch Number: GBB284,GHH141,GHH142 ,GKK1798, GKK1799,GKK1801,GKK1802,GKK1803,OP17517,OP17514,GN28904 AND GN29093
DESCRIPTION	
1	For reporting purposes, the MQL is defined in the report as the RL. The unadjusted MQL/RL is reported in the method blank. The SDL/MDL is defined in the report as the MDL.
2	All anomalies are discussed in the case narrative

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O= organic analyses; I= inorganic analyses (and general chemistry, when applicable);
3. NA = Not Applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked on the LRC)

GC Volatiles

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QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GHH141-MB	HH0002629.D		02/18/11	AT	n/a	n/a	GHH141

The QC reported here applies to the following samples:

Method: SW846 8015

T69384-1

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

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	83%	46-127%
98-08-8	aaa-Trifluorotoluene	91%	44-120%

Method Blank Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GHH142-MB	HH0002659.D		02/21/11	AT	n/a	n/a	GHH142

The QC reported here applies to the following samples:

Method: SW846 8015

T69384-2

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

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	83%	46-127%
98-08-8	aaa-Trifluorotoluene	89%	44-120%

Method Blank Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB284-MB	BB0005762.DI		02/22/11	AT	n/a	n/a	GBB284

The QC reported here applies to the following samples:

Method: SW846 8015

T69384-3

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	0.050	mg/l	

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	92%	42-123%
98-08-8	aaa-Trifluorotoluene	101%	51-130%

Method Blank Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1798-MB	KK037517.D 1		02/18/11	AT	n/a	n/a	GKK1798

The QC reported here applies to the following samples:

Method: SW846 8021B

T69384-3

CAS No.	Compound	Result	RL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	71%	58-125%
98-08-8	aaa-Trifluorotoluene	73%	73-139%

Method Blank Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1799-MB	KK037557.D 1		02/21/11	LB	n/a	n/a	GKK1799

The QC reported here applies to the following samples:

Method: SW846 8021B

T69384-3

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	77%	58-125%
98-08-8	aaa-Trifluorotoluene	79%	73-139%

Method Blank Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1801-MB	KK037635.D 1		02/23/11	LB	n/a	n/a	GKK1801

The QC reported here applies to the following samples:

Method: SW846 8021B

T69384-2

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

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	89%	21-163%
98-08-8	aaa-Trifluorotoluene	120%	39-170%

Method Blank Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1802-MB	KK037672.D 1		02/24/11	LB	n/a	n/a	GKK1802

The QC reported here applies to the following samples:

Method: SW846 8021B

T69384-1

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

CAS No.	Surrogate Recoveries	Results	Limits
460-00-4	4-Bromofluorobenzene	91%	21-163%
98-08-8	aaa-Trifluorotoluene	112%	39-170%

Blank Spike Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GHH141-BS	HH0002624.D		02/18/11	AT	n/a	n/a	GHH141

The QC reported here applies to the following samples:

Method: SW846 8015

T69384-1

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.370	93	78-115

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	84%	46-127%
98-08-8	aaa-Trifluorotoluene	95%	44-120%

Blank Spike Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GHH142-BS	HH0002656.D		02/21/11	AT	n/a	n/a	GHH142

The QC reported here applies to the following samples:

Method: SW846 8015

T69384-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.382	96	78-115

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	82%	46-127%
98-08-8	aaa-Trifluorotoluene	93%	44-120%

Blank Spike Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB284-BS	BB0005759.DI		02/22/11	AT	n/a	n/a	GBB284

The QC reported here applies to the following samples:

Method: SW846 8015

T69384-3

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.364	91	81-113

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	95%	42-123%
98-08-8	aaa-Trifluorotoluene	106%	51-130%

Blank Spike Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1798-BS	KK037514.D 1		02/18/11	AT	n/a	n/a	GKK1798

The QC reported here applies to the following samples:

Method: SW846 8021B

T69384-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-41-4	Ethylbenzene	20	19.6	98	81-116
108-88-3	Toluene	20	19.8	99	87-117

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	74%	58-125%
98-08-8	aaa-Trifluorotoluene	78%	73-139%

Blank Spike Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1802-BS	KK037668.D 1		02/24/11	LB	n/a	n/a	GKK1802

The QC reported here applies to the following samples:

Method: SW846 8021B

T69384-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	20	18.3	92	73-132
100-41-4	Ethylbenzene	20	18.0	90	70-133
108-88-3	Toluene	20	18.1	91	74-133
1330-20-7	Xylenes (total)	60	55.0	92	73-134
	m,p-Xylene	40	36.4	91	70-134
95-47-6	o-Xylene	20	18.6	93	76-131

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	91%	21-163%
98-08-8	aaa-Trifluorotoluene	118%	39-170%

Blank Spike/Blank Spike Duplicate Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1799-BS	KK037554.D 1		02/21/11	LB	n/a	n/a	GKK1799
GKK1799-BSD	KK037555.D 1		02/21/11	LB	n/a	n/a	GKK1799

The QC reported here applies to the following samples:

Method: SW846 8021B

T69384-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	20	20.2	101	19.9	100	1	86-121/30
1330-20-7	Xylenes (total)	60	60.9	102	59.9	100	2	85-115/30
95-47-6	o-Xylene	20	20.8	104	20.4	102	2	87-116/30
	m,p-Xylene	40	40.1	100	39.4	99	2	84-116/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	76%	101%	58-125%
98-08-8	aaa-Trifluorotoluene	79%	103%	73-139%

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Blank Spike/Blank Spike Duplicate Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1801-BS	KK037632.D 1		02/23/11	LB	n/a	n/a	GKK1801
GKK1801-BSD	KK037633.D 1		02/23/11	LB	n/a	n/a	GKK1801

The QC reported here applies to the following samples:

Method: SW846 8021B

T69384-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	20	20.5	103	19.2	96	7	73-132/30
100-41-4	Ethylbenzene	20	21.2	106	19.5	98	8	70-133/30
108-88-3	Toluene	20	20.6	103	19.1	96	8	74-133/30
1330-20-7	Xylenes (total)	60	63.0	105	58.3	97	8	73-134/30
	m,p-Xylene	40	42.2	106	38.8	97	8	70-134/30
95-47-6	o-Xylene	20	20.8	104	19.5	98	6	76-131/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	96%	95%	21-163%
98-08-8	aaa-Trifluorotoluene	122%	121%	39-170%

5.3.2
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T69384-1MS	HH0002647.D		02/18/11	AT	n/a	n/a	GHH141
T69384-1MSD	HH0002648.D		02/18/11	AT	n/a	n/a	GHH141
T69384-1	HH0002646.D		02/18/11	AT	n/a	n/a	GHH141

The QC reported here applies to the following samples:

Method: SW846 8015

T69384-1

CAS No.	Compound	T69384-1 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	6.52	26.7	28.3	82	27.9	80	1	78-115/14

CAS No.	Surrogate Recoveries	MS	MSD	T69384-1	Limits
460-00-4	4-Bromofluorobenzene	84%	85%	80%	46-127%
98-08-8	aaa-Trifluorotoluene	93%	93%	89%	44-120%

5.4.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T69384-2MS	HH0002661.D0		02/21/11	AT	n/a	n/a	GHH142
T69384-2MSD	HH0002662.D0		02/21/11	AT	n/a	n/a	GHH142
T69384-2	HH0002660.D0		02/21/11	AT	n/a	n/a	GHH142

The QC reported here applies to the following samples:

Method: SW846 8015

T69384-2

CAS No.	Compound	T69384-2 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	844	593	1180	57*	1150	52*	3	78-115/14

CAS No.	Surrogate Recoveries	MS	MSD	T69384-2	Limits
460-00-4	4-Bromofluorobenzene	94%	95%	93%	46-127%
98-08-8	aaa-Trifluorotoluene	98%	99%	96%	44-120%

5.4.2
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T69384-3MS	BB0005764.D50		02/22/11	AT	n/a	n/a	GBB284
T69384-3MSD	BB0005765.D50		02/22/11	AT	n/a	n/a	GBB284
T69384-3	BB0005763.D50		02/22/11	AT	n/a	n/a	GBB284

The QC reported here applies to the following samples:

Method: SW846 8015

T69384-3

CAS No.	Compound	T69384-3 mg/l	Spike Q mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	17.3	20	35.4	91	35.2	90	1	81-113/31

CAS No.	Surrogate Recoveries	MS	MSD	T69384-3	Limits
460-00-4	4-Bromofluorobenzene	95%	97%	93%	42-123%
98-08-8	aaa-Trifluorotoluene	107%	108%	101%	51-130%

5.4.3
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T68595-2MS	KK037520.D 1		02/19/11	AT	n/a	n/a	GKK1798
T68595-2MSD	KK037521.D 1		02/19/11	AT	n/a	n/a	GKK1798
T68595-2	KK037519.D 1		02/18/11	AT	n/a	n/a	GKK1798

The QC reported here applies to the following samples:

Method: SW846 8021B

T69384-3

CAS No.	Compound	T68595-2 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-41-4	Ethylbenzene	ND	20	18.6	93	18.6	93	0	81-116/14
108-88-3	Toluene	ND	20	18.5	93	18.8	94	2	87-117/16

CAS No.	Surrogate Recoveries	MS	MSD	T68595-2	Limits
460-00-4	4-Bromofluorobenzene	69%	60%	73%	58-125%
98-08-8	aaa-Trifluorotoluene	72% * a	63% * a	77%	73-139%

(a) Outside control limits biased low.

5.4.4
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T69308-1MS	KK037571.D 1		02/21/11	LB	n/a	n/a	GKK1799
T69308-1MSD	KK037572.D 1		02/21/11	LB	n/a	n/a	GKK1799
T69308-1	KK037568.D 1		02/21/11	LB	n/a	n/a	GKK1799

The QC reported here applies to the following samples:

Method: SW846 8021B

T69384-3

CAS No.	Compound	T69308-1 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	1.7	20	20.8	96	20.9	96	0	86-121/19
1330-20-7	Xylenes (total)	70.5	60	129	98	129	98	0	85-115/12
95-47-6	o-Xylene	27.6	20	47.5	100	47.2	98	1	87-116/16
	m,p-Xylene	42.9	40	81.9	98	81.6	97	0	84-116/13

CAS No.	Surrogate Recoveries	MS	MSD	T69308-1	Limits
460-00-4	4-Bromofluorobenzene	59%	74%	81%	58-125%
98-08-8	aaa-Trifluorotoluene	69% * a	82%	89%	73-139%

(a) Outside control limits biased low.

5.4.5
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T69036-2MS	KK037650.D 1		02/23/11	LB	n/a	n/a	GKK1801
T69036-2MSD	KK037651.D 1		02/23/11	LB	n/a	n/a	GKK1801
T69036-2 ^a	KK037645.D 1		02/23/11	LB	n/a	n/a	GKK1801

The QC reported here applies to the following samples:

Method: SW846 8021B

T69384-2

CAS No.	Compound	T69036-2 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	21.4	9.5	44	8.6	43	10	41-129/33
100-41-4	Ethylbenzene	ND	21.4	15.8	74	14.4	72	9	15-139/36
108-88-3	Toluene	ND	21.4	9.9	46	8.9	44	11	26-141/38
1330-20-7	Xylenes (total)	ND	64.2	35.4	55	33.7	56	5	22-132/33
	m,p-Xylene	ND	42.8	21.4	50	20.8	52	3	24-133/41
95-47-6	o-Xylene	ND	21.4	14.0	65	12.9	64	8	25-140/35

CAS No.	Surrogate Recoveries	MS	MSD	T69036-2	Limits
460-00-4	4-Bromofluorobenzene	89%	89%	90%	21-163%
98-08-8	aaa-Trifluorotoluene	123%	123%	126%	39-170%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

5.4.6
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T69202-1MS	KK037676.D 1		02/24/11	LB	n/a	n/a	GKK1802
T69202-1MSD	KK037677.D 1		02/24/11	LB	n/a	n/a	GKK1802
T69202-1	KK037673.D 1		02/24/11	LB	n/a	n/a	GKK1802

The QC reported here applies to the following samples:

Method: SW846 8021B

T69384-1

CAS No.	Compound	T69202-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	4.5 U	23.2	22.6	97	20.4	95	10	41-129/33
100-41-4	Ethylbenzene	4.5 U	23.2	24.7	107	22.8	106	8	15-139/36
108-88-3	Toluene	4.5 U	23.2	24.9	107	22.8	106	9	26-141/38
1330-20-7	Xylenes (total)	13 U	69.5	77.9	112	72.7	113	7	22-132/33
	m,p-Xylene	8.9 U	46.4	53.5	115	50.5	118	6	24-133/41
95-47-6	o-Xylene	4.5 U	23.2	24.3	105	22.2	104	9	25-140/35

CAS No.	Surrogate Recoveries	MS	MSD	T69202-1	Limits
460-00-4	4-Bromofluorobenzene	87%	82%	79%	21-163%
98-08-8	aaa-Trifluorotoluene	121%	120%	113%	39-170%

5.4.7
5

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: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17514-MB	IF204281.D	1	02/22/11	HD	02/21/11	OP17514	GIB1164

The QC reported here applies to the following samples:

Method: SW846 8015 M

T69384-1, T69384-2

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

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	87% 33-115%

6.1.1
6

Method Blank Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17517-MB	IF204283.D	1	02/22/11	HD	02/21/11	OP17517	GIB1164

The QC reported here applies to the following samples:

Method: SW846 8015 M

T69384-3

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	0.10	mg/l	
	TPH (> C28-C40)	ND	0.10	mg/l	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	76% 25-112%

Method Blank Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17514-MB	JJ10964.D	1	03/01/11	HD	02/21/11	OP17514	GJB143

The QC reported here applies to the following samples:

Method: SW846 8015 M

T69384-1, T69384-2

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

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	89% 33-115%

Method Blank Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17517-MB	JJ10968.D	1	03/02/11	HD	02/21/11	OP17517	GJB143

The QC reported here applies to the following samples:

Method: SW846 8015 M

T69384-3

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	0.10	mg/l	
	TPH (> C28-C40)	ND	0.10	mg/l	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	85% 25-112%

Blank Spike Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17514-BSP	IF204263.D	1	02/21/11	HD	02/21/11	OP17514	GIB1163

The QC reported here applies to the following samples:

Method: SW846 8015 M

T69384-1, T69384-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	33.1	23.3	70	45-107

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	78%	33-115%

Blank Spike Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17517-BS	IF204285.D	1	02/22/11	HD	02/21/11	OP17517	GIB1164

The QC reported here applies to the following samples:

Method: SW846 8015 M

T69384-3

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH (C10-C28)	1	0.688	69	22-84

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	81%	25-112%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17514-MS	IF204289.D	1	02/22/11	HD	02/21/11	OP17514	GIB1164
OP17514-MSD	IF204265.D	1	02/21/11	HD	02/21/11	OP17514	GIB1163
T69384-2	IF204293.D	2	02/22/11	HD	02/21/11	OP17514	GIB1164
T69384-2	JJ10967.D	2	03/01/11	HD	02/21/11	OP17514	GJF143

The QC reported here applies to the following samples:

Method: SW846 8015 M

T69384-1, T69384-2

CAS No.	Compound	T69384-2 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	50.9	41.3	53.2	6*	109	140*	69*	45-107/34

CAS No.	Surrogate Recoveries	MS	MSD	T69384-2	T69384-2	Limits
84-15-1	o-Terphenyl	62%	93%	62%	65%	33-115%

6.3.1
6

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69384
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17517-MS	IF204259.D	1	02/21/11	HD	02/21/11	OP17517	GIB1163
OP17517-MSD	IF204287.D	1	02/22/11	HD	02/21/11	OP17517	GIB1164
T69384-3	IF204261.D	1	02/21/11	HD	02/21/11	OP17517	GIB1163
T69384-3	JJ10969.D	1	03/02/11	HD	02/21/11	OP17517	GJF143

The QC reported here applies to the following samples:

Method: SW846 8015 M

T69384-3

CAS No.	Compound	T69384-3 mg/l	Spike Q mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	6.06	2.04	9.18	153* a	7.55	73	19	22-84/36

CAS No.	Surrogate Recoveries	MS	MSD	T69384-3	T69384-3	Limits
84-15-1	o-Terphenyl	97%	105%	98%	71%	25-112%

(a) Outside control limits due to high level in sample relative to spike amount.

Technical Report for

EL PASO CORPORATION

MWHCODE: San Juan River Basin Program

JAQUEZ SITE

Accutest Job Number: T69435

Sampling Date: 02/17/11

Report to:

MWH
1801 California Street Suite 2900
Denver, CO 80202
jed.smith@mwhglobal.com

ATTN: Jed Smith

Total number of pages in report: **27**



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 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: T69435

MWHCODE: San Juan River Basin Program
Project No: JAQUEZ SITE

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T69435-1	02/17/11	14:40	02/19/11	SO	Soil	JAQUEZ (148)-12-021711

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 T69435

Site: MWHCODE: San Juan River Basin Program

Report Date 3/7/2011 4:23:56 PM

1 Sample(s) were collected on 02/17/2011 and were received at Accutest on 02/19/2011 properly preserved, at 6 Deg. C and intact. These Samples received an Accutest job number of T69435. 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 GC By Method SW846 8015

Matrix SO	Batch ID: GHH146
------------------	-------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T69436-19MS, T69436-19MSD were used as the QC samples indicated.
- Sample(s) T69436-19MS, T69436-19MSD have surrogates outside control limits. Probable cause due to matrix interference.

Volatiles by GC By Method SW846 8021B

Matrix SO	Batch ID: GKK1803
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T69435-1MS, T69435-1MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8015 M

Matrix SO	Batch ID: OP17591
------------------	--------------------------

- 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) T69782-1MS, T69782-1MSD were used as the QC samples indicated.

