3R - 210

REPORTS

DATE:

2002

elpaso Field Services

Certified Mail: #7001 1940 0002 1371 7676

February 28, 2003

Mr. William C. Olson
New Mexico Oil Conservation Division
1220 St. Francis Dr.
Santa Fe, NM 87504

RE: 2002 Pit Project Annual Groundwater Report

Dear Mr. Olson:

In accordance with reporting requirements, El Paso Field Services (EPFS) has enclosed annual reports for the 30 remaining groundwater impacted sites that were identified during our pit closure project of 1994 / 1995.

EPFS has organized the 30 Annual Reports (Volumes 1, 2 and 3) by land type. Volume 1 contains Annual Reports for sites found on Federal land. Volume 2 contains Non Federal sites and Volume 3 contains sites on Navajo land. Of the 30 reports submitted, EPFS is requesting closure of three sites located on Navajo lands. Of the three Navajo sites submitted for closure OCD has closed the Charley Pah #4 and the John Charles #8. The Rementa et al #1 has not been closed by either agency and EPFS reiterates request for closure of this site. EPFS understands closure of groundwater sites on Navajo land falls under jurisdiction of the Navajo Nation Environmental Protection Agency and original documents have been submitted to them for review. Other Navajo sites are included in the report for your information.

Three additional sites were submitted for closure in 2002. EPFS recently has received closure on the W.D. Heath B-5. Closure approval is pending on the D Loop Line Drip and Hammond # 41A. All of these sites are included in the 2002 Annual Report.

If you have any questions concerning the enclosed reports, please call me at (505) 599-2124.

Sincerely,

Scott T. Pope P.G.
Senior Environmental Scientist

xc: Mr. Denny Foust, NMOCD, Aztec - w / enclosures; **Certified Mail # 7001 1940 0002 1371 7669**
Mr. Bill Liesse, BLM – w / enclosures (federal sites only), **Certified Mail # 7001 1940 0002 1371 7652**