Wet Chemistry By Method SM 2540 G

Matrix SO	Batch ID: GN29126
------------------	--------------------------

- Sample(s) T69435-1DUP 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:	JAQUEZ (148)-12-021711		
Lab Sample ID:	T69435-1	Date Sampled:	02/17/11
Matrix:	SO - Soil	Date Received:	02/19/11
Method:	SW846 8015	Percent Solids:	87.5
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH0002773.D	1	02/24/11	AT	n/a	n/a	GHH146
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.44 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	6.0	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	80%		46-127%	
98-08-8	aaa-Trifluorotoluene	84%		44-120%	

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

3.1
3

Client Sample ID: JAQUEZ (148)-12-021711	Date Sampled: 02/17/11
Lab Sample ID: T69435-1	Date Received: 02/19/11
Matrix: SO - Soil	Percent Solids: 87.5
Method: SW846 8021B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK037707.D	1	02/25/11	LB	n/a	n/a	GKK1803
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.39 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.2	ug/kg	
100-41-4	Ethylbenzene	ND	4.2	ug/kg	
108-88-3	Toluene	ND	4.2	ug/kg	
1330-20-7	Xylenes (total)	ND	13	ug/kg	
	m,p-Xylene	ND	8.5	ug/kg	
95-47-6	o-Xylene	ND	4.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%		21-163%
98-08-8	aaa-Trifluorotoluene	156%		39-170%

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

3.1
3

Client Sample ID:	JAQUEZ (148)-12-021711	
Lab Sample ID:	T69435-1	Date Sampled: 02/17/11
Matrix:	SO - Soil	Date Received: 02/19/11
Method:	SW846 8015 M SW846 3550B	Percent Solids: 87.5
Project:	MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ10995.D	1	03/02/11	HD	02/25/11	OP17591	GJF143
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

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

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

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
- LRC Form

SAMPLE INSPECTION FORM

Accutest Job Number: T69435 Client: MWH Date/Time Received: 2/19/11 1000
 # of Coolers Received: 1 Thermometer #: # 110 Temperature Adjustment Factor: -0.5°C
 Cooler Temperatures (initial/adjusted): #1: 6.5/6.0°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 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

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

Summary of Discrepancies:

TECHNICIAN SIGNATURE/DATE: Danell Rudolph 2/19/11

INFORMATION AND SAMPLE LABELING VERIFIED BY: _____

♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ **CORRECTIVE ACTIONS** ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦

Client Representative Notified: _____ Date: _____
 By Accutest Representative: _____ Via: Phone Email
 Client Instructions: _____

kinwalker\forms\samplemanagement SM023 Revised 8/11/10

Appendix A Laboratory Data Package Cover Page

This data package is for Job No.T69435 and laboratory batch no(s): GHH146,GKK1803,OP17591 AND GN29126 consist of

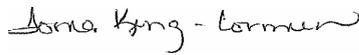
- This signature page, the laboratory review checklist, and the following reportable data:
- R1 Field chain-of-custody documentation;
- R2 Sample identification cross-reference;
- R3 Test reports (analytical data sheets) for each environmental sample that includes:
 - a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
 - b) dilution factors,
 - c) preparation methods,
 - d) cleanup methods, and
 - e) if required for the project, tentatively identified compounds (TICs).
- R4 Surrogate recovery data including:
 - a) Calculated recovery (%R), and
 - b) The laboratory's surrogate QC limits.
- R5 Test reports/summary forms for blank samples;
- R6 Test reports/summary forms for laboratory control samples (LCSs) including:
 - a) LCS spiking amounts,
 - b) Calculated %R for each analyte, and
 - c) The laboratory's LCS QC limits.
- R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a) Samples associated with the MS/MSD clearly identified,
 - b) MS/MSD spiking amounts,
 - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d) Calculated %Rs and relative percent differences (RPDs), and
 - e) The laboratory's MS/MSD QC limits
- R8 Laboratory analytical duplicate (if applicable) recovery and precision:
 - a) The amount of analyte measured in the duplicate,
 - b) The calculated RPD, and
 - c) The laboratory's QC limits for analytical duplicates.
- R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;
- R10 Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Report. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By me signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld.

Check, if applicable: This laboratory meets an exception under 30 TAC&25.6 and was last inspection by TCEQ or _____ on Oct. 2008. Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Tonia King-Cormier
Name (Printed)


Signature

QA Manager
Official Title (printed)

03/07/2011
Date

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: Accutest Laboratories Gulf Coast	LRC Date: 03/07/2011
Project Name: MWHCODE: San Juan River Basin Program	Laboratory Job Number: T69435
Reviewer Name: Tonia King-Cormier	Prep Batch Number(s): GHH146,GKK1803,OP17591 AND GN29126

# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soil/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?				X	
		If required for the project, TICs reported?				X	
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			2
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?				X	
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL minimize the matrix interference affects on the sample results?	X				
		Is the Laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: Accutest Laboratories Gulf Coast	LRC Date: 03/07/2011
Project Name: MWHCODE: San Juan River Basin Program	Laboratory Job Number: T69435
Reviewer Name: Tonia King-Cormier	Prep Batch Number(s): GHH146,GKK1803,OP17591 AND GN29126

# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER # ⁵
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration					
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
S3	O	Mass spectral tuning:					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS):					
		Were IS area counts and retention times within the method-required QC limits?			X		
S5	OI	Raw data (NELAC section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs):					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results:					
		Were percent recoveries within method QC limits?			X		
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports:					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chap 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs):					
		Are laboratory SOPs current and on file for each method performed?	X				

Appendix A (cont'd): Laboratory Review Checklist: Exception Reports	
Laboratory Name: Accutest Laboratories Gulf Coast	LRC Date: 03/07/2011
Project Name: MWHCODE: San Juan River Basin Program	Laboratory Job Number: T69435
Reviewer Name: Tonia King-Cormier	Prep Batch Number: GHH146,GKK1803,OP17591 AND GN29126
DESCRIPTION	
1	For reporting purposes, the MQL is defined in the report as the RL. The unadjusted MQL/RL is reported in the method blank. The SDL/MDL is defined in the report as the MDL.
2	All anomalies are discussed in the case narrative

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O= organic analyses; I= inorganic analyses (and general chemistry, when applicable);
3. NA = Not Applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked on the LRC)

GC 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: T69435
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GHH146-MB	HH0002747.D		02/24/11	AT	n/a	n/a	GHH146

The QC reported here applies to the following samples:

Method: SW846 8015

T69435-1

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

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	86%	46-127%
98-08-8	aaa-Trifluorotoluene	86%	44-120%

Method Blank Summary

Job Number: T69435
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1803-MB	KK037706.D 1		02/25/11	LB	n/a	n/a	GKK1803

The QC reported here applies to the following samples:

Method: SW846 8021B

T69435-1

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

CAS No.	Surrogate Recoveries	Results	Limits
460-00-4	4-Bromofluorobenzene	93%	21-163%
98-08-8	aaa-Trifluorotoluene	120%	39-170%

Blank Spike Summary

Job Number: T69435
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GHH146-BS	HH0002744.D		02/24/11	AT	n/a	n/a	GHH146

The QC reported here applies to the following samples:

Method: SW846 8015

T69435-1

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.388	97	78-115

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	85%	46-127%
98-08-8	aaa-Trifluorotoluene	95%	44-120%

Blank Spike Summary

Job Number: T69435
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1803-BS	KK037702.D 1		02/25/11	LB	n/a	n/a	GKK1803

The QC reported here applies to the following samples:

Method: SW846 8021B

T69435-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	20	21.0	105	73-132
100-41-4	Ethylbenzene	20	21.0	105	70-133
108-88-3	Toluene	20	20.8	104	74-133
1330-20-7	Xylenes (total)	60	63.3	106	73-134
	m,p-Xylene	40	42.2	106	70-134
95-47-6	o-Xylene	20	21.2	106	76-131

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	95%	21-163%
98-08-8	aaa-Trifluorotoluene	121%	39-170%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69435
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T69436-19MS	HH0002763.D	0	02/24/11	AT	n/a	n/a	GHH146
T69436-19MSD	HH0002764.D	0	02/24/11	AT	n/a	n/a	GHH146
T69436-19	HH0002753.D	0	02/24/11	AT	n/a	n/a	GHH146

The QC reported here applies to the following samples:

Method: SW846 8015

T69435-1

CAS No.	Compound	T69436-19 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	645	422	1000	84	979	79	2	78-115/14

CAS No.	Surrogate Recoveries	MS	MSD	T69436-19	Limits
460-00-4	4-Bromofluorobenzene	161%* a	156%* a	150%* a	46-127%
98-08-8	aaa-Trifluorotoluene	100%	100%	96%	44-120%

(a) Outside control limits due to matrix interference. Confirmed by MS/MSD.

5.3.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69435
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T69435-1MS	KK037710.D 1		02/25/11	LB	n/a	n/a	GKK1803
T69435-1MSD	KK037711.D 1		02/25/11	LB	n/a	n/a	GKK1803
T69435-1	KK037707.D 1		02/25/11	LB	n/a	n/a	GKK1803

The QC reported here applies to the following samples:

Method: SW846 8021B

T69435-1

CAS No.	Compound	T69435-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	21	21.9	104	17.1	83	25	41-129/33
100-41-4	Ethylbenzene	ND	21	22.0	105	17.0	83	26	15-139/36
108-88-3	Toluene	ND	21	24.1	115	18.4	90	27	26-141/38
1330-20-7	Xylenes (total)	ND	63	68.2	108	52.0	85	27	22-132/33
	m,p-Xylene	ND	42	45.7	109	34.7	85	27	24-133/41
95-47-6	o-Xylene	ND	21	22.5	107	17.3	84	26	25-140/35

CAS No.	Surrogate Recoveries	MS	MSD	T69435-1	Limits
460-00-4	4-Bromofluorobenzene	94%	97%	93%	21-163%
98-08-8	aaa-Trifluorotoluene	127%	131%	156%	39-170%

5.3.2
5

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: T69435
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17591-MB	JJ10982.D	1	03/02/11	HD	02/25/11	OP17591	GJB143

The QC reported here applies to the following samples:

Method: SW846 8015 M

T69435-1

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

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	70% 33-115%

Blank Spike Summary

Job Number: T69435
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17591-BS	JJ10983.D	1	03/02/11	HD	02/25/11	OP17591	GJF143

The QC reported here applies to the following samples:

Method: SW846 8015 M

T69435-1

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	33.3	25.1	75	45-107

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	72%	33-115%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69435
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17591-MS	JJ10984.D	1	03/02/11	HD	02/25/11	OP17591	GJB143
OP17591-MSD	JJ10985.D	1	03/02/11	HD	02/25/11	OP17591	GJF143
T69782-1	JJ10986.D	1	03/02/11	HD	02/25/11	OP17591	GJB143

The QC reported here applies to the following samples:

Method: SW846 8015 M

T69435-1

CAS No.	Compound	T69782-1 mg/kg	Spike Q	mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	ND	40.1	25.9	65	31.5	79	20	45-107/34	

CAS No.	Surrogate Recoveries	MS	MSD	T69782-1	Limits
84-15-1	o-Terphenyl	61%	73%	77%	33-115%

Technical Report for

EL PASO CORPORATION

MWHCODE: San Juan River Basin Program

JAQUEZ SITE

Accutest Job Number: T69782

Sampling Dates: 02/18/11 - 02/22/11

Report to:

MWH
1801 California Street Suite 2900
Denver, CO 80202
jed.smith@mwhglobal.com

ATTN: Jed Smith

Total number of pages in report: **51**



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 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)

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: T69782

MWHCODE: San Juan River Basin Program

Project No: JAQUEZ SITE

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T69782-1	02/22/11	19:00	02/24/11	SO	Soil	JAQUEZ 220 (10) 022211
T69782-2	02/22/11	12:53	02/24/11	SO	Soil	JAQUEZ 213 (20.5) 022211
T69782-3	02/22/11	17:00	02/24/11	SO	Soil	JAQUEZ 219 (17) 022211
T69782-4	02/18/11	15:33	02/24/11	SO	Soil	JAQUEZ 178 (5.5) 021811
T69782-5	02/18/11	15:46	02/24/11	SO	Soil	JAQUEZ 169 (6.5) 021811
T69782-6	02/18/11	16:45	02/24/11	SO	Soil	JAQUEZ 174 (5) 021811
T69782-7	02/18/11	17:07	02/24/11	SO	Soil	JAQUEZ 157 (7) 021811
T69782-8	02/18/11	17:21	02/24/11	SO	Soil	JAQUEZ 179 (10) 021811
T69782-9	02/21/11	14:00	02/24/11	SO	Soil	JAQUEZ 199 (25) 022111

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 T69782

Site: MWHCODE: San Juan River Basin Program

Report Date 3/8/2011 8:14:55 AM

9 Sample(s) were collected on between 02/18/2011 and 02/22/2011 and were received at Accutest on 02/24/2011 properly preserved, at 4.8 Deg. C and intact. These Samples received an Accutest job number of T69782. 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 GC By Method SW846 8015

Matrix SO	Batch ID: GBB289
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- All samples were analyzed within the recommended method holding time.
- Sample(s) T69782-2MS, T69782-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Volatiles by GC By Method SW846 8021B

Matrix SO	Batch ID: GKK1803
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- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T69435-1MS, T69435-1MSD were used as the QC samples indicated.
- Sample(s) T69782-8 have surrogates outside control limits. Confirmation run for surrogate recoveries.
- T69782-8 for Benzene: More than 40% RPD for detected concentrations between two GC columns.
- T69782-8 for aaa-Trifluorotoluene: Outside control limits due to matrix interference. Confirmed by reanalysis.

Matrix SO	Batch ID: GKK1806
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- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T69782-3MS, T69782-3MSD were used as the QC samples indicated.
- Sample(s) T69782-8 have surrogates outside control limits. Confirmation run for surrogate recoveries.
- T69782-5 for o-Xylene: More than 40% RPD for detected concentrations between two GC columns.
- T69782-5 for Xylenes (total): More than 40% RPD for detected concentrations between two GC columns.
- T69782-9 for Xylenes (total): More than 40% RPD for detected concentrations between two GC columns.

Matrix SO	Batch ID: GKK1807
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- Sample(s) T69782-8 have surrogates outside control limits. Confirmation run for surrogate recoveries.
- T69782-8: Confirmation run for surrogate recoveries.

Extractables by GC By Method SW846 8015 M

Matrix SO	Batch ID: OP17591
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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) T69782-1MS, T69782-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Wet Chemistry By Method SM 2540 G

Matrix SO	Batch ID: GN29099
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- Sample(s) T69385-6DUP were used as the QC samples for Solids, Percent.

Matrix SO	Batch ID: GN29127
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- Sample(s) T69778-1DUP were used as the QC samples for Solids, Percent.

Matrix SO	Batch ID: GN29130
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- Sample(s) T69782-7DUP were used as the QC samples for Solids, Percent.

Matrix SO	Batch ID: GN29158
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- Sample(s) T69848-1DUP 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:	JAQUEZ 220 (10) 022211		
Lab Sample ID:	T69782-1	Date Sampled:	02/22/11
Matrix:	SO - Soil	Date Received:	02/24/11
Method:	SW846 8015	Percent Solids:	83.1
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0005883.D	1	02/25/11	AT	n/a	n/a	GBB289
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.59 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	6.4	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	93%		46-127%	
98-08-8	aaa-Trifluorotoluene	100%		44-120%	

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:	JAQUEZ 220 (10) 022211	
Lab Sample ID:	T69782-1	Date Sampled: 02/22/11
Matrix:	SO - Soil	Date Received: 02/24/11
Method:	SW846 8021B	Percent Solids: 83.1
Project:	MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK037709.D	1	02/25/11	LB	n/a	n/a	GKK1803
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.42 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.4	ug/kg	
100-41-4	Ethylbenzene	ND	4.4	ug/kg	
108-88-3	Toluene	ND	4.4	ug/kg	
1330-20-7	Xylenes (total)	ND	13	ug/kg	
	m,p-Xylene	ND	8.9	ug/kg	
95-47-6	o-Xylene	ND	4.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		21-163%
98-08-8	aaa-Trifluorotoluene	127%		39-170%

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

3.1
3

Client Sample ID:	JAQUEZ 220 (10) 022211		
Lab Sample ID:	T69782-1	Date Sampled:	02/22/11
Matrix:	SO - Soil	Date Received:	02/24/11
Method:	SW846 8015 M SW846 3550B	Percent Solids:	83.1
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ10986.D	1	03/02/11	HD	02/25/11	OP17591	GJB143
Run #2							

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

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	4.0	mg/kg	
	TPH (> C28-C40)	ND	4.0	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	77%		33-115%	

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

32
3

Client Sample ID:	JAQUEZ 213 (20.5) 022211		
Lab Sample ID:	T69782-2	Date Sampled:	02/22/11
Matrix:	SO - Soil	Date Received:	02/24/11
Method:	SW846 8015	Percent Solids:	79.4
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0005884.D	1	02/25/11	AT	n/a	n/a	GBB289
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.25 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	7.3	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	91%		46-127%	
98-08-8	aaa-Trifluorotoluene	100%		44-120%	

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

32
3

Client Sample ID:	JAQUEZ 213 (20.5) 022211		
Lab Sample ID:	T69782-2	Date Sampled:	02/22/11
Matrix:	SO - Soil	Date Received:	02/24/11
Method:	SW846 8021B	Percent Solids:	79.4
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK037714.D	1	02/25/11	LB	n/a	n/a	GKK1803
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.29 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.8	ug/kg	
100-41-4	Ethylbenzene	ND	4.8	ug/kg	
108-88-3	Toluene	ND	4.8	ug/kg	
1330-20-7	Xylenes (total)	ND	14	ug/kg	
	m,p-Xylene	ND	9.5	ug/kg	
95-47-6	o-Xylene	ND	4.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	90%		21-163%
98-08-8	aaa-Trifluorotoluene	130%		39-170%

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

32
3

Client Sample ID: JAQUEZ 213 (20.5) 022211	
Lab Sample ID: T69782-2	Date Sampled: 02/22/11
Matrix: SO - Soil	Date Received: 02/24/11
Method: SW846 8015 M SW846 3550B	Percent Solids: 79.4
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ10987.D	1	03/02/11	HD	02/25/11	OP17591	GJF143
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	4.2	mg/kg	
	TPH (> C28-C40)	ND	4.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	88%		33-115%

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:	JAQUEZ 219 (17) 022211		
Lab Sample ID:	T69782-3	Date Sampled:	02/22/11
Matrix:	SO - Soil	Date Received:	02/24/11
Method:	SW846 8015	Percent Solids:	83.0
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0005885.D	1	02/25/11	AT	n/a	n/a	GBB289
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.13 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	6.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	91%		46-127%	
98-08-8	aaa-Trifluorotoluene	100%		44-120%	

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: JAQUEZ 219 (17) 022211	Date Sampled: 02/22/11
Lab Sample ID: T69782-3	Date Received: 02/24/11
Matrix: SO - Soil	Percent Solids: 83.0
Method: SW846 8021B	
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK037813.D	1	03/02/11	LB	n/a	n/a	GKK1806
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.85 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.1	ug/kg	
100-41-4	Ethylbenzene	ND	4.1	ug/kg	
108-88-3	Toluene	ND	4.1	ug/kg	
1330-20-7	Xylenes (total)	ND	12	ug/kg	
	m,p-Xylene	ND	8.2	ug/kg	
95-47-6	o-Xylene	ND	4.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	80%		21-163%
98-08-8	aaa-Trifluorotoluene	169%		39-170%

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: JAQUEZ 219 (17) 022211	
Lab Sample ID: T69782-3	Date Sampled: 02/22/11
Matrix: SO - Soil	Date Received: 02/24/11
Method: SW846 8015 M SW846 3550B	Percent Solids: 83.0
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ10988.D	1	03/02/11	HD	02/25/11	OP17591	GJB143
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	73%		33-115%

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

3.4
3

Client Sample ID:	JAQUEZ 178 (5.5) 021811		
Lab Sample ID:	T69782-4	Date Sampled:	02/18/11
Matrix:	SO - Soil	Date Received:	02/24/11
Method:	SW846 8015	Percent Solids:	83.2
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0005886.D	1	02/25/11	AT	n/a	n/a	GBB289
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.80 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	6.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	90%		46-127%	
98-08-8	aaa-Trifluorotoluene	99%		44-120%	

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: JAQUEZ 178 (5.5) 021811	
Lab Sample ID: T69782-4	Date Sampled: 02/18/11
Matrix: SO - Soil	Date Received: 02/24/11
Method: SW846 8021B	Percent Solids: 83.2
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK037716.D	1	02/25/11	LB	n/a	n/a	GKK1803
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.43 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.4	ug/kg	
100-41-4	Ethylbenzene	ND	4.4	ug/kg	
108-88-3	Toluene	ND	4.4	ug/kg	
1330-20-7	Xylenes (total)	ND	13	ug/kg	
	m,p-Xylene	ND	8.9	ug/kg	
95-47-6	o-Xylene	ND	4.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	95%		21-163%
98-08-8	aaa-Trifluorotoluene	127%		39-170%

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

3.4
3

Client Sample ID: JAQUEZ 178 (5.5) 021811	
Lab Sample ID: T69782-4	Date Sampled: 02/18/11
Matrix: SO - Soil	Date Received: 02/24/11
Method: SW846 8015 M SW846 3550B	Percent Solids: 83.2
Project: MWCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ10989.D	1	03/02/11	HD	02/25/11	OP17591	GJF143
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	68%		33-115%

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:	JAQUEZ 169 (6.5) 021811		
Lab Sample ID:	T69782-5	Date Sampled:	02/18/11
Matrix:	SO - Soil	Date Received:	02/24/11
Method:	SW846 8015	Percent Solids:	81.8
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0005887.D	1	02/25/11	AT	n/a	n/a	GBB289
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.19 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	7.0	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	92%		46-127%	
98-08-8	aaa-Trifluorotoluene	101%		44-120%	

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: JAQUEZ 169 (6.5) 021811	
Lab Sample ID: T69782-5	Date Sampled: 02/18/11
Matrix: SO - Soil	Date Received: 02/24/11
Method: SW846 8021B	Percent Solids: 81.8
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK037834.D	1	03/02/11	LB	n/a	n/a	GKK1806
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.9	ug/kg	
100-41-4	Ethylbenzene	ND	4.9	ug/kg	
108-88-3	Toluene	ND	4.9	ug/kg	
1330-20-7	Xylenes (total) ^a	ND	15	ug/kg	
	m,p-Xylene	ND	9.8	ug/kg	
95-47-6	o-Xylene ^a	ND	4.9	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	56%		21-163%
98-08-8	aaa-Trifluorotoluene	84%		39-170%

(a) More than 40% RPD for detected concentrations between two GC columns.

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: JAQUEZ 169 (6.5) 021811	
Lab Sample ID: T69782-5	Date Sampled: 02/18/11
Matrix: SO - Soil	Date Received: 02/24/11
Method: SW846 8015 M SW846 3550B	Percent Solids: 81.8
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ10990.D	1	03/02/11	HD	02/25/11	OP17591	GJB143
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	4.1	mg/kg	
	TPH (> C28-C40)	ND	4.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	58%		33-115%

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

3.6
3

Client Sample ID:	JAQUEZ 174 (5) 021811		
Lab Sample ID:	T69782-6	Date Sampled:	02/18/11
Matrix:	SO - Soil	Date Received:	02/24/11
Method:	SW846 8015	Percent Solids:	85.1
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0005888.D	1	02/25/11	AT	n/a	n/a	GBB289
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.92 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	5.8	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	90%		46-127%	
98-08-8	aaa-Trifluorotoluene	102%		44-120%	

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:	JAQUEZ 174 (5) 021811	
Lab Sample ID:	T69782-6	Date Sampled: 02/18/11
Matrix:	SO - Soil	Date Received: 02/24/11
Method:	SW846 8021B	Percent Solids: 85.1
Project:	MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK037718.D	1	02/25/11	LB	n/a	n/a	GKK1803
Run #2							

	Initial Weight	Final Volume
Run #1	5.70 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.1	ug/kg	
100-41-4	Ethylbenzene	ND	4.1	ug/kg	
108-88-3	Toluene	ND	4.1	ug/kg	
1330-20-7	Xylenes (total)	ND	12	ug/kg	
	m,p-Xylene	ND	8.2	ug/kg	
95-47-6	o-Xylene	ND	4.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	87%		21-163%
98-08-8	aaa-Trifluorotoluene	135%		39-170%

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

3.6
3

Client Sample ID: JAQUEZ 174 (5) 021811	
Lab Sample ID: T69782-6	Date Sampled: 02/18/11
Matrix: SO - Soil	Date Received: 02/24/11
Method: SW846 8015 M SW846 3550B	Percent Solids: 85.1
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ10991.D	1	03/02/11	HD	02/25/11	OP17591	GJF143
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	3.9	mg/kg	
	TPH (> C28-C40)	6.41	3.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	56%		33-115%

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

37
3

Client Sample ID:	JAQUEZ 157 (7) 021811		
Lab Sample ID:	T69782-7	Date Sampled:	02/18/11
Matrix:	SO - Soil	Date Received:	02/24/11
Method:	SW846 8015	Percent Solids:	77.8
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0005894.D	1	02/25/11	AT	n/a	n/a	GBB289
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	Units	Q
	TPH-GRO (C6-C10)	ND	7.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	91%		46-127%	
98-08-8	aaa-Trifluorotoluene	100%		44-120%	

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

37
3

Client Sample ID:	JAQUEZ 157 (7) 021811		
Lab Sample ID:	T69782-7	Date Sampled:	02/18/11
Matrix:	SO - Soil	Date Received:	02/24/11
Method:	SW846 8021B	Percent Solids:	77.8
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK037835.D	1	03/03/11	LB	n/a	n/a	GKK1806
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.49 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.7	ug/kg	
100-41-4	Ethylbenzene	ND	4.7	ug/kg	
108-88-3	Toluene	ND	4.7	ug/kg	
1330-20-7	Xylenes (total)	ND	14	ug/kg	
	m,p-Xylene	ND	9.4	ug/kg	
95-47-6	o-Xylene	ND	4.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	53%		21-163%
98-08-8	aaa-Trifluorotoluene	73%		39-170%

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

37
3

Client Sample ID: JAQUEZ 157 (7) 021811	
Lab Sample ID: T69782-7	Date Sampled: 02/18/11
Matrix: SO - Soil	Date Received: 02/24/11
Method: SW846 8015 M SW846 3550B	Percent Solids: 77.8
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ10992.D	1	03/02/11	HD	02/25/11	OP17591	GJB143
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	4.3	mg/kg	
	TPH (> C28-C40)	ND	4.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	73%		33-115%

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

3.8
3

Client Sample ID:	JAQUEZ 179 (10) 021811		
Lab Sample ID:	T69782-8	Date Sampled:	02/18/11
Matrix:	SO - Soil	Date Received:	02/24/11
Method:	SW846 8015	Percent Solids:	77.1
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0005896.D	1	02/25/11	AT	n/a	n/a	GBB289
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.39 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	7.5	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	91%		46-127%	
98-08-8	aaa-Trifluorotoluene	102%		44-120%	

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: JAQUEZ 179 (10) 021811	
Lab Sample ID: T69782-8	Date Sampled: 02/18/11
Matrix: SO - Soil	Date Received: 02/24/11
Method: SW846 8021B	Percent Solids: 77.1
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK037721.D	1	02/25/11	LB	n/a	n/a	GKK1803
Run #2 ^a	KK037861.D	1	03/03/11	LB	n/a	n/a	GKK1807

Run #	Initial Weight	Final Volume
Run #1	5.60 g	5.0 ml
Run #2	5.13 g	5.0 ml

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene ^b	4.8	4.6	ug/kg	
100-41-4	Ethylbenzene	9.6	4.6	ug/kg	
108-88-3	Toluene	23.2	4.6	ug/kg	
1330-20-7	Xylenes (total)	59.0	14	ug/kg	
	m,p-Xylene	44.4	9.3	ug/kg	
95-47-6	o-Xylene	14.6	4.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%	34%	21-163%
98-08-8	aaa-Trifluorotoluene	1096% ^c	2696% ^c	39-170%

- (a) Confirmation run for surrogate recoveries.
- (b) More than 40% RPD for detected concentrations between two GC columns.
- (c) Outside control limits due to matrix interference. Confirmed by reanalysis.

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

3.8
3

Client Sample ID:	JAQUEZ 179 (10) 021811		
Lab Sample ID:	T69782-8	Date Sampled:	02/18/11
Matrix:	SO - Soil	Date Received:	02/24/11
Method:	SW846 8015 M SW846 3550B	Percent Solids:	77.1
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ10993.D	1	03/02/11	HD	02/25/11	OP17591	GJF143
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	45.1	4.3	mg/kg	
	TPH (> C28-C40)	16.4	4.3	mg/kg	

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

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
3

Client Sample ID:	JAQUEZ 199 (25) 022111		
Lab Sample ID:	T69782-9	Date Sampled:	02/21/11
Matrix:	SO - Soil	Date Received:	02/24/11
Method:	SW846 8015	Percent Solids:	81.2
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0005895.D	1	02/25/11	AT	n/a	n/a	GBB289
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.26 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	7.0	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	91%		46-127%	
98-08-8	aaa-Trifluorotoluene	100%		44-120%	

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:	JAQUEZ 199 (25) 022111		
Lab Sample ID:	T69782-9	Date Sampled:	02/21/11
Matrix:	SO - Soil	Date Received:	02/24/11
Method:	SW846 8021B	Percent Solids:	81.2
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK037836.D	1	03/03/11	LB	n/a	n/a	GKK1806
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.29 g	5.0 ml
Run #2		

Purgeable Aromatics

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	50%		21-163%
98-08-8	aaa-Trifluorotoluene	86%		39-170%

(a) More than 40% RPD for detected concentrations between two GC columns.

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:	JAQUEZ 199 (25) 022111		
Lab Sample ID:	T69782-9	Date Sampled:	02/21/11
Matrix:	SO - Soil	Date Received:	02/24/11
Method:	SW846 8015 M SW846 3550B	Percent Solids:	81.2
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ10994.D	1	03/02/11	HD	02/25/11	OP17591	GJB143
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	4.1	mg/kg	
	TPH (> C28-C40)	ND	4.1	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	63%		33-115%	

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

SAMPLE INSPECTION FORM

Accutest Job Number: T69782 Client: MWH Date/Time Received: 2-24-11 9:45
 # of Coolers Received: 1 Thermometer #: 110 Temperature Adjustment Factor: -5.0°C
 Cooler Temperatures (initial/adjusted): #1: 5.3°/4.8°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 rec'd 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: [Signature] 2-24-11

INFORMATION AND SAMPLE LABELING VERIFIED BY: [Signature] DPA 2/24/11

◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ **CORRECTIVE ACTIONS** ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆

Client Representative Notified: _____ Date: _____
 By Accutest Representative: _____ Via: Phone Email
 Client Instructions: _____

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4.1
4

SAMPLE RECEIPT LOG

JOB #: T69782 DATE/TIME RECEIVED: 2-24-11 945

CLIENT: MWH INITIALS: FC

COOLER#	SAMPLE ID	FIELD ID	DATE	MATRIX	VOL	BOTTLE #	LOCATION	PRESERV	PH
1	1	Jaquez 220(10)02211	2-22-11 1900	S	402	1-2	2-11	0 2 3 4 5 6 7 8	<2 >12
	1					3	VR	0 2 3 4 5 6 7 8	<2 >12
	2	Jaquez 213(20.5)02211				1-2	2-11	0 2 3 4 5 6 7 8	<2 >12
	2					3	VR	0 2 3 4 5 6 7 8	<2 >12
	3	Jaquez 219(17)02211				1-2	2-11	0 2 3 4 5 6 7 8	<2 >12
	3					3	VR	0 2 3 4 5 6 7 8	<2 >12
	4	Jaquez 178(5.5)021811	0218-11 1533			1-2	2-11	0 2 3 4 5 6 7 8	<2 >12
	4					3	VR	0 2 3 4 5 6 7 8	<2 >12
	5	Jaquez 169(6.5)021811				1-2	2-11	0 2 3 4 5 6 7 8	<2 >12
	5					3	VR	0 2 3 4 5 6 7 8	<2 >12
	6	Jaquez 171(5)021811				1-2	2-11	0 2 3 4 5 6 7 8	<2 >12
	6					3	VR	0 2 3 4 5 6 7 8	<2 >12
	7	Jaquez 157(7)021811				1-2	2-11	0 2 3 4 5 6 7 8	<2 >12
	7					3	VR	0 2 3 4 5 6 7 8	<2 >12
	8	Jaquez 179(10)021811				1-2	2-11	0 2 3 4 5 6 7 8	<2 >12
	8					3	VR	0 2 3 4 5 6 7 8	<2 >12
	9	Jaquez 159(25)02211	2-21-11 1400			1-2	2-11	0 2 3 4 5 6 7 8	<2 >12
	9					3	VR	0 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 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: T69782
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB289-MB	BB0005882.DI		02/25/11	AT	n/a	n/a	GBB289

The QC reported here applies to the following samples:

Method: SW846 8015

T69782-1, T69782-2, T69782-3, T69782-4, T69782-5, T69782-6, T69782-7, T69782-8, T69782-9

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

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	92%	46-127%
98-08-8	aaa-Trifluorotoluene	100%	44-120%

Method Blank Summary

Job Number: T69782
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1803-MB	KK037706.D 1		02/25/11	LB	n/a	n/a	GKK1803

The QC reported here applies to the following samples:

Method: SW846 8021B

T69782-1, T69782-2, T69782-4, T69782-6, T69782-8

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

CAS No.	Surrogate Recoveries	Result	Limits
460-00-4	4-Bromofluorobenzene	93%	21-163%
98-08-8	aaa-Trifluorotoluene	120%	39-170%

Method Blank Summary

Job Number: T69782
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1806-MB	KK037811.D 1		03/02/11	LB	n/a	n/a	GKK1806

The QC reported here applies to the following samples:

Method: SW846 8021B

T69782-3, T69782-5, T69782-7, T69782-9

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

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	82%	21-163%
98-08-8	aaa-Trifluorotoluene	104%	39-170%

Blank Spike Summary

Job Number: T69782
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB289-BS	BB0005879.DI		02/25/11	AT	n/a	n/a	GBB289

The QC reported here applies to the following samples:

Method: SW846 8015

T69782-1, T69782-2, T69782-3, T69782-4, T69782-5, T69782-6, T69782-7, T69782-8, T69782-9

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.370	93	78-115

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	96%	46-127%
98-08-8	aaa-Trifluorotoluene	108%	44-120%

Blank Spike Summary

Job Number: T69782
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1803-BS	KK037702.D 1		02/25/11	LB	n/a	n/a	GKK1803

The QC reported here applies to the following samples:

Method: SW846 8021B

T69782-1, T69782-2, T69782-4, T69782-6, T69782-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	20	21.0	105	73-132
100-41-4	Ethylbenzene	20	21.0	105	70-133
108-88-3	Toluene	20	20.8	104	74-133
1330-20-7	Xylenes (total)	60	63.3	106	73-134
	m,p-Xylene	40	42.2	106	70-134
95-47-6	o-Xylene	20	21.2	106	76-131

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	95%	21-163%
98-08-8	aaa-Trifluorotoluene	121%	39-170%

Blank Spike Summary

Job Number: T69782
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1806-BS	KK037807.D 1		03/02/11	LB	n/a	n/a	GKK1806

The QC reported here applies to the following samples:

Method: SW846 8021B

T69782-3, T69782-5, T69782-7, T69782-9

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	20	20.0	100	73-132
100-41-4	Ethylbenzene	20	19.6	98	70-133
108-88-3	Toluene	20	19.6	98	74-133
1330-20-7	Xylenes (total)	60	59.4	99	73-134
	m,p-Xylene	40	39.3	98	70-134
95-47-6	o-Xylene	20	20.0	100	76-131

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	81%	21-163%
98-08-8	aaa-Trifluorotoluene	103%	39-170%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69782
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T69782-2MS	BB0005891.DI		02/25/11	AT	n/a	n/a	GBB289
T69782-2MSD	BB0005892.DI		02/25/11	AT	n/a	n/a	GBB289
T69782-2	BB0005884.DI		02/25/11	AT	n/a	n/a	GBB289

The QC reported here applies to the following samples:

Method: SW846 8015

T69782-1, T69782-2, T69782-3, T69782-4, T69782-5, T69782-6, T69782-7, T69782-8, T69782-9

CAS No.	Compound	T69782-2 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	29.2	26.7	92	26.5	91	1	78-115/14

CAS No.	Surrogate Recoveries	MS	MSD	T69782-2	Limits
460-00-4	4-Bromofluorobenzene	93%	96%	91%	46-127%
98-08-8	aaa-Trifluorotoluene	106%	107%	100%	44-120%

5.3.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69782
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T69435-1MS	KK037710.D 1		02/25/11	LB	n/a	n/a	GKK1803
T69435-1MSD	KK037711.D 1		02/25/11	LB	n/a	n/a	GKK1803
T69435-1	KK037707.D 1		02/25/11	LB	n/a	n/a	GKK1803

The QC reported here applies to the following samples:

Method: SW846 8021B

T69782-1, T69782-2, T69782-4, T69782-6, T69782-8

CAS No.	Compound	T69435-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	21	21.9	104	17.1	83	25	41-129/33
100-41-4	Ethylbenzene	ND	21	22.0	105	17.0	83	26	15-139/36
108-88-3	Toluene	ND	21	24.1	115	18.4	90	27	26-141/38
1330-20-7	Xylenes (total)	ND	63	68.2	108	52.0	85	27	22-132/33
	m,p-Xylene	ND	42	45.7	109	34.7	85	27	24-133/41
95-47-6	o-Xylene	ND	21	22.5	107	17.3	84	26	25-140/35

CAS No.	Surrogate Recoveries	MS	MSD	T69435-1	Limits
460-00-4	4-Bromofluorobenzene	94%	97%	93%	21-163%
98-08-8	aaa-Trifluorotoluene	127%	131%	156%	39-170%

5.3.2
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69782
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T69782-3MS	KK037815.D 1		03/02/11	LB	n/a	n/a	GKK1806
T69782-3MSD	KK037816.D 1		03/02/11	LB	n/a	n/a	GKK1806
T69782-3	KK037813.D 1		03/02/11	LB	n/a	n/a	GKK1806

The QC reported here applies to the following samples:

Method: SW846 8021B

T69782-3, T69782-5, T69782-7, T69782-9

CAS No.	Compound	T69782-3 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	22.4	24.0	107	23.1	97	4	41-129/33
100-41-4	Ethylbenzene	ND	22.4	23.5	105	22.6	95	4	15-139/36
108-88-3	Toluene	ND	22.4	27.6	123	25.6	107	8	26-141/38
1330-20-7	Xylenes (total)	ND	67.2	70.6	105	68.1	95	4	22-132/33
	m,p-Xylene	ND	44.8	47.8	107	45.8	96	4	24-133/41
95-47-6	o-Xylene	ND	22.4	22.8	102	22.3	93	2	25-140/35

CAS No.	Surrogate Recoveries	MS	MSD	T69782-3	Limits
460-00-4	4-Bromofluorobenzene	73%	71%	80%	21-163%
98-08-8	aaa-Trifluorotoluene	126%	123%	169%	39-170%

5.3.3
5

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: T69782
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17591-MB	JJ10982.D	1	03/02/11	HD	02/25/11	OP17591	GJB143

The QC reported here applies to the following samples:

Method: SW846 8015 M

T69782-1, T69782-2, T69782-3, T69782-4, T69782-5, T69782-6, T69782-7, T69782-8, T69782-9

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

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	70% 33-115%

Blank Spike Summary

Job Number: T69782
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17591-BS	JJ10983.D	1	03/02/11	HD	02/25/11	OP17591	GJF143

The QC reported here applies to the following samples:

Method: SW846 8015 M

T69782-1, T69782-2, T69782-3, T69782-4, T69782-5, T69782-6, T69782-7, T69782-8, T69782-9

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	33.3	25.1	75	45-107

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	72%	33-115%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69782
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17591-MS	JJ10984.D	1	03/02/11	HD	02/25/11	OP17591	GJB143
OP17591-MSD	JJ10985.D	1	03/02/11	HD	02/25/11	OP17591	GJF143
T69782-1	JJ10986.D	1	03/02/11	HD	02/25/11	OP17591	GJB143

The QC reported here applies to the following samples:

Method: SW846 8015 M

T69782-1, T69782-2, T69782-3, T69782-4, T69782-5, T69782-6, T69782-7, T69782-8, T69782-9

CAS No.	Compound	T69782-1 mg/kg	Spike Q	mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	ND	40.1	25.9	65	31.5	79	20	45-107/34	

CAS No.	Surrogate Recoveries	MS	MSD	T69782-1	Limits
84-15-1	o-Terphenyl	61%	73%	77%	33-115%

6.3.1
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Technical Report for

EL PASO CORPORATION

MWHCODE: San Juan River Basin Program

JAQUEZ SITE

Accutest Job Number: T69886

Sampling Date: 02/23/11

Report to:

MWH
1801 California Street Suite 2900
Denver, CO 80202
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 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: T69886

MWHCODE: San Juan River Basin Program

Project No: JAQUEZ SITE

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T69886-1	02/23/11	13:13	02/25/11	SO	Soil	JAQUEZ 226(13)022311
T69886-2	02/23/11	16:32	02/25/11	SO	Soil	JAQUEZ 232(19)022311

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 T69886

Site: MWHCODE: San Juan River Basin Program

Report Date 3/10/2011 3:03:09 PM

2 Sample(s) were collected on 02/23/2011 and were received at Accutest on 02/25/2011 properly preserved, at 3 Deg. C and intact. These Samples received an Accutest job number of T69886. 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 GC By Method SW846 8015

Matrix SO	Batch ID: GBB290
------------------	-------------------------

- All samples were analyzed within the recommended method holding time.
- Sample(s) T69888-1MS, T69888-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- 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.

Volatiles by GC By Method SW846 8021B

Matrix SO	Batch ID: GKK1806
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T69782-3MS, T69782-3MSD were used as the QC samples indicated.
- Sample(s) T69886-2 have surrogates outside control limits. Outside control limits due to matrix interference.
- T69886-2 for Ethylbenzene: More than 40% RPD for detected concentrations between two GC columns.
- T69886-2 for o-Xylene, m,p-Xylene and Xylenes (total): More than 40% RPD for detected concentrations between two GC columns.

Matrix SO	Batch ID: GKK1808
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T69849-1MS, T69849-1MSD were used as the QC samples indicated.
- T69886-1 for Toluene: More than 40% RPD for detected concentrations between two GC columns.

Extractables by GC By Method SW846 8015 M

Matrix SO	Batch ID: OP17640
------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) T69886-1MS, T69886-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Wet Chemistry By Method SM 2540 G

Matrix SO

Batch ID: GN29180

- Sample(s) T69886-1DUP 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:	JAQUEZ 226(13)022311		
Lab Sample ID:	T69886-1	Date Sampled:	02/23/11
Matrix:	SO - Soil	Date Received:	02/25/11
Method:	SW846 8015	Percent Solids:	78.9
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0005915.D	1	02/28/11	AT	n/a	n/a	GBB290
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.68 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	6.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	94%		46-127%	
98-08-8	aaa-Trifluorotoluene	106%		44-120%	

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: JAQUEZ 226(13)022311	
Lab Sample ID: T69886-1	Date Sampled: 02/23/11
Matrix: SO - Soil	Date Received: 02/25/11
Method: SW846 8021B	Percent Solids: 78.9
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK037903.D	1	03/04/11	LB	n/a	n/a	GKK1808
Run #2							

	Initial Weight	Final Volume
Run #1	5.15 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.9	ug/kg	
100-41-4	Ethylbenzene	ND	4.9	ug/kg	
108-88-3	Toluene ^a	ND	4.9	ug/kg	
1330-20-7	Xylenes (total)	ND	15	ug/kg	
	m,p-Xylene	ND	9.8	ug/kg	
95-47-6	o-Xylene	ND	4.9	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	86%		21-163%
98-08-8	aaa-Trifluorotoluene	167%		39-170%

(a) More than 40% RPD for detected concentrations between two GC columns.

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:	JAQUEZ 226(13)022311		
Lab Sample ID:	T69886-1	Date Sampled:	02/23/11
Matrix:	SO - Soil	Date Received:	02/25/11
Method:	SW846 8015 M SW846 3550B	Percent Solids:	78.9
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ11180.D	1	03/07/11	HD	03/02/11	OP17640	GJB147
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	4.2	mg/kg	
	TPH (> C28-C40)	ND	4.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	61%		33-115%

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

32
3

Client Sample ID:	JAQUEZ 232(19)022311		
Lab Sample ID:	T69886-2	Date Sampled:	02/23/11
Matrix:	SO - Soil	Date Received:	02/25/11
Method:	SW846 8015	Percent Solids:	80.3
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0005916.D	1	02/28/11	AT	n/a	n/a	GBB290
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.19 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	7.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	96%		46-127%	
98-08-8	aaa-Trifluorotoluene	105%		44-120%	

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

32
3

Client Sample ID: JAQUEZ 232(19)022311	
Lab Sample ID: T69886-2	Date Sampled: 02/23/11
Matrix: SO - Soil	Date Received: 02/25/11
Method: SW846 8021B	Percent Solids: 80.3
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK037839.D	1	03/03/11	LB	n/a	n/a	GKK1806
Run #2 ^a	KK037904.D	1	03/04/11	LB	n/a	n/a	GKK1808

Run #	Initial Weight	Final Volume
Run #1	5.74 g	5.0 ml
Run #2	5.71 g	5.0 ml

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.3	ug/kg	
100-41-4	Ethylbenzene ^b	19.4	4.3	ug/kg	
108-88-3	Toluene	ND	4.3	ug/kg	
1330-20-7	Xylenes (total) ^b	ND	13	ug/kg	
	m,p-Xylene ^b	ND	8.7	ug/kg	
95-47-6	o-Xylene ^b	6.7	4.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	49%	98%	21-163%
98-08-8	aaa-Trifluorotoluene	247% ^c	321% ^c	39-170%

- (a) Confirmation run for surrogate recoveries.
- (b) More than 40% RPD for detected concentrations between two GC columns.
- (c) Outside control limits due to matrix interference. Confirmed by reanalysis.

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

32
3

Client Sample ID: JAQUEZ 232(19)022311	
Lab Sample ID: T69886-2	Date Sampled: 02/23/11
Matrix: SO - Soil	Date Received: 02/25/11
Method: SW846 8015 M SW846 3550B	Percent Solids: 80.3
Project: MWCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ11181.D	1	03/07/11	HD	03/02/11	OP17640	GJF147
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	4.51	4.1	mg/kg	
	TPH (> C28-C40)	4.62	4.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	59%		33-115%

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

SAMPLE INSPECTION FORM

Accutest Job Number: T69886 Client: MWH Date/Time Received: 2-25-11 1010
 # of Coolers Received: 1 Thermometer #: JR Gw04 Temperature Adjustment Factor: 0.0
 Cooler Temperatures (initial/adjusted): #1: 3.0°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 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

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

Summary of Discrepancies:

TECHNICIAN SIGNATURE/DATE: [Signature] 2-25-11
 INFORMATION AND SAMPLE LABELING VERIFIED BY: DEA 2/25/11

♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ **CORRECTIVE ACTIONS** ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦

Client Representative Notified: _____ Date: _____
 By Accutest Representative: _____ Via: Phone _____ Email _____
 Client Instructions: _____

ivmwalker/form/samplemanagement SM023 Revised 8/11/10

4.1
4

GC 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: T69886
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB290-MB	BB0005914.DI		02/28/11	AT	n/a	n/a	GBB290

The QC reported here applies to the following samples:

Method: SW846 8015

T69886-1, T69886-2

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

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	95%	46-127%
98-08-8	aaa-Trifluorotoluene	105%	44-120%

Method Blank Summary

Job Number: T69886
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1806-MB	KK037811.D 1		03/02/11	LB	n/a	n/a	GKK1806

The QC reported here applies to the following samples:

Method: SW846 8021B

T69886-2

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

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	82%	21-163%
98-08-8	aaa-Trifluorotoluene	104%	39-170%

Method Blank Summary

Job Number: T69886
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1808-MB	KK037896.D 1		03/04/11	LB	n/a	n/a	GKK1808

The QC reported here applies to the following samples:

Method: SW846 8021B

T69886-1

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

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	87%	21-163%
98-08-8	aaa-Trifluorotoluene	113%	39-170%

Blank Spike Summary

Job Number: T69886
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB290-BS	BB0005911.DI		02/28/11	AT	n/a	n/a	GBB290

The QC reported here applies to the following samples:

Method: SW846 8015

T69886-1, T69886-2

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	97%	46-127%
98-08-8	aaa-Trifluorotoluene	109%	44-120%

Blank Spike Summary

Job Number: T69886
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1806-BS	KK037807.D 1		03/02/11	LB	n/a	n/a	GKK1806

The QC reported here applies to the following samples:

Method: SW846 8021B

T69886-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	20	20.0	100	73-132
100-41-4	Ethylbenzene	20	19.6	98	70-133
108-88-3	Toluene	20	19.6	98	74-133
1330-20-7	Xylenes (total)	60	59.4	99	73-134
	m,p-Xylene	40	39.3	98	70-134
95-47-6	o-Xylene	20	20.0	100	76-131

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	81%	21-163%
98-08-8	aaa-Trifluorotoluene	103%	39-170%

5.2.2
5

Blank Spike Summary

Job Number: T69886
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1808-BS	KK037892.D 1		03/04/11	LB	n/a	n/a	GKK1808

The QC reported here applies to the following samples:

Method: SW846 8021B

T69886-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	20	18.1	91	73-132
100-41-4	Ethylbenzene	20	18.2	91	70-133
108-88-3	Toluene	20	17.9	90	74-133
1330-20-7	Xylenes (total)	60	54.6	91	73-134
	m,p-Xylene	40	36.4	91	70-134
95-47-6	o-Xylene	20	18.2	91	76-131

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	89%	21-163%
98-08-8	aaa-Trifluorotoluene	116%	39-170%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69886
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T69888-1MS	BB0005918.D200		02/28/11	AT	n/a	n/a	GBB290
T69888-1MSD	BB0005919.D200		02/28/11	AT	n/a	n/a	GBB290
T69888-1	BB0005917.D200		02/28/11	AT	n/a	n/a	GBB290

The QC reported here applies to the following samples:

Method: SW846 8015

T69886-1, T69886-2

CAS No.	Compound	T69888-1 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	21300	10800	28800	70*	28400	66*	1	78-115/14

CAS No.	Surrogate Recoveries	MS	MSD	T69888-1	Limits
460-00-4	4-Bromofluorobenzene	102%	100%	98%	46-127%
98-08-8	aaa-Trifluorotoluene	112%	113%	105%	44-120%

5.3.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69886
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T69782-3MS	KK037815.D 1		03/02/11	LB	n/a	n/a	GKK1806
T69782-3MSD	KK037816.D 1		03/02/11	LB	n/a	n/a	GKK1806
T69782-3	KK037813.D 1		03/02/11	LB	n/a	n/a	GKK1806

The QC reported here applies to the following samples:

Method: SW846 8021B

T69886-2

CAS No.	Compound	T69782-3 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	22.4	24.0	107	23.1	97	4	41-129/33
100-41-4	Ethylbenzene	ND	22.4	23.5	105	22.6	95	4	15-139/36
108-88-3	Toluene	ND	22.4	27.6	123	25.6	107	8	26-141/38
1330-20-7	Xylenes (total)	ND	67.2	70.6	105	68.1	95	4	22-132/33
	m,p-Xylene	ND	44.8	47.8	107	45.8	96	4	24-133/41
95-47-6	o-Xylene	ND	22.4	22.8	102	22.3	93	2	25-140/35

CAS No.	Surrogate Recoveries	MS	MSD	T69782-3	Limits
460-00-4	4-Bromofluorobenzene	73%	71%	80%	21-163%
98-08-8	aaa-Trifluorotoluene	126%	123%	169%	39-170%

5.3.2
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69886
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T69849-1MS	KK037911.D 1		03/05/11	LB	n/a	n/a	GKK1808
T69849-1MSD	KK037912.D 1		03/05/11	LB	n/a	n/a	GKK1808
T69849-1	KK037906.D 1		03/04/11	LB	n/a	n/a	GKK1808

The QC reported here applies to the following samples:

Method: SW846 8021B

T69886-1

CAS No.	Compound	T69849-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	1.1	J	22.4	17.1	71	16.6	65	3	41-129/33
100-41-4	Ethylbenzene	ND		22.4	13.9	62	11.9	50	16	15-139/36
108-88-3	Toluene	ND		22.4	30.9	138	27.6	115	11	26-141/38
1330-20-7	Xylenes (total)	ND		67.3	46.7	69	36.0	50	26	22-132/33
	m,p-Xylene	ND		44.9	31.2	70	24.5	51	24	24-133/41
95-47-6	o-Xylene	ND		22.4	15.5	69	11.5	48	30	25-140/35

CAS No.	Surrogate Recoveries	MS	MSD	T69849-1	Limits
460-00-4	4-Bromofluorobenzene	81%	80%	79%	21-163%
98-08-8	aaa-Trifluorotoluene	144%	126%	107%	39-170%

5.3.3
5

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: T69886
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17640-MB	JJ11150.D	1	03/05/11	HD	03/02/11	OP17640	GJB146

The QC reported here applies to the following samples:

Method: SW846 8015 M

T69886-1, T69886-2

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

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	76% 33-115%

Blank Spike Summary

Job Number: T69886
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17640-BS	JJ11151.D	1	03/05/11	HD	03/02/11	OP17640	GJF146

The QC reported here applies to the following samples:

Method: SW846 8015 M

T69886-1, T69886-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	33.3	27.6	83	45-107

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	70%	33-115%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T69886
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17640-MS	JJ11161.D	1	03/05/11	HD	03/02/11	OP17640	GJF146
OP17640-MSD	JJ11162.D	1	03/05/11	HD	03/02/11	OP17640	GJB146
T69886-1	JJ11180.D	1	03/07/11	HD	03/02/11	OP17640	GJB147

The QC reported here applies to the following samples:

Method: SW846 8015 M

T69886-1, T69886-2

CAS No.	Compound	T69886-1 mg/kg	Spike Q	mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	ND	42.1	33.1	79	33.6	80	1	45-107/34	

CAS No.	Surrogate Recoveries	MS	MSD	T69886-1	Limits
84-15-1	o-Terphenyl	70%	71%	61%	33-115%

6.3.1
6

Technical Report for

EL PASO CORPORATION

MWHCODE: San Juan River Basin Program

JAQUEZ SITE

Accutest Job Number: T70072

Sampling Dates: 02/24/11 - 02/28/11

Report to:

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ATTN: Jed Smith

Total number of pages in report: **68**



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 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: T70072

MWHCODE: San Juan River Basin Program

Project No: JAQUEZ SITE

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T70072-1	02/24/11	16:15	03/01/11	SO	Soil	JAQUEZ 247(6) 022411
T70072-2	02/24/11	16:22	03/01/11	SO	Soil	JAQUEZ 248(8) 022411
T70072-3	02/24/11	16:30	03/01/11	SO	Soil	JAQUEZ 249(15) 022411
T70072-4	02/25/11	12:34	03/01/11	AQ	Ground Water	JAQUEZ 254(GW) 022511
T70072-5	02/25/11	15:36	03/01/11	SO	Soil	JAQUEZ 264(22) 022511
T70072-6	02/25/11	15:20	03/01/11	SO	Soil	JAQUEZ 265(12.5) 022511
T70072-7	02/25/11	00:00	03/01/11	AQ	Trip Blank Water	TRIP BLANK
T70072-8	02/28/11	12:00	03/01/11	SO	Soil	JAQUEZ 280(16) 022811
T70072-9	02/28/11	11:30	03/01/11	SO	Soil	JAQUEZ 279(7) 022811

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 T70072

Site: MWHCODE: San Juan River Basin Program

Report Date 3/16/2011 12:51:25 PM

8 Sample(s) and 1 Trip Blank(s) were collected on between 02/24/2011 and 02/28/2011 and were received at Accutest on 03/01/2011 properly preserved, at 4.5 Deg. C and intact. These Samples received an Accutest job number of T70072. 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 GC By Method SW846 8015

Matrix AQ

Batch ID: GBB299

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T70300-2MS, T70300-2MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for TPH-GRO (C6-C10) are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- Matrix Spike Duplicate Recovery(s) for TPH-GRO (C6-C10) are outside control limits. Probable cause due to matrix interference.
- Sample(s) T70300-2MS, T70300-2MSD have surrogates outside control limits. Probable cause due to matrix interference.

Matrix AQ

Batch ID: GHH151

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T70072-4MS, T70072-4MSD were used as the QC samples indicated

Matrix SO

Batch ID: GHH148

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T70072-5MS, T70072-5MSD were used as the QC samples indicated.
- T70072-1, T70072-3, T70072-3, T70072-5, T70072-6, T70072-8, T70072-9: Sample was received unpreserved and outside the 48 hour preservation time.

Volatiles by GC By Method SW846 8021B

Matrix AQ **Batch ID:** GKK1805

- All samples were analyzed within the recommended method holding time.
- Sample(s) T69931-3MS, T69931-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix AQ **Batch ID:** GKK1812

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Samples T70309-1MS,T70309-1MSD were used as the QC samples

Matrix AQ **Batch ID:** GKK1815

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T70072-4 have surrogates outside control limits. Probable cause due to matrix interference.
- T70072-4 for Toluene: More than 40% RPD for detected concentrations between two GC columns.

Matrix SO **Batch ID:** GKK1808

- All samples were analyzed within the recommended method holding time.
- Sample(s) T69849-1MS, T69849-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T70072-1, T70072-2, T70072-3 have surrogates outside control limits. Probable cause due to matrix interference.
- T70072-1,T70072-2,T70072-3: Sample was received unpreserved and outside the 48 hour preservation time.
- T70072-2,T70072-3 for m,p-Xylene: More than 40% RPD for detected concentrations between two GC columns.
- T70072-3 for o-Xylene: More than 40% RPD for detected concentrations between two GC columns.
- T70072-2 ,T70072-3 for Ethylbenzene: More than 40% RPD for detected concentrations between two GC columns.
- T70072-2,T70072-3 for Xylenes (total): More than 40% RPD for detected concentrations between two GC columns.
- T70072-2,T70072-3 for Benzene: More than 40% RPD for detected concentrations between two GC columns.
- T70072-1,T70072-2,T70072-3 for aaa-Trifluorotoluene: Outside control limits possibly due to matrix interference.
- T70072-2 for Toluene: More than 40% RPD for detected concentrations between two GC columns.

Matrix SO **Batch ID:** GKK1816

- All method blanks for this batch meet method specific criteria.
- The following samples were run outside of holding time for method SW846 8021B: T70072-5, T70072-6 Sample was received beyond 48 hours hold time. Sample analyzed per clients request.
- Sample(s) GKK1816-MB, T70072-5, T70072-6 have surrogates outside control limits. Probable cause due to matrix interference.
- GKK1816-MB,T70072-5,T70072-6 for 4-Bromofluorobenzene: Outside control limits biased low due to autosampler spiking failure. Sample was reanalyzed for confirmation.
- GKK1816-MB,T70072-5,T70072-6 for aaa-Trifluorotoluene: Outside control limits biased low due to autosampler spiking failure. Sample was reanalyzed for confirmation.

Matrix SO **Batch ID:** GKK1818

- Sample(s) T70399-2MS, T70399-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- The following samples were run outside of holding time for method SW846 8021B: T70072-9 Sample was received beyond 48 hours hold time. Sample was analyzed per clients request.
- T70072-5,T70072-6: Confirmation run for surrogate recoveries.
- T70072-8,T70072-9: Sample was received beyond 48 hours hold time. Sample analyzed per clients request.

Extractables by GC By Method SW846 8015 M

Matrix AQ	Batch ID: OP17625
------------------	--------------------------

- 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.
- Samples OP17625-BS,OP17625BSD were used as the QC samples indicated

Matrix SO	Batch ID: OP17640
------------------	--------------------------

- 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) T69886-1MS, T69886-1MSD were used as the QC samples indicated.

Wet Chemistry By Method SM 2540 G

Matrix SO	Batch ID: GN29167
------------------	--------------------------

- Sample(s) T69932-8DUP were used as the QC samples for Solids, Percent.

Matrix SO	Batch ID: GN29168
------------------	--------------------------

- Sample(s) T70072-8DUP 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: JAQUEZ 247(6) 022411	
Lab Sample ID: T70072-1	Date Sampled: 02/24/11
Matrix: SO - Soil	Date Received: 03/01/11
Method: SW846 8015	Percent Solids: 80.5
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	HH0002815.D	1	03/02/11	AT	n/a	n/a	GHH148
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.25 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	7.1	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	84%		46-127%	
98-08-8	aaa-Trifluorotoluene	91%		44-120%	

(a) Sample was received unpreserved and outside the 48 hour preservation time.

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

3.1
3

Client Sample ID: JAQUEZ 247(6) 022411	
Lab Sample ID: T70072-1	Date Sampled: 02/24/11
Matrix: SO - Soil	Date Received: 03/01/11
Method: SW846 8021B	Percent Solids: 80.5
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK037920.D	1	03/05/11	LB	n/a	n/a	GKK1808
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.67 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.4	ug/kg	
100-41-4	Ethylbenzene	ND	4.4	ug/kg	
108-88-3	Toluene	ND	4.4	ug/kg	
1330-20-7	Xylenes (total)	ND	13	ug/kg	
	m,p-Xylene	ND	8.8	ug/kg	
95-47-6	o-Xylene	ND	4.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	88%		21-163%
98-08-8	aaa-Trifluorotoluene	224% ^b		39-170%

(a) Sample was received unpreserved and outside the 48 hour preservation time.
 (b) Outside control limits biased high. Only ND results reported.

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

3.1
3

Client Sample ID: JAQUEZ 247(6) 022411	
Lab Sample ID: T70072-1	Date Sampled: 02/24/11
Matrix: SO - Soil	Date Received: 03/01/11
Method: SW846 8015 M SW846 3550B	Percent Solids: 80.5
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ11182.D	1	03/07/11	HD	03/02/11	OP17640	GJB147
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	4.1	mg/kg	
	TPH (> C28-C40)	ND	4.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	73%		33-115%

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

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Client Sample ID: JAQUEZ 248(8) 022411	
Lab Sample ID: T70072-2	Date Sampled: 02/24/11
Matrix: SO - Soil	Date Received: 03/01/11
Method: SW846 8015	Percent Solids: 77.0
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	HH0002816.D	1	03/02/11	AT	n/a	n/a	GHH148
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.21 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	7.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	86%		46-127%	
98-08-8	aaa-Trifluorotoluene	92%		44-120%	

(a) Sample was received unpreserved and outside the 48 hour preservation time.

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

32
3

Client Sample ID: JAQUEZ 248(8) 022411	
Lab Sample ID: T70072-2	Date Sampled: 02/24/11
Matrix: SO - Soil	Date Received: 03/01/11
Method: SW846 8021B	Percent Solids: 77.0
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK037921.D	1	03/05/11	LB	n/a	n/a	GKK1808
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.11 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene ^b	ND	5.1	ug/kg	
100-41-4	Ethylbenzene ^b	ND	5.1	ug/kg	
108-88-3	Toluene ^b	ND	5.1	ug/kg	
1330-20-7	Xylenes (total) ^b	19.1	15	ug/kg	
	m,p-Xylene ^b	13.0	10	ug/kg	
95-47-6	o-Xylene	6.1	5.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	87%		21-163%
98-08-8	aaa-Trifluorotoluene	526% ^c		39-170%

- (a) Sample was received unpreserved and outside the 48 hour preservation time.
- (b) More than 40% RPD for detected concentrations between two GC columns.
- (c) Outside control limits possibly due to matrix interference.

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

32
3

Client Sample ID: JAQUEZ 248(8) 022411	
Lab Sample ID: T70072-2	Date Sampled: 02/24/11
Matrix: SO - Soil	Date Received: 03/01/11
Method: SW846 8015 M SW846 3550B	Percent Solids: 77.0
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ11184.D	1	03/07/11	HD	03/02/11	OP17640	GJB147
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	4.3	mg/kg	
	TPH (> C28-C40)	ND	4.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	74%		33-115%

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: JAQUEZ 249(15) 022411	
Lab Sample ID: T70072-3	Date Sampled: 02/24/11
Matrix: SO - Soil	Date Received: 03/01/11
Method: SW846 8015	Percent Solids: 86.2
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	HH0002817.D	1	03/02/11	AT	n/a	n/a	GHH148
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.38 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	6.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	86%		46-127%	
98-08-8	aaa-Trifluorotoluene	92%		44-120%	

(a) Sample was received unpreserved and outside the 48 hour preservation time.

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:	JAQUEZ 249(15) 022411		
Lab Sample ID:	T70072-3	Date Sampled:	02/24/11
Matrix:	SO - Soil	Date Received:	03/01/11
Method:	SW846 8021B	Percent Solids:	86.2
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK037922.D	1	03/05/11	LB	n/a	n/a	GKK1808
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.46 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene ^b	ND	4.2	ug/kg	
100-41-4	Ethylbenzene ^b	26.1	4.2	ug/kg	
108-88-3	Toluene	ND	4.2	ug/kg	
1330-20-7	Xylenes (total) ^b	25.4	13	ug/kg	
	m,p-Xylene ^b	11.8	8.5	ug/kg	
95-47-6	o-Xylene ^b	13.6	4.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		21-163%
98-08-8	aaa-Trifluorotoluene	900% ^c		39-170%

- (a) Sample was received unpreserved and outside the 48 hour preservation time.
- (b) More than 40% RPD for detected concentrations between two GC columns.
- (c) Outside control limits possibly due to matrix interference.

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: JAQUEZ 249(15) 022411	
Lab Sample ID: T70072-3	Date Sampled: 02/24/11
Matrix: SO - Soil	Date Received: 03/01/11
Method: SW846 8015 M SW846 3550B	Percent Solids: 86.2
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ11186.D	1	03/07/11	HD	03/02/11	OP17640	GJB147
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	3.9	mg/kg	
	TPH (> C28-C40)	ND	3.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	74%		33-115%

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

3.4
3

Client Sample ID:	JAQUEZ 254(GW) 022511		
Lab Sample ID:	T70072-4	Date Sampled:	02/25/11
Matrix:	AQ - Ground Water	Date Received:	03/01/11
Method:	SW846 8015	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	BB0006078.D	10	03/08/11	AT	n/a	n/a	GBB299
Run #2 ^a	HH0002874.D	50	03/04/11	AT	n/a	n/a	GHH151

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

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	4.06	0.50	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	112%	85%	42-123%	
98-08-8	aaa-Trifluorotoluene	114%	94%	51-130%	

(a) Reported for QC purposes only.

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

34
3

Client Sample ID: JAQUEZ 254(GW) 022511	
Lab Sample ID: T70072-4	Date Sampled: 02/25/11
Matrix: AQ - Ground Water	Date Received: 03/01/11
Method: SW846 8021B	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	KK038082.D	1	03/11/11	LB	n/a	n/a	GKK1815
Run #2	KK038013.D	10	03/09/11	LB	n/a	n/a	GKK1812

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	1.8	1.0	ug/l	
100-41-4	Ethylbenzene	1.7	1.0	ug/l	
108-88-3	Toluene ^a	9.5	1.0	ug/l	
1330-20-7	Xylenes (total)	19.0	3.0	ug/l	
95-47-6	o-Xylene	4.4	1.0	ug/l	
	m,p-Xylene	14.7	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	102%	99%	58-125%
98-08-8	aaa-Trifluorotoluene	581% ^b	126%	73-139%

- (a) More than 40% RPD for detected concentrations between two GC columns.
- (b) Outside control limits due to matrix interference. Confirmed by reanalysis.

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

3.4
3

Client Sample ID: JAQUEZ 254(GW) 022511	
Lab Sample ID: T70072-4	Date Sampled: 02/25/11
Matrix: AQ - Ground Water	Date Received: 03/01/11
Method: SW846 8015 M SW846 3510C	Percent Solids: n/a
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ10973.D	10	03/02/11	HD	03/01/11	OP17625	GJF143
Run #2							

	Initial Volume	Final Volume
Run #1	820 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	21.4	1.2	mg/l	
	TPH (> C28-C40)	6.96	1.2	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	68%		25-112%

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:	JAQUEZ 264(22) 022511		
Lab Sample ID:	T70072-5	Date Sampled:	02/25/11
Matrix:	SO - Soil	Date Received:	03/01/11
Method:	SW846 8015	Percent Solids:	85.4
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	HH0002818.D	1	03/02/11	AT	n/a	n/a	GHH148
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.01 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	6.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	87%		46-127%	
98-08-8	aaa-Trifluorotoluene	95%		44-120%	

(a) Sample was received unpreserved and outside the 48 hour preservation time.

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: JAQUEZ 264(22) 022511	
Lab Sample ID: T70072-5	Date Sampled: 02/25/11
Matrix: SO - Soil	Date Received: 03/01/11
Method: SW846 8021B	Percent Solids: 85.4
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK038091.D	1	03/11/11	LB	n/a	n/a	GKK1816
Run #2 ^b	KK038151.D	1	03/14/11	LB	n/a	n/a	GKK1818

Run #	Initial Weight	Final Volume
Run #1	5.78 g	5.0 ml
Run #2	5.13 g	5.0 ml

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.1	ug/kg	
100-41-4	Ethylbenzene	ND	4.1	ug/kg	
108-88-3	Toluene	ND	4.1	ug/kg	
1330-20-7	Xylenes (total)	ND	12	ug/kg	
	m,p-Xylene	ND	8.1	ug/kg	
95-47-6	o-Xylene	ND	4.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	2% ^c	87%	21-163%
98-08-8	aaa-Trifluorotoluene	2% ^c	118%	39-170%

(a) Sample was received beyond 48 hours hold time. Sample analyzed per clients request.

(b) Confirmation run for surrogate recoveries.

(c) Outside control limits biased low due to autosampler spiking failure. Sample was reanalyzed for confirmation.

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: JAQUEZ 264(22) 022511	
Lab Sample ID: T70072-5	Date Sampled: 02/25/11
Matrix: SO - Soil	Date Received: 03/01/11
Method: SW846 8015 M SW846 3550B	Percent Solids: 85.4
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ11187.D	1	03/07/11	HD	03/02/11	OP17640	GJF147
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	3.9	mg/kg	
	TPH (> C28-C40)	ND	3.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	58%		33-115%

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

3.6
3

Client Sample ID: JAQUEZ 265(12.5) 022511	
Lab Sample ID: T70072-6	Date Sampled: 02/25/11
Matrix: SO - Soil	Date Received: 03/01/11
Method: SW846 8015	Percent Solids: 85.4
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	HH0002819.D	1	03/02/11	AT	n/a	n/a	GHH148
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.29 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	6.4	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	83%		46-127%	
98-08-8	aaa-Trifluorotoluene	91%		44-120%	

(a) Sample was received unpreserved and outside the 48 hour preservation time.

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: JAQUEZ 265(12.5) 022511	
Lab Sample ID: T70072-6	Date Sampled: 02/25/11
Matrix: SO - Soil	Date Received: 03/01/11
Method: SW846 8021B	Percent Solids: 85.4
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK038092.D	1	03/11/11	LB	n/a	n/a	GKK1816
Run #2 ^b	KK038152.D	1	03/14/11	LB	n/a	n/a	GKK1818

Run #	Initial Weight	Final Volume
Run #1	5.62 g	5.0 ml
Run #2	5.47 g	5.0 ml

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.2	ug/kg	
100-41-4	Ethylbenzene	ND	4.2	ug/kg	
108-88-3	Toluene	ND	4.2	ug/kg	
1330-20-7	Xylenes (total)	ND	13	ug/kg	
	m,p-Xylene	ND	8.3	ug/kg	
95-47-6	o-Xylene	ND	4.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	1% ^c	90%	21-163%
98-08-8	aaa-Trifluorotoluene	1% ^c	129%	39-170%

- (a) Sample was received beyond 48 hours hold time. Sample was analyzed per clients request.
- (b) Confirmation run for surrogate recoveries.
- (c) Outside control limits biased low due to autosampler spiking failure. Sample was reanalyzed for confirmation.

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

3.6
3

Client Sample ID: JAQUEZ 265(12.5) 022511	
Lab Sample ID: T70072-6	Date Sampled: 02/25/11
Matrix: SO - Soil	Date Received: 03/01/11
Method: SW846 8015 M SW846 3550B	Percent Solids: 85.4
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ11188.D	1	03/07/11	HD	03/02/11	OP17640	GJB147
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	3.9	mg/kg	
	TPH (> C28-C40)	ND	3.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	71%		33-115%

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:	TRIP BLANK	Date Sampled:	02/25/11
Lab Sample ID:	T70072-7	Date Received:	03/01/11
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8021B		
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK037788.D	1	03/01/11	LB	n/a	n/a	GKK1805
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	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	90%		58-125%
98-08-8	aaa-Trifluorotoluene	91%		73-139%

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

3.8
3

Client Sample ID: JAQUEZ 280(16) 022811	
Lab Sample ID: T70072-8	Date Sampled: 02/28/11
Matrix: SO - Soil	Date Received: 03/01/11
Method: SW846 8015	Percent Solids: 79.8
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	HH0002820.D	1	03/02/11	AT	n/a	n/a	GHH148
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.23 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	7.3	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	85%		46-127%	
98-08-8	aaa-Trifluorotoluene	93%		44-120%	

(a) Sample was received unpreserved and outside the 48 hour preservation time.

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:	JAQUEZ 280(16) 022811		
Lab Sample ID:	T70072-8	Date Sampled:	02/28/11
Matrix:	SO - Soil	Date Received:	03/01/11
Method:	SW846 8021B	Percent Solids:	79.8
Project:	MWHCODE: San Juan River Basin Program		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK038139.D	1	03/14/11	LB	n/a	n/a	GKK1818
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.11 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.9	ug/kg	
100-41-4	Ethylbenzene	ND	4.9	ug/kg	
108-88-3	Toluene	ND	4.9	ug/kg	
1330-20-7	Xylenes (total)	ND	15	ug/kg	
	m,p-Xylene	ND	9.8	ug/kg	
95-47-6	o-Xylene	ND	4.9	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		21-163%
98-08-8	aaa-Trifluorotoluene	133%		39-170%

(a) Sample was received beyond 48 hours hold time. Sample analyzed per clients request.

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: JAQUEZ 280(16) 022811	
Lab Sample ID: T70072-8	Date Sampled: 02/28/11
Matrix: SO - Soil	Date Received: 03/01/11
Method: SW846 8015 M SW846 3550B	Percent Solids: 79.8
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ11189.D	1	03/07/11	HD	03/02/11	OP17640	GJF147
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	4.2	mg/kg	
	TPH (> C28-C40)	ND	4.2	mg/kg	

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

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
3

Client Sample ID: JAQUEZ 279(7) 022811	
Lab Sample ID: T70072-9	Date Sampled: 02/28/11
Matrix: SO - Soil	Date Received: 03/01/11
Method: SW846 8015	Percent Solids: 80.5
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	HH0002826.D	1	03/02/11	AT	n/a	n/a	GHH148
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.43 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	6.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	81%		46-127%	
98-08-8	aaa-Trifluorotoluene	90%		44-120%	

(a) Sample was received unpreserved and outside the 48 hour preservation time.

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
3

Client Sample ID: JAQUEZ 279(7) 022811	
Lab Sample ID: T70072-9	Date Sampled: 02/28/11
Matrix: SO - Soil	Date Received: 03/01/11
Method: SW846 8021B	Percent Solids: 80.5
Project: MWHCODE: San Juan River Basin Program	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	KK038141.D	1	03/14/11	LB	n/a	n/a	GKK1818
Run #2							

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

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.5	ug/kg	
100-41-4	Ethylbenzene	ND	4.5	ug/kg	
108-88-3	Toluene	ND	4.5	ug/kg	
1330-20-7	Xylenes (total)	ND	13	ug/kg	
	m,p-Xylene	ND	9.0	ug/kg	
95-47-6	o-Xylene	ND	4.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	89%		21-163%
98-08-8	aaa-Trifluorotoluene	126%		39-170%

(a) Sample was received beyond 48 hours hold time. Sample was analyzed per clients request.

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
3

Client Sample ID: JAQUEZ 279(7) 022811	
Lab Sample ID: T70072-9	Date Sampled: 02/28/11
Matrix: SO - Soil	Date Received: 03/01/11
Method: SW846 8015 M SW846 3550B	Percent Solids: 80.5
Project: MWHCODE: San Juan River Basin Program	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ11190.D	1	03/07/11	HD	03/02/11	OP17640	GJB147
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	4.1	mg/kg	
	TPH (> C28-C40)	6.47	4.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	69%		33-115%

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

SAMPLE INSPECTION FORM

Accutest Job Number: T70072 Client: MWH Date/Time Received: 3/11/11 1000

of Coolers Received: 1 Thermometer #: 110 Temperature Adjustment Factor: -0.50°C

Cooler Temperatures (initial/adjusted): #1: 5.0°C/4.5°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

- 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 ltrts? _____
 Number of lab-filtered metals? _____

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

Summary of Discrepancies:
1) Received 1 of 2 Amber with cracked lid. Sample bottle completely full.
2) 1 of 3 Soil jar received with cracked lid for ID 264. Sample jar completely full.

TECHNICIAN SIGNATURE/DATE: [Signature] 3/11/11
 INFORMATION AND SAMPLE LABELING VERIFIED BY: [Signature] ORA 3/11/11

CORRECTIVE ACTIONS

Client Representative Notified: _____ Date: _____
 By Accutest Representative: _____ Via: Phone Email
 Client Instructions: _____

i:\mwalker\form\samplemanagement SM023 Revised 8/11/10

SAMPLE RECEIPT LOG

JOB #: T70072 DATE/TIME RECEIVED: 8-2-11 1200
 CLIENT: MWH INITIALS: SC

COOLER#	SAMPLE ID	FIELD ID	DATE	MATRIX	VOL	BOTTLE #	LOCATION	PRESERV	PH
1	1	Jaguel 2-247(6)022411	2-24-11 1615	S	402	1-2	2-22	① 2 3 4 5 6 7 8	<2 >12
1	1	"	"	"	"	3	VR	① 2 3 4 5 6 7 8	<2 >12
1	2	Jaguel 2-248(8)022411	" 1627	"	"	1-2	2-22	① 2 3 4 5 6 7 8	<2 >12
1	2	"	"	"	"	3	VR	① 2 3 4 5 6 7 8	<2 >12
1	3	Jaguel 2-249(15)022411	" 1630	"	"	1-2	2-22	① 2 3 4 5 6 7 8	<2 >12
1	3	"	"	"	"	3	VR	① 2 3 4 5 6 7 8	<2 >12
1	4	Jaguel 2-254(6)022511	2-25-11 1734	W	LAG	1-2	1W	① 2 3 4 5 6 7 8	<2 >12
1	4	"	"	W	40	3-8	VR	① 2 3 4 5 6 7 8	<2 >12
1	5	Jaguel 2-264(22)022511	" 1536	S	402	1-2	2-22	① 2 3 4 5 6 7 8	<2 >12
1	5	"	"	S	402	3VR	VR	① 2 3 4 5 6 7 8	<2 >12
1	6	Jaguel 2-264(12)022511	" 1570	S	402	1-2	2-22	① 2 3 4 5 6 7 8	<2 >12
1	6	"	"	S	402	3VR	VR	① 2 3 4 5 6 7 8	<2 >12
1	7	Trap Blank	2-15-11	WTS	40	1-2	VR	① 2 3 4 5 6 7 8	<2 >12
1	8	Jaguel 2-282(16)022811	2-28-11 1200	S	402	1-2	2-22	① 2 3 4 5 6 7 8	<2 >12
1	8	"	"	S	402	3	VR	① 2 3 4 5 6 7 8	<2 >12
1	9	Jaguel 2-275(7)022811	2-28-11 1130	S	402	1-2	2-22	① 2 3 4 5 6 7 8	<2 >12
1	9	"	"	"	"	3	VR	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 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: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GHH148-MB	HH0002814.D		03/02/11	AT	n/a	n/a	GHH148

The QC reported here applies to the following samples:

Method: SW846 8015

T70072-1, T70072-2, T70072-3, T70072-5, T70072-6, T70072-8, T70072-9

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

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	83%	46-127%
98-08-8	aaa-Trifluorotoluene	92%	44-120%

Method Blank Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GHH151-MB	HH0002861.D		03/04/11	AT	n/a	n/a	GHH151

The QC reported here applies to the following samples:

Method: SW846 8015

T70072-4

CAS No.	Compound	Result	RL	Units	Q
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CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	87%	42-123%
98-08-8	aaa-Trifluorotoluene	100%	51-130%

Method Blank Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB299-MB	BB0006071.DI		03/08/11	AT	n/a	n/a	GBB299

The QC reported here applies to the following samples:

Method: SW846 8015

T70072-4

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	0.050	mg/l	

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	96%	42-123%
98-08-8	aaa-Trifluorotoluene	106%	51-130%

Method Blank Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1805-MB	KK037775.D 1		03/01/11	LB	n/a	n/a	GKK1805

The QC reported here applies to the following samples:

Method: SW846 8021B

T70072-7

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	92%	58-125%
98-08-8	aaa-Trifluorotoluene	99%	73-139%

Method Blank Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1808-MB	KK037896.D 1		03/04/11	LB	n/a	n/a	GKK1808

The QC reported here applies to the following samples:

Method: SW846 8021B

T70072-1, T70072-2, T70072-3

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

CAS No.	Surrogate Recoveries	Result	Limits
460-00-4	4-Bromofluorobenzene	87%	21-163%
98-08-8	aaa-Trifluorotoluene	113%	39-170%

Method Blank Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1812-MB	KK037994.D 1		03/09/11	LB	n/a	n/a	GKK1812

The QC reported here applies to the following samples:

Method: SW846 8021B

T70072-4

CAS No.	Compound	Result	RL	Units	Q
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CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	97%	58-125%
98-08-8	aaa-Trifluorotoluene	100%	73-139%

Method Blank Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1815-MB	KK038081.D 1		03/11/11	LB	n/a	n/a	GKK1815

The QC reported here applies to the following samples:

Method: SW846 8021B

T70072-4

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	102%	58-125%
98-08-8	aaa-Trifluorotoluene	105%	73-139%

Method Blank Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1816-MB	KK038090.D 1		03/11/11	LB	n/a	n/a	GKK1816

The QC reported here applies to the following samples:

Method: SW846 8021B

T70072-5, T70072-6

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

CAS No.	Surrogate Recoveries	Results	Limits
460-00-4	4-Bromofluorobenzene	20% * a	21-163%
98-08-8	aaa-Trifluorotoluene	22% * a	39-170%

(a) Outside control limits biased low due to autosampler spiking failure.

Method Blank Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1818-MB	KK038138.D 1		03/14/11	LB	n/a	n/a	GKK1818

The QC reported here applies to the following samples:

Method: SW846 8021B

T70072-8, T70072-9

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

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	94%	21-163%
98-08-8	aaa-Trifluorotoluene	128%	39-170%

Blank Spike Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GHH148-BS	HH0002811.D		03/02/11	AT	n/a	n/a	GHH148

The QC reported here applies to the following samples:

Method: SW846 8015

T70072-1, T70072-2, T70072-3, T70072-5, T70072-6, T70072-8, T70072-9

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.354	89	78-115

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	87%	46-127%
98-08-8	aaa-Trifluorotoluene	98%	44-120%

Blank Spike Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GHH151-BS	HH0002858.D		03/04/11	AT	n/a	n/a	GHH151

The QC reported here applies to the following samples:

Method: SW846 8015

T70072-4

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
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CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	90%	42-123%
98-08-8	aaa-Trifluorotoluene	100%	51-130%

Blank Spike Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB299-BS	BB0006068.DI		03/08/11	AT	n/a	n/a	GBB299

The QC reported here applies to the following samples:

Method: SW846 8015

T70072-4

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.393	98	81-113

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	100%	42-123%
98-08-8	aaa-Trifluorotoluene	111%	51-130%

Blank Spike Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1805-BS	KK037772.D 1		03/01/11	LB	n/a	n/a	GKK1805

The QC reported here applies to the following samples:

Method: SW846 8021B

T70072-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	19.4	97	86-121
100-41-4	Ethylbenzene	20	19.1	96	81-116
108-88-3	Toluene	20	19.1	96	87-117
1330-20-7	Xylenes (total)	60	57.5	96	85-115
95-47-6	o-Xylene	20	19.7	99	87-116
	m,p-Xylene	40	37.9	95	84-116

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	103%	58-125%
98-08-8	aaa-Trifluorotoluene	106%	73-139%

Blank Spike Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1808-BS	KK037892.D 1		03/04/11	LB	n/a	n/a	GKK1808

The QC reported here applies to the following samples:

Method: SW846 8021B

T70072-1, T70072-2, T70072-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	20	18.1	91	73-132
100-41-4	Ethylbenzene	20	18.2	91	70-133
108-88-3	Toluene	20	17.9	90	74-133
1330-20-7	Xylenes (total)	60	54.6	91	73-134
	m,p-Xylene	40	36.4	91	70-134
95-47-6	o-Xylene	20	18.2	91	76-131

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	89%	21-163%
98-08-8	aaa-Trifluorotoluene	116%	39-170%

Blank Spike Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1812-BS	KK037991.D 1		03/09/11	LB	n/a	n/a	GKK1812

The QC reported here applies to the following samples:

Method: SW846 8021B

T70072-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
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CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	99%	58-125%
98-08-8	aaa-Trifluorotoluene	101%	73-139%

Blank Spike Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1818-BS	KK038134.D 1		03/14/11	LB	n/a	n/a	GKK1818

The QC reported here applies to the following samples:

Method: SW846 8021B

T70072-8, T70072-9

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	20	21.9	110	73-132
100-41-4	Ethylbenzene	20	21.3	107	70-133
108-88-3	Toluene	20	21.1	106	74-133
1330-20-7	Xylenes (total)	60	64.6	108	73-134
	m,p-Xylene	40	42.9	107	70-134
95-47-6	o-Xylene	20	21.7	109	76-131

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	99%	21-163%
98-08-8	aaa-Trifluorotoluene	131%	39-170%

Blank Spike/Blank Spike Duplicate Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1815-BS	KK038078.D 1		03/11/11	LB	n/a	n/a	GKK1815
GKK1815-BSD	KK038079.D 1		03/11/11	LB	n/a	n/a	GKK1815

The QC reported here applies to the following samples:

Method: SW846 8021B

T70072-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	20	19.5	98	18.9	95	3	86-121/30
100-41-4	Ethylbenzene	20	19.1	96	18.3	92	4	81-116/30
108-88-3	Toluene	20	19.4	97	18.6	93	4	87-117/30
1330-20-7	Xylenes (total)	60	57.4	96	55.1	92	4	85-115/30
95-47-6	o-Xylene	20	19.5	98	18.8	94	4	87-116/30
	m,p-Xylene	40	37.9	95	36.3	91	4	84-116/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	105%	104%	58-125%
98-08-8	aaa-Trifluorotoluene	107%	106%	73-139%

5.3.1
5

Blank Spike/Blank Spike Duplicate Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK1816-BS	KK038086.D 1		03/11/11	LB	n/a	n/a	GKK1816
GKK1816-BSD	KK038087.D 1		03/11/11	LB	n/a	n/a	GKK1816

The QC reported here applies to the following samples:

Method: SW846 8021B

T70072-5, T70072-6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	20	19.6	98	19.2	96	2	73-132/30
100-41-4	Ethylbenzene	20	19.3	97	18.7	94	3	70-133/30
108-88-3	Toluene	20	19.4	97	18.8	94	3	74-133/30
1330-20-7	Xylenes (total)	60	58.6	98	56.7	95	3	73-134/30
	m,p-Xylene	40	38.9	97	37.6	94	3	70-134/30
95-47-6	o-Xylene	20	19.7	99	19.1	96	3	76-131/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene		117%	21-163%
460-00-4	4-Bromofluorobenzene	99%	101%	21-163%
98-08-8	aaa-Trifluorotoluene		150%	39-170%
98-08-8	aaa-Trifluorotoluene	128%	132%	39-170%

5.3.2
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T70072-5MS	HH0002823.D		03/02/11	AT	n/a	n/a	GHH148
T70072-5MSD	HH0002824.D		03/02/11	AT	n/a	n/a	GHH148
T70072-5 ^a	HH0002818.D		03/02/11	AT	n/a	n/a	GHH148

The QC reported here applies to the following samples: Method: SW846 8015

T70072-1, T70072-2, T70072-3, T70072-5, T70072-6, T70072-8, T70072-9

CAS No.	Compound	T70072-5 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	26.8	23.6	88	21.8	81	8	78-115/14

CAS No.	Surrogate Recoveries	MS	MSD	T70072-5	Limits
460-00-4	4-Bromofluorobenzene	84%	85%	87%	46-127%
98-08-8	aaa-Trifluorotoluene	94%	97%	95%	44-120%

(a) Sample was received unpreserved and outside the 48 hour preservation time.

5.4.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T70072-4MS	HH0002870.150		03/04/11	AT	n/a	n/a	GHH151
T70072-4MSD	HH0002871.150		03/04/11	AT	n/a	n/a	GHH151
T70072-4 ^a	HH0002874.150		03/04/11	AT	n/a	n/a	GHH151

The QC reported here applies to the following samples:

Method: SW846 8015

T70072-4

CAS No.	Compound	T70072-4 mg/l	Spike Q	mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
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CAS No.	Surrogate Recoveries	MS	MSD	T70072-4	Limits
460-00-4	4-Bromofluorobenzene	84%	85%	85%	42-123%
98-08-8	aaa-Trifluorotoluene	99%	98%	94%	51-130%

(a) Reported for QC purposes only.

5.4.2
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T70300-2MS	BB0006074.D500000		03/08/11	AT	n/a	n/a	GBB299
T70300-2MSD	BB0006075.D500000		03/08/11	AT	n/a	n/a	GBB299
T70300-2	BB0006073.D500000		03/08/11	AT	n/a	n/a	GBB299

The QC reported here applies to the following samples:

Method: SW846 8015

T70072-4

CAS No.	Compound	T70300-2 mg/l	Spike Q mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	613000	200000	667000	27* a	699000	43* a	5	81-113/31

CAS No.	Surrogate Recoveries	MS	MSD	T70300-2	Limits
460-00-4	4-Bromofluorobenzene	147%* b	149%* b	151%* b	42-123%
98-08-8	aaa-Trifluorotoluene	113%	120%	116%	51-130%

(a) Outside control limits due to high level in sample relative to spike amount.

(b) Outside control limits due to matrix interference. Confirmed by MS/MSD.

5.4.3
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T69931-3MS	KK037780.D	5	03/01/11	LB	n/a	n/a	GKK1805
T69931-3MSD	KK037781.D	5	03/01/11	LB	n/a	n/a	GKK1805
T69931-3 ^a	KK037777.D	5	03/01/11	LB	n/a	n/a	GKK1805

The QC reported here applies to the following samples:

Method: SW846 8021B

T70072-7

CAS No.	Compound	T69931-3 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	5.0 U	100	96.0	96	92.1	92	4	86-121/19
100-41-4	Ethylbenzene	1.7	J 100	93.3	92	90.4	89	3	81-116/14
108-88-3	Toluene	5.0 U	100	94.9	95	90.4	90	5	87-117/16
1330-20-7	Xylenes (total)	15 U	300	277	92	270	90	3	85-115/12
95-47-6	o-Xylene	5.0 U	100	94.1	94	92.5	93	2	87-116/16
	m,p-Xylene	10 U	200	183	92	178	89	3	84-116/13

CAS No.	Surrogate Recoveries	MS	MSD	T69931-3	Limits
460-00-4	4-Bromofluorobenzene	88%	97%	84%	58-125%
98-08-8	aaa-Trifluorotoluene	97%	102%	88%	73-139%

(a) Reported for QC purposes only.

5.4.4
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T69849-1MS	KK037911.D 1		03/05/11	LB	n/a	n/a	GKK1808
T69849-1MSD	KK037912.D 1		03/05/11	LB	n/a	n/a	GKK1808
T69849-1	KK037906.D 1		03/04/11	LB	n/a	n/a	GKK1808

The QC reported here applies to the following samples:

Method: SW846 8021B

T70072-1, T70072-2, T70072-3

CAS No.	Compound	T69849-1 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	1.1	J	22.4	17.1	71	16.6	65	3	41-129/33
100-41-4	Ethylbenzene	ND		22.4	13.9	62	11.9	50	16	15-139/36
108-88-3	Toluene	ND		22.4	30.9	138	27.6	115	11	26-141/38
1330-20-7	Xylenes (total)	ND		67.3	46.7	69	36.0	50	26	22-132/33
	m,p-Xylene	ND		44.9	31.2	70	24.5	51	24	24-133/41
95-47-6	o-Xylene	ND		22.4	15.5	69	11.5	48	30	25-140/35

CAS No.	Surrogate Recoveries	MS	MSD	T69849-1	Limits
460-00-4	4-Bromofluorobenzene	81%	80%	79%	21-163%
98-08-8	aaa-Trifluorotoluene	144%	126%	107%	39-170%

5.4.5
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T70309-1MS	KK038008.D 1		03/09/11	LB	n/a	n/a	GKK1812
T70309-1MSD	KK038009.D 1		03/09/11	LB	n/a	n/a	GKK1812
T70309-1	KK038001.D 1		03/09/11	LB	n/a	n/a	GKK1812

The QC reported here applies to the following samples:

Method: SW846 8021B

T70072-4

CAS No.	Compound	T70309-1 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
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CAS No.	Surrogate Recoveries	MS	MSD	T70309-1	Limits
460-00-4	4-Bromofluorobenzene	99%	99%	116%	58-125%
98-08-8	aaa-Trifluorotoluene	103%	104%	151%* a	73-139%

(a) Outside control limits biased high. Only ND results reported.

5.4.6
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T70399-2MS	KK038156.D 1		03/14/11	LB	n/a	n/a	GKK1818
T70399-2MSD	KK038157.D 1		03/14/11	LB	n/a	n/a	GKK1818
T70399-2	KK038142.D 1		03/14/11	LB	n/a	n/a	GKK1818

The QC reported here applies to the following samples:

Method: SW846 8021B

T70072-8, T70072-9

CAS No.	Compound	T70399-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	1.0	J	23.6	22.4	91	18.4	84	20	41-129/33
100-41-4	Ethylbenzene	0.92	J	23.6	22.0	89	17.6	80	22	15-139/36
108-88-3	Toluene	2.8	J	23.6	23.0	85	18.5	76	22	26-141/38
1330-20-7	Xylenes (total)	3.7	J	70.9	66.2	88	53.2	79	22	22-132/33
	m,p-Xylene	2.7	J	47.3	44.3	88	35.5	79	22	24-133/41
95-47-6	o-Xylene	0.97	J	23.6	21.9	89	17.7	80	21	25-140/35

CAS No.	Surrogate Recoveries	MS	MSD	T70399-2	Limits
460-00-4	4-Bromofluorobenzene	91%	93%	91%	21-163%
98-08-8	aaa-Trifluorotoluene	125%	131%	134%	39-170%

5.4.7
5

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: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17625-MB	JJ10970.D	1	03/02/11	HD	03/01/11	OP17625	GJB143

The QC reported here applies to the following samples:

Method: SW846 8015 M

T70072-4

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	0.10	mg/l	
	TPH (> C28-C40)	ND	0.10	mg/l	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	92% 25-112%

Method Blank Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17640-MB	JJ11150.D	1	03/05/11	HD	03/02/11	OP17640	GJB146

The QC reported here applies to the following samples:

Method: SW846 8015 M

T70072-1, T70072-2, T70072-3, T70072-5, T70072-6, T70072-8, T70072-9

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

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	76% 33-115%

Blank Spike Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17640-BS	JJ11151.D	1	03/05/11	HD	03/02/11	OP17640	GJF146

The QC reported here applies to the following samples:

Method: SW846 8015 M

T70072-1, T70072-2, T70072-3, T70072-5, T70072-6, T70072-8, T70072-9

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	33.3	27.6	83	45-107

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	70%	33-115%

Blank Spike/Blank Spike Duplicate Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17625-BS	JJ10971.D	1	03/02/11	HD	03/01/11	OP17625	GJF143
OP17625-BSD	JJ10972.D	1	03/02/11	HD	03/01/11	OP17625	GJB143

The QC reported here applies to the following samples:

Method: SW846 8015 M

T70072-4

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	1	0.635	64	0.707	71	11	22-84/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	77%	65%	25-112%

6.3.1
6

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T70072
Account: ELPASOX EL PASO CORPORATION
Project: MWHCODE: San Juan River Basin Program

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17640-MS	JJ11161.D	1	03/05/11	HD	03/02/11	OP17640	GJF146
OP17640-MSD	JJ11162.D	1	03/05/11	HD	03/02/11	OP17640	GJB146
T69886-1	JJ11180.D	1	03/07/11	HD	03/02/11	OP17640	GJB147

The QC reported here applies to the following samples:

Method: SW846 8015 M

T70072-1, T70072-2, T70072-3, T70072-5, T70072-6, T70072-8, T70072-9

CAS No.	Compound	T69886-1 mg/kg	Spike Q	mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	ND	42.1	33.1	79	33.6	80	1	45-107/34	

CAS No.	Surrogate Recoveries	MS	MSD	T69886-1	Limits
84-15-1	o-Terphenyl	70%	71%	61%	33-115%

**EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons**

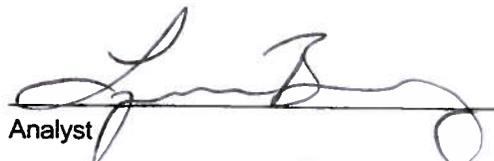
Client:	El Paso Natural Gas	Project #:	10182-0001
Sample ID:	Liner Sample	Date Reported:	03-22-11
Laboratory Number:	57663	Date Sampled:	03-21-11
Chain of Custody No:	11391	Date Received:	03-21-11
Sample Matrix:	Soil	Date Extracted:	03-21-11
Preservative:	Cool	Date Analyzed:	03-22-11
Condition:	Intact	Analysis Requested:	8015 TPH

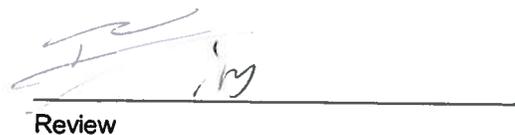
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Liner Sample/Paul & Son Trucking**


Analyst


Review

**EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons**

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	03-22-11 QA/QC	Date Reported:	03-22-11
Laboratory Number:	57663	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	03-22-11
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	03-22-11	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	03-22-11	9.9960E+002	1.0000E+003	0.04%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

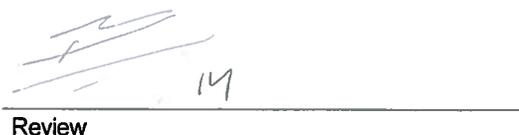
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	253	101%	75 - 125%
Diesel Range C10 - C28	ND	250	244	97.7%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 57625-57627, 57661-57663, 57665

Analyst 

Review 

Client:	El Paso Natural Gas	Project #:	10182-0001
Sample ID:	Liner Sample	Date Reported:	03-22-11
Laboratory Number:	57663	Date Sampled:	03-21-11
Chain of Custody:	11391	Date Received:	03-21-11
Sample Matrix:	Soil	Date Analyzed:	03-22-11
Preservative:	Cool	Date Extracted:	03-21-11
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	0.9
Toluene	ND	1.0
Ethylbenzene	ND	1.0
p,m-Xylene	ND	1.2
o-Xylene	ND	0.9
Total BTEX	ND	

ND - Parameter not detected at the stated detection limit.

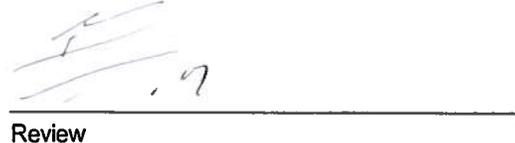
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	102 %
	1,4-difluorobenzene	100 %
	Bromochlorobenzene	102 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Liner Sample/Paul & Son Trucking

Analyst 

Review 

Client:	N/A	Project #:	N/A
Sample ID:	0322BBLK QA/QC	Date Reported:	03-22-11
Laboratory Number:	57663	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	03-22-11
Condition:	N/A	Analysis:	BTEX
		Dilution:	10

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF: Accept. Range 0 - 15%	%Diff.	Blank Conc	Detect. Limit
Benzene	1.4060E+005	1.4088E+005	0.2%	ND	0.1
Toluene	1.5888E+005	1.5920E+005	0.2%	ND	0.1
Ethylbenzene	1.3758E+005	1.3786E+005	0.2%	ND	0.1
p,m-Xylene	3.1762E+005	3.1826E+005	0.2%	ND	0.1
o-Xylene	1.3595E+005	1.3623E+005	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	ND	ND	0.0%	0 - 30%	0.9
Toluene	ND	ND	0.0%	0 - 30%	1.0
Ethylbenzene	ND	ND	0.0%	0 - 30%	1.0
p,m-Xylene	ND	ND	0.0%	0 - 30%	1.2
o-Xylene	ND	ND	0.0%	0 - 30%	0.9

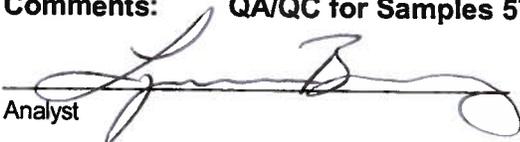
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	500	490	98.0%	39 - 150
Toluene	ND	500	492	98.3%	46 - 148
Ethylbenzene	ND	500	485	97.0%	32 - 160
p,m-Xylene	ND	1000	972	97.2%	46 - 148
o-Xylene	ND	500	503	101%	46 - 148

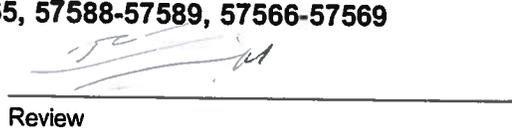
ND - Parameter not detected at the stated detection limit.

Dilution: Spike and spiked sample concentration represent a dilution proportional to sample dilution.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 57661-57663, 57665, 57588-57589, 57566-57569

Analyst 

Review 

RUSH*

CHAIN OF CUSTODY RECORD

11391

Client: El Paso Natural Gas Line - Sample / Pipeline Tracking		Project Name / Location:		ANALYSIS / PARAMETERS																																	
Client Address: SR		Sampler Name:		Sample No. / Identification		Lab No.		Sample Matrix		No. / Volume of Containers		Preservative		TPH (Method 8015)		BTEX (Method 8021)		VOC (Method 8260)		RCRA 8 Metals		Cation / Anion		RCI		TCLP with H/P		PAH		TPH (418.1)		CHLORIDE		Sample Cool		Sample Intact	
Client Phone No.: 101820001		Sample Date: 3/2/11		Sample Time: 15:26		Lab No.: 57663		Sample Matrix: Soil Solid		No. / Volume of Containers: 4 / 0.2		Preservative: HCl		TPH (Method 8015): <input checked="" type="checkbox"/>		BTEX (Method 8021): <input checked="" type="checkbox"/>		VOC (Method 8260): <input type="checkbox"/>		RCRA 8 Metals: <input type="checkbox"/>		Cation / Anion: <input type="checkbox"/>		RCI: <input type="checkbox"/>		TCLP with H/P: <input type="checkbox"/>		PAH: <input type="checkbox"/>		TPH (418.1): <input type="checkbox"/>		CHLORIDE: <input type="checkbox"/>		Sample Cool: YY		Sample Intact: YY	
Relinquished by: (Signature)		Date: 3/2/11		Time: 15:45		Received by: (Signature)		Date: 3/2/11		Time: 15:45		Received by: (Signature)		Date: 3/2/11		Time: 15:45		Received by: (Signature)		Date: 3/2/11		Time: 15:45		Received by: (Signature)		Date: 3/2/11		Time: 15:45		Received by: (Signature)		Date: 3/2/11		Time: 15:45			

envirotech
Analytical Laboratory





NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

RECEIVED

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

July 18, 2005

Mr. Scott T. Pope
El Paso Corporation
2 North Nevada
Colorado Springs, CO 80903

**RE: EL PASO FIELD SERVICES LINDRITH B #24
SAN JUAN COUNTY, NEW MEXICO
CASE 3R0214**

Dear Mr. Pope:

The New Mexico Oil Conservation Division (OCD) has reviewed El Paso Field Services' (EPFS) letter of June 23, 2005, in which you request OCD to reconsider its denial of EPFS's closure request of February 4, 2005. At issue are OCD's two requirements that (1) EPFS conduct a ground water investigation to characterize the release from the Lindrith B#24 production pit and (2) that **after it has defined the contaminate plume, it demonstrate that it is in compliance with the Water Quality Control Commission (WQCC) abatement standards specified at 20.6.2.3103 NMAC for eight (8) consecutive quarterly samples. Thank you for providing me with a copy of the 1995 workplan. With respect to the second issue, OCD acknowledges that it did grant approval in 1995 for the use of four quarters rather than eight quarters. OCD therefore, rescinds its June 23, 2005 requirement of eight quarters.**

However, OCD does not accept EPFS's assertions that hydrocarbon-impacted ground water has not migrated away from the pit for several reasons. EPFS has never adequately characterized the release. For example, despite having BTEX concentrations that exceeded the WQCC abatement standards on many occasions, EPFS has never provided an isoconcentration map depicting the extent of the contamination. It appears from the data presented that ground water flow was predominately to the west from at least the time that the pit was closed (1995) through 2001. The unlined production pit was presumably installed in 1983 and OCD must assume that the release of hydrocarbons began shortly after the well was put on production in June 1984.

EPFS did remove a significant amount of contaminated soil from the pit in October 1994 and in again in August 1995. OCD assumes that hydrocarbons were released from the pit from approximately 1984 until 1994 and migrated downgradient.

Monitor well MW-1 was installed in 1997 in the former pit location. Despite EPFS's February 1998 proposal to install additional monitoring wells and OCD's July 1998 requirement that EPFS install downgradient and/or permanent monitor wells, EPFS did not install additional monitor wells in 1998. In July 1999 OCD reminded EPFS of its requirement that EPFS install additional monitoring wells and determine the extent of ground water contamination. EPFS installed MW-2 and MW-3 in October 1999 and noted that the ground water gradient was to the west in its 1999 Pit Project report. In its 2000 Pit Project report, EPFS again noted that the ground water gradient was to the west and referred to MW-2 as an upgradient well and MW-3 as an cross-gradient well. Not surprisingly, EPFS noted that BTEX had not been detected in either MW-2 or MW-3.

In July 2001, after reviewing EPFS's 2000 Pit Project report, OCD for a third time informed EPFS that it needed to define the extent of the release by adding additional monitor wells. EPFS apparently chose to interpret this requirement to mean that it would "complete" MW-2 and MW-3 as permanent monitoring wells, apparently by surveying the elevation of the wells. EPFS also noted in its 2001 Pit Project report that that *"No samples were collected from MW-2 or MW-3, since BTEX compounds have never been detected in these wells."* Figure 2 (August 2001) of EPFS's 2001 Pit Project report depicts ground water flow to the west using a ground water elevation that was corrected for the amount of product on the water table. OCD notes that this figure, the first provided by EPFS after it surveyed the wells, clearly depicts ground water flow to the west and that neither MW-2 nor MW-3 are appropriate downgradient wells.

Data provided by EPFS in its annual Pit Project reports for the next three years (2002 to 2004) depict ground water flow to the southwest. In its February 2005 Closure Report, EPFS reports that BTEX concentrations at MW-1 were below WQCC standard for all four quarters in 2004. Neither BTEX nor free product was detected at MW-2 and MW-3 from the single sample collected from these two wells in 2004. EPFS concludes by noting that it has demonstrated that it had removed most of the contaminated soil and there has been minimal impact to ground water at this site; therefore, EPFS requests OCD to approve closure of this site.

After careful review, OCD has decided that it cannot approve EPFS closure request. It does appear that EPFS did remove most of the contaminated soil from the pit. However, OCD must assume that ground water has been contaminated by a hydrocarbon plume that was released from the unlined production pit from 1984 until 1994. OCD must assume, based on the data submitted by EPFS, that the ground water gradient was originally to the west, down the axis of Largo Wash, and that the hydrocarbon plume released from the pit migrated west until 2002. By the time that the local ground water gradient migrated to the southwest in 2002, the majority of the ground water plume had apparently migrated away from the pit site. By not installing appropriate downgradient wells in a timely fashion, despite repeated directions from OCD to do so, EPFS failed to conduct a ground water investigation program that meets the appropriate performance standards. That is, EPFS has not yet adequately defined the site conditions at its former unlined production pit, nor has it delineated the extent of the contamination that was

released from the pit. Therefore, OCD must deny EPFS's closure request and require the EPFS implement a ground water investigation to determine the extent of the contamination.

EPFS must submit a ground water investigation plan to install a sufficient number of additional monitoring wells to delineate the downgradient extent of the ground water contamination from the Lindrith B #24 pit site by August 19, 2005. The purpose of the ground water investigation is for EPFS to demonstrate that it has adequately delineated and remediated the hydrocarbon contamination. EPFS should be prepared to install as many monitoring wells as needed to delineate the full extent of the BTEX plume to concentrations less than the WQCC Abatement Standards (20.6.2.3103 NMAC). After it has delineated the release, or demonstrated to OCD's satisfaction that there is no remaining hydrocarbon contamination in the ground water downgradient from the former pit, OCD will determine whether to require additional action from EPFS.

EPFS may wish to propose a investigative approach that relies on temporary well points and screening criteria. OCD is willing to meet with EPFS to discuss the required ground water investigation in detail.

If you have any questions, please call me at (505) 476-3488.

Sincerely,



Glenn von Gonten
Senior Hydrologist
Environmental Bureau

xc: Denny Foust, OCD Aztec District Office
Mr. Bill Liess, Bureau of Land Management
Mr. Mike Matush, New Mexico State Land Office
Mr. Bill Freeman, Navajo Nation EPA
Mr. Kurt Sandoval, Jicarilla Apache Tribe Environmental Protection Office
Pam Anderson, MWH



EL PASO FIELD SERVICES

24321 - NMOCD

MEMORANDUM

**To: Sandra Miller
John Lambdin
Nancy Prince**

Date: January 12, 1996

From: Ann Allen

Place: EPFS Compliance Engineering

Subject: NMOCD Approved Remediation Plan for Groundwater Encountered During Pit Closure Activities

Enclosed are the following three documents which together constitute the subject plan approved by NMOCD.

1. NMOCD approval letter dated 11/30/95 with conditions
2. EPFS original plan submitted to NMOCD 9/16/95
3. EPFS amendment to original plan submitted to NMOCD 11/29/95

Leslie Ann Allen

XC: J. Lambdin 4-25-97

NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505

November 30, 1995

CERTIFIED MAIL

RETURN RECEIPT NO. 2-765-962-517

Ms. Leslie Ann Allen
El Paso Field Services
P.O. Box 1492
El Paso, Texas 79978

RE: SAN JUAN BASIN GROUND WATER INVESTIGATION WORK PLAN

Dear Ms. Allen:

The New Mexico Oil Conservation Division (OCD) has completed a review of El Paso Field Service's (EPFS) November 29, 1995 "REMEDIATION PLAN FOR GROUNDWATER ENCOUNTERED DURING PIT CLOSURE ACTIVITIES/EL PASO NATURAL GAS COMPANY-EL PASO FIELD SERVICES COMPANY" and September 16, 1995 "REMEDIATION PLAN FOR GROUNDWATER ENCOUNTERED DURING PIT CLOSURE ACTIVITIES/EL PASO NATURAL GAS COMPANY-EL PASO FIELD SERVICES COMPANY". These documents contain EPFS's generic work plan for investigation and remediation of contaminated ground related to the former use of unlined pits in the San Juan Basin of Northwestern New Mexico.

The above referenced work plan is approved with the following conditions:

1. EPFS will conduct all sampling and analysis activities using EPA approved procedures.
2. The OCD will not consider ground water actions at a site to be terminated unless all ground water contaminant concentrations (including cations/anions related to disposal practices) are either below WQCC standards or below background levels.
3. All wastes generated will be disposed of at an OCD approved facility or in an OCD approved manner.

OFFICE OF THE SECRETARY - P.O. BOX 6439 - SANTA FE, NM 87505-6439 - (505) 827-5930
ADMINISTRATIVE SERVICES DIVISION - P.O. BOX 6439 - SANTA FE, NM 87505-6439 - (505) 827-5933
ENERGY CONSERVATION AND MANAGEMENT DIVISION - P.O. BOX 6439 - SANTA FE, NM 87505-6439 - (505) 827-5900
FORESTRY AND RESOURCES CONSERVATION DIVISION - P.O. BOX 1948 - SANTA FE, NM 87504-1948 - (505) 827-1830
MINING AND MINERALS DIVISION - P.O. BOX 6439 - SANTA FE, NM 87505-6439 - (505) 827-5970
OIL CONSERVATION DIVISION - P.O. BOX 6439 - SANTA FE, NM 87505-6439 - (505) 827-7111

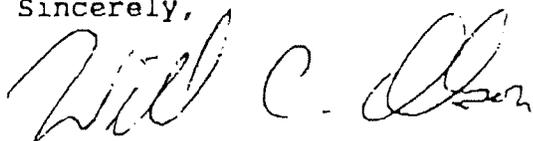
Ms. Leslie Ann Allen
November 30, 1995
Page 2

4. EPFS will submit semi-annual reports on investigation/remedial activities to the OCD by April 1 and October 1 of each respective year. The reports will present the information on each site as a separate case. Each case will contain:
 - a. A description of all activities which occurred during the investigation, conclusions and recommendations.
 - b. The laboratory analytic results of soil and water sampling.
 - c. A site map and a water table elevation map using the water table elevation of the ground water in all monitor wells.
 - d. A geologic log and completion diagram for each well.
 - e. The disposition of all wastes generated.
5. EPFS will notify the OCD at least 48 hours in advance of all scheduled activities such that the OCD has the opportunity to witness the events and/or split samples.
6. All documents submitted for approval will be submitted to the OCD Santa Fe Office with copies provided to the OCD Aztec Office.

Please be advised that OCD approval does not relieve EPFS of liability if contamination exists which is beyond the scope of the work plan, if the activities fail to adequately determine the extent of contamination or if the activities fail to adequately remediate contamination related to EPFS's activities. In addition, OCD approval does not relieve EPFS of responsibility for compliance with any other federal, state or local laws and/or regulations.

If you have any questions, please call me at (505) 827-7154.

Sincerely,



William C. Olson
Hydrogeologist
Environmental Bureau

cc: Denny Foust, OCD Aztec District Office
Ray Powell, NM State Land Commissioner
Bill Liess, BLM Farmington District

**El Paso
Field Services**

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

September 16, 1995

Mr. William Olsen
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Subject: Remediation Plan for Groundwater Encountered During Pit Closure Activities/El Paso Natural Gas Company-El Paso Field Services Company

Dear Mr. Olsen:

El Paso Field Services (EPFS) submits the enclosed proposed remediation plan for closure of pits where groundwater is encountered. Included with the plan is a list of pit closure sites where El Paso has encountered groundwater. The list is current as of August 31, 1995. The proposed remediation plan will apply to all pit closure sites where groundwater is encountered, including future sites not presently shown on the attached list.

Sandra Miller, Nancy Prince, and I would like to meet with you late this month or early in November to discuss the proposed remediation plan. I will be contacting you in the next few days to schedule a meeting.

I enjoyed meeting you last week at the NMOGA meeting in Santa Fe and look forward to working with you on the enclosed plan. I can be reached at 915-541-2524 if you have any questions.

Sincerely,



Leslie Ann Allen
Senior Environmental Scientist
El Paso Field Services

Enclosures (2)

cc: Denny Foust, NMOCD, Aztec

via e-mail: Sandra D. Miller
Nancy K. Prince

file: NMOCD1.doc

**EL PASO NATURAL GAS COMPANY
EL PASO FIELD SERVICES COMPANY**

**REMEDATION PLAN
FOR GROUNDWATER ENCOUNTERED
DURING PIT CLOSURE ACTIVITIES**

El Paso Natural Gas Company (EPNG) is closing all pits in the San Juan Basin in accordance with the Pit Closure Plan submitted to NMOCD on July 28, 1993. These closures include sampling pit soils and removing contaminated soil in groundwater vulnerable areas. In some locations groundwater was encountered during the closure activities. In addition, at locations inside the groundwater vulnerable zone (GVZ) where soil samples failed the criteria established in the NMOCD Pit Closure Guidance, a single boring has been advanced to determine potential impact on groundwater.

This Remediation Plan addresses cases where groundwater was encountered either during the initial closure activities (Phase I) or during the followup investigations inside the GVZ (Phase II). All pits where groundwater is encountered will be assessed and remediated according to options outlined below.

1.0 Investigation

- 1.1 Pits where groundwater was encountered during Phase I closure activities.
A preliminary investigation has been conducted with a RECON ® soil vapor survey. Further investigation will be recommended as needed according to the procedures outlined below.
- 1.2 Pits inside vulnerable zone where soil samples failed NMOCD criteria (Phase II).

1.2.1 Preliminary Investigation

A preliminary investigation will be conducted with soil boring and temporary monitoring well installation according to NMOCD Pit Closure Guidance after removal of source. The purpose is to determine if groundwater has been impacted.

If it is obvious during the boring operation that a source of contamination still remains and groundwater is less than 20', then no temporary monitoring well will be installed. The stained soil will be removed according to the approved Pit Closure Plan. Fertilizer will be added prior to backfill to enhance the natural attenuation process. Groundwater quality will then be assessed either through soil vapor surveys or monitoring well installation.

If groundwater is encountered, a soil sample will be collected from immediately above the water table and submitted for analysis. A temporary monitoring well will also be completed, developed, and sampled for BTEX and TDS. Wells will be 4-inch diameter PVC set with 5 feet of screen above the water table and 10 feet of screen beneath the water table. Sand pack, bentonite seal, and grout will be used to complete the wells which will be fitted with locking caps and padlocks.

The boring will be advanced and soil samples collected at five foot intervals until either field screening indicates that the soil is clean, groundwater is encountered, or auger refusal is reached.

If auger refusal is due to cobbles at shallow depths, and there is reason to believe that groundwater exists at less than 20 feet below the surface at the site, then groundwater quality will be assessed by soil vapor surveys or trenching with a backhoe.

If auger refusal due to cobbles encountered at greater depths, and contamination appears at the refusal depth, groundwater quality will be assessed on a site by site basis.

1.2.2 If Groundwater is Clean

If the groundwater sample collected contains levels of BTEX less than the standards presently set forth in paragraph 3-103 of Water Quality Control Commission regulations ("WQCC standards"), then the well will be abandoned according to NMED guidance documents as soon as practical.

1.2.3 If Groundwater Exceeds WQCC Standards

If the sample is above WQCC standards, further investigation and/or remediation will be conducted. The vertical and horizontal extent of contaminated groundwater will be investigated by soil vapor surveys and/or monitoring well installation. If continued monitoring of the temporarily installed well is required, concrete pads, bumpers etc. will be added as needed to secure the well location. Surface and top of casing elevations will be surveyed as necessary to determine groundwater flow direction.

2.0 Risk assessment

At pits near residential areas when WQCC standards have been exceeded, a water well survey will be conducted. If this survey indicates that a water supply well is within 1000 feet, then the flow direction will be determined, and the extent of contamination in the direction of that receptor will be determined.

If potential receptors are not present, and if concentrations of dissolved phase hydrocarbons are low, EPNG may petition for closure by natural attenuation on a site by site basis. Such a petition might include an evaluation of risk demonstrating that the remaining contaminants do not pose a threat to fresh water supplies, public health and the environment in accordance with NMOCD Pit Closure Guidance.

3.0 Remedial Design

An individual remedial plan will be developed for each location. This plan will include the remedial method selected, schedule of activities, and future monitoring requirements. Boring logs from nearby wells will be used to support remedial design as appropriate. These plans will be submitted with semi-annual reports (see Section 6.0 below), and will not be submitted for

individual approval. NMOCD District and State offices will be notified prior to initiation of any significant activities.

The following methods will be considered during the remedial design:

- 3.1 **Separate light non-aqueous phase liquid (LNAPL) hydrocarbons**
LNAPL removal will be implemented if LNAPLs appear as a measurable layer. Removal will be achieved by way of skimmer pumps (either automatic or manual). Other methods may be proposed on a site by site basis. Some proposed alternatives are listed on the attached table. Any recovered LNAPL will be considered to be exploration and production waste exempt from regulation under subtitle C of RCRA. Recovered LNAPL will be either retained for future use or disposed of in accordance with NMOCD requirements.
- 3.2 **Dissolved phase hydrocarbons**
EPNG proposes to treat groundwater contaminated with dissolved phase hydrocarbons with fertilizer, hydrogen peroxide, natural air, or other in-situ method to enhance the natural attenuation process. Other methods may be proposed on a site by site basis. Table 1 lists some proposed alternatives.

4.0 Remediation

Remedial activities at groundwater sites will be conducted on an on-going basis, in conjunction with pit closure activities as appropriate. Potential remedial alternatives are listed in the attached table "San Juan Basin Pits Groundwater Remedial Alternatives".

5.0 Groundwater Monitoring

EPNG will monitor any well which exhibits contamination quarterly for at least one year. LNAPL removal will be implemented again if LNAPLs reappear as a measurable layer during the monitoring period. When WQCC standards have been met, or when concentrations have leveled off (an asymptotic limit has been reached) for four consecutive quarters, the pit will be considered closed and the wells will be abandoned.

6.0 Reporting

Notification will continue to be made to NMOCD when groundwater is encountered during pit remediation as per the approved Pit Closure Plan.

Twice a year, a summary of groundwater remediation activities will be submitted to District and Santa Fe offices. This summary will include soil boring logs, monitoring well completion diagrams, analytical data, groundwater elevation data, any risk analysis, and type of remediation method used if remediation is required for each location at which contaminated groundwater has been encountered.

7.0 Schedule

Groundwater investigation and remediation activities will begin as soon as practical at each site. Priorities will be assigned based upon the results of risk assessment and field considerations.

SAN JUAN BASIN PITS GROUNDWATER REMEDIAL ALTERNATIVES

TECHNOLOGY	POWER	LENDTH	PROS	CONS			EFFECTIVENESS	COSTS	LABOR	DIFFERENTIATION	COMMENTS
				WATER REMOVAL	TIME/MAINTENANCE/WEATHER	PARTIAL					
PUMP AND TREAT	ELECTRIC	YEARS	NO DISPOSAL			PARTIAL	MEDIUM	HIGH	LONG	Removal of the water and treat in various ways. This would be used in conjunction with pump and treat to speed the process up and allow in the soil.	
BIUM ASST. PUMPING	ELECTRIC	MEDIUM	CLEAN SOILS AND GW	MAINTENANCE/WEATHER	GOOD	GOOD	HIGH	HIGH	LONG	This may be a treatment method used in conjunction with pump and treat.	
AIR STRIPPING	ELECTRIC	YEARS	CLEAN WATER	AIR TREATMENT/WEATHER	GOOD	GOOD	HIGH	HIGH	LONG	This is another form of water treatment for water not product used in conjunction with pump and treat.	
CHARBON ADSORPTION	ELECTRIC	LONG	CLEAN WATER	MAINTENANCE/WEATHER	GOOD	GOOD	MEDIUM	MEDIUM	LONG	This is a water only treatment process and would need to be used with pump and treat technology.	
ULTRAVIOLET OXIDIZATION	ELECTRIC	MEDIUM	NO DISPOSAL	CHEMICAL HANDLING	GOOD	GOOD	MEDIUM	HIGH	LONG	This would entail adding microbes to the water through the well.	
IN SITU BIOREMEDIATION	NONE	MEDIUM	NO DISPOSAL	DOESNT ALWAYS WORK	GOOD	GOOD	MEDIUM	LOW	MEDIUM	These would be retro traps for product only removal.	
PASSIVE PRODUCT REMOVAL	NONE	LONG	LOW COST	LABOR INTENSIVE	LOW	LOW	LOW	MEDIUM	SHORT	As opposed to the passive this would involve the use of a skimmer pump for product only.	
ACTIVE PRODUCT REMOVAL	ELECTRIC	LONG	AUTOMATED	EXPENSIVE	GOOD	GOOD	HIGH	HIGH	LONG	These would be used only for product removal.	
BELT SKIMMERS	ELECTRIC	LONG	NO GW DISPOSAL	MAINTENANCE	GOOD	GOOD	MEDIUM	HIGH	MEDIUM		
OTHER											

El Paso Natural Gas Co.
Pit Closure and Remediation Project
Groundwater Sites Update as of 8/31/95

Meter #	Location/Lane Name	Project Phase	Action due to GW Encountered	Unit	Loc.	T.	R.
93296	Gallegos Canyon Unit 188E	Phase I	RECON Soil/Gas and Water Survey	B	30	29	12
93357	Johnson #1E	Phase I	RECON Soil/Gas and Water Survey	P	21	31	13
71676	Turner #1A	Phase I	RECON Soil/Gas and Water Survey	K	34	31	11
94984	Anderson Gas Com A#1 PC	Phase I	RECON Soil/Gas and Water Survey	C	28	29	10
95136	Trujillo Gas Com A#1	Phase I	RECON Soil/Gas and Water Survey	C	28	29	10
94879	Sanchez Gas Com C#1	Phase I	RECON Soil/Gas and Water Survey	A	28	29	10
75220	Sanchez Gas Com B#1	Phase I	RECON Soil/Gas and Water Survey	G	28	29	10
95210	Anderson Gas Com A#1 CH	Phase I	RECON Soil/Gas and Water Survey	C	28	29	10
95726	Candelaria Gas Com C #1	Phase I	RECON Soil/Gas and Water Survey	C	27	29	10
72387	Grace Pearce #1	Phase I	RECON Soil/Gas and Water Survey	O	22	29	11
75323	Green Com #1	Phase I	RECON Soil/Gas and Water Survey	E	36	29	9
93196	Candado 23 CH & MV	Phase I	RECON Soil/Gas and Water Survey	B	9	26	7
LD153	Trunk 2B Drip X-1	Phase I	RECON Soil/Gas and Water Survey	J	1	27	11
93790	Chacon Amigos #6	Phase I	RECON survey to be performed.	C	11	22	3
73003	Ona McGee #1	Phase I	RECON survey to be performed.	P	4	30	11
93793	Canyon Largo Unit #302	Phase II	Excavate additional soil & resample.	J	3	24	6
94768	Federal 6 #32	Phase II	Excavate additional soil & resample.	G	6	26	7
89039	Marshall 'B' #1J	Phase II	Excavate additional soil & resample.	O	14	27	9
94495	Miles Federal #1E	Phase II	Excavate additional soil & resample.	N	5	26	7
94967	Lindriith B#24	Phase II	Excavate additional soil & resample.	N	9	24	3
70079	Harrington #1	Phase II	Excavate additional soil & resample.	M	31	27	7
95-156	Canyon Largo Unit #336	Phase II	Excavate additional soil & resample.	C	24	25	6
70327	Gartner LS#7	Phase II	Excavate additional soil & resample.	K	26	30	8
94298	Valdez Gas Unit A1E	Phase II	Excavate additional soil & resample.	G	24	29	11
74692	Lindriith Unit #23	Phase II	Excavate additional soil & resample.	D	9	24	3
72265	San Juan 28-6 #79 MV	Phase II	Excavate additional soil & resample.	M	11	27	6
LD104	2C-22 #3 Line Drip	Phase II	Excavate additional soil & resample.	G	13	24	6
90862	Hammond #92	Phase II	Excavate additional soil & resample.	O	25	27	8
93828	Jacques 3 PC	Phase II	Excavate additional soil & resample.	E	25	30	9

Jicarilla site

Meter #	Location/Line Name	Project Phase	Action due to GW Encountered	Unit	Sw.	T.	R.
LD019	Howell #3 (Line Drip)	Phase II	Excavate additional soil & resample.	C	3	27	8
74289	Cutler #2	Phase II	Excavate additional soil & resample.	A	14	24	6
93788	Canyon Largo Unit 304	Phase II	Excavate additional soil & resample.	C	11	24	6
93590	Canyon Largo Unit #298	Phase II	Excavate additional soil & resample.	A	3	24	6
70613	Burroughs Com #1	Phase II	Excavate additional soil & resample.	H	36	27	8
72405	Hammond #7	Phase II	Excavate additional soil & resample.	G	26	27	8
74943	New Mexico Com G1	Phase II	Excavate additional soil & resample.	P	36	30	10
LD094	K 17 Line Drip	Phase II	Excavate additional soil & resample.	C	26	27	8
94899	Valdes #2	Phase II	Excavate additional soil & resample.	G	24	29	11
75212	Graham # 53	Phase II	Monitor Well Set	L	10	27	8
94925	Federal R #2	Phase II	Monitor Well Set	P	15	27	8
70595	Hammond Fed. #1	Phase II	Monitor Well Set	L	25	27	8
89232	Johnston Federal #6A	Phase II	Monitor Well Set	F	35	31	9
LD077	Lat. 2C-55 Line Drip	Phase II	Monitor Well Set	F	17	25	7
94180	Salazar "G" 34-1	Phase II	Monitor Well Set	K	34	25	6
93388	Horton 1-E	Phase II	Monitor Well Set	H	28	31	9
97213	Hamner #9	Phase II	Monitor Well Set	A	20	29	9
70753	Usselman Gas Com No. 1	Phase II	Monitor Well Set	B	4	31	10
87640	Canada Mesa #2	Phase II	Monitor Well Set	I	24	24	6
87493	W. D. Heath B #5	Phase II	Monitor Well Set	M	31	30	9
89620	Sandoval A1A	Phase II	Monitor Well Set	C	35	30	9
LD102	2C-22 #1 Line Drip	Phase II	Monitor Well Set	N	35	24	6
70286	Sheets Well No. 2	Phase II	Monitor Well Set	H	28	31	9
70194	Johnston Federal #4	Phase II	Excavate additional soil & resample.	H	33	31	9
93780	Argo #1E	Phase II	Excavate additional soil & resample.	N	18	27	10
93262	Krause WN Federal #1E	Phase II	Excavate additional soil & resample.	C	32	28	11

Notes:

- Phase II sites are those in which soil samples failed remediation criteria. A borehole was then drilled in order to prove no impact to groundwater.
- On sites where groundwater was encountered during the drilling of the borehole the following practice is implemented: 1) groundwater > 20', monitor wells to be installed, developed, and sampled; 2) groundwater < 20', return to site to excavate additional soil.

**El Paso
Field Services**

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

Via Facsimile

November 29, 1995

Mr. William Olsen
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Subject: Remediation Plan for Groundwater Encountered During Pit Closure Activities/El Paso Natural Gas Company-El Paso Field Services Company

Dear Mr. Olsen:

El Paso Field Services (EPFS) submits the enclosed amendment to the previously proposed remediation plan for closure of pits where groundwater is encountered. The previously proposed plan was submitted by letter dated September 16, 1995. The enclosed amendment modifies the September 16 plan and becomes part of that plan.

The enclosed amendment reflects the conclusions reached during our telephone conversation November 7, 1995. It is our understanding that the enclosed amendment will allow our proposed plan to be approved.

Thank you for your assistance in reviewing our proposed plan. If you have any questions regarding the amendment, please contact me at 915-541-2524.

Sincerely,



Leslie Ann Allen
Senior Environmental Scientist
El Paso Field Services Company

Enclosure (1)

cc: Denny Foust, NMOCD, Aztec

via e-mail: John A. Lambdin
Sandra D. Miller
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file: NMOCD2.doc

AMENDMENT NO. 1

EL PASO NATURAL GAS COMPANY EL PASO FIELD SERVICES COMPANY

REMIATION PLAN FOR GROUNDWATER ENCOUNTERED DURING PIT CLOSURE ACTIVITIES

El Paso Natural Gas Company amends the original remediation plan submitted to NMOCD September 16, 1995 with the following:

Section 1.2.1 Preliminary Investigation of the plan is amended to specify that:

- Groundwater quality will be assessed either through use of a temporary well point (i.e. RECON) or installation of a monitoring well.
- Groundwater sampling locations will either be within the pit or directly adjacent and downgradient to the pit.
- If necessary, additional wells will be placed as appropriate on a case-by-case basis to determine extent of contamination.
- Groundwater will be sampled for the following analytical parameters:
 1. **Major Cations and Major Anions:** Analysis for major cations and major anions will not be conducted if El Paso is able to demonstrate that groundwater impact by major cations and major anions, presently listed in the WQCC standards, is unlikely at a location. Analysis of major cations and major anions, presently listed in the WQCC standards, will only be conducted at locations where El Paso is unable to demonstrate contamination to be unlikely and where TDS exceeds 1,000 mg/l.
 2. **Benzene, Toluene, Ethyl Benzene, Total Xylenes (BTEX)**
 3. **Polyaromatic Hydrocarbons (PAH):** A water sample will only be analyzed for PAH if evidence of a sheen or free phase is noted.
 4. **Metals:** Metals analysis will not be conducted if El Paso is able to demonstrate that groundwater impact by metals is unlikely using site specific soils analysis, gas production data, historical analytical data, or other means. Analysis for arsenic, barium, cadmium, chromium, lead, total mercury, selenium, and silver will only be conducted at locations where El Paso is unable to demonstrate that metals contamination is unlikely.

Section 1.2.2 If Groundwater is Clean of the plan is revised to read: "If the groundwater sample collected can be demonstrated to have levels of BTEX, and/or levels of PAH and/or levels of metals, when analyzed according to Section 1.2.1, less than the standards set forth in paragraph 3-103 of Water Quality Control Commission regulations ("WQCC standards"), then the well will be abandoned according to NMED guidance documents as soon as practical."

Section 5 Groundwater Monitoring is revised to read: "EPNG will monitor any well which exhibits contamination quarterly for at least one year. LNAPL removal will be implemented again if LNAPLs reappear as a measurable layer during the monitoring period. When WQCC standards have been met as described in Section 1.2.2 for four consecutive quarters, the pit will be considered closed and the wells will be abandoned. At any site where concentrations have leveled off for four consecutive quarters, but WQCC standards have not been met, closure of the pit will be handled on a case-by-case basis with NMOCD."