El Paso Field Services
614 Reilly Farmington, New Mexico 87401

elpaso

El Paso Field Services

San Juan Basin Pit Program Groundwater Sites Project

2002 Annual Report Non-Federal Sites (Volume 2)

March 2003

MWH
10619 South Jordan Gateway, Suite 100
Salt Lake City, Utah 84095

EL PASO FIELD SERVICES ANNUAL GROUNDWATER REPORT

NON-FEDERAL SITES VOLUME II

TABLE OF CONTENTS

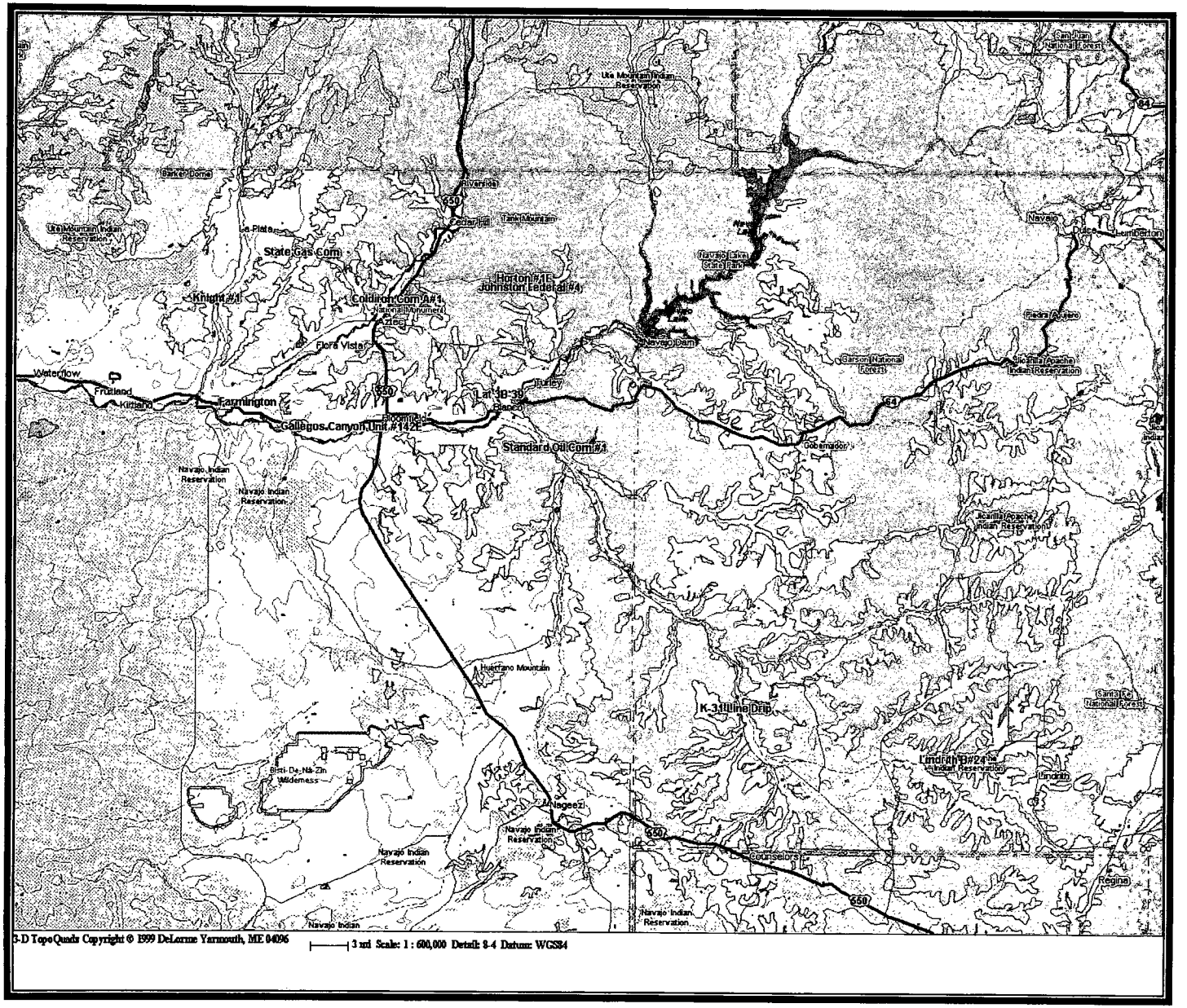
Site Map

METER or LINE ID	SITE NAME	TOWNSHIP	RANGE	SECTION	UNIT
71669	State Gas Com N #1	31N	12W	16	H
70194	Johnston Fed #4	31N	09W	33	H
93388	Horton #1E	31N	09W	28	H
72556	Knight #1	30N	13W	5	A
73551	Coldiron A #1	30N	11W	2	K
03906	GCU Com A #142E	29N	12W	25	G
70445	Standard Oil Com #1	29N	09W	36	N
LD146	Lat 3B-39 Line Drip	29N	09W	10	M
LD087	K-31 Line Drip	25N	06W	16	N
94967	Lindrith B #24	24N	03W	9	N

elpaso

MWH
MONTGOMERY WATSON HARZA

Non - Federal Groundwater Site Map



EPFS GROUNDWATER SITES
2002 ANNUAL GROUNDWATER REPORT

Lat 3B-39 Line Drip
Meter Code: LD146

SITE DETAILS

LEGAL DESCRIPTION: **Twn:** 29N **Rng:** 9W **Sec:** 10 **Unit:** M

NMOCD Haz Ranking: 40 **Land Type:** Fee **Operator:** EPFS

PREVIOUS ACTIVITIES

Site Assessment: 1/94	**Excavation:** 1/95 (60 cy)	**Soil Boring:** 9/95
Monitor Well: 9/95	**Geoprobe:** 11/96	**Additional MWs:** 11/00
Downgradient MWs: 11/00	**Replace MW:** NA	**Quarterly Initiated:** 11/96
ORC Nutrient Injection: NA	**Re-Excavation:** NA	**PSH Removal Initiated:** NA
Annual Initiated: NA	**Quarterly Resumed:** NA	

SUMMARY OF 2002 ACTIVITIES

MW-1: Quarterly groundwater sampling and water level monitoring was performed during 2002.

MW-2: Quarterly water level monitoring was performed during 2002.

MW-3: Quarterly water level monitoring was performed during 2002.

Site-Wide Activities: Per recommendations made in the 2001 Annual Report, the groundwater flow direction at this site was evaluated. This evaluation included review of groundwater and top of casing elevations since 2000, a review of relative groundwater elevation changes over time, and a review of local topography.

SUMMARY TABLES AND GRAPHS

- Analytical data are summarized in Table 1 and are presented graphically in Figure 5.
- Laboratory reports are presented in Attachment 1.
- Field documentation are presented in Attachment 2.

SITE MAP

Site maps are attached as Figures 1 though 4.

GEOLOGIC LOGS AND WELL COMPLETION DIAGRAMS

No subsurface activities were performed at this site during 2002.

DISPOSITION OF GENERATED WASTES

No waste was generated at this site during 2002.

Lat 3B-39 Line Drip
Meter Code: LD146

ISOCONCENTRATION MAPS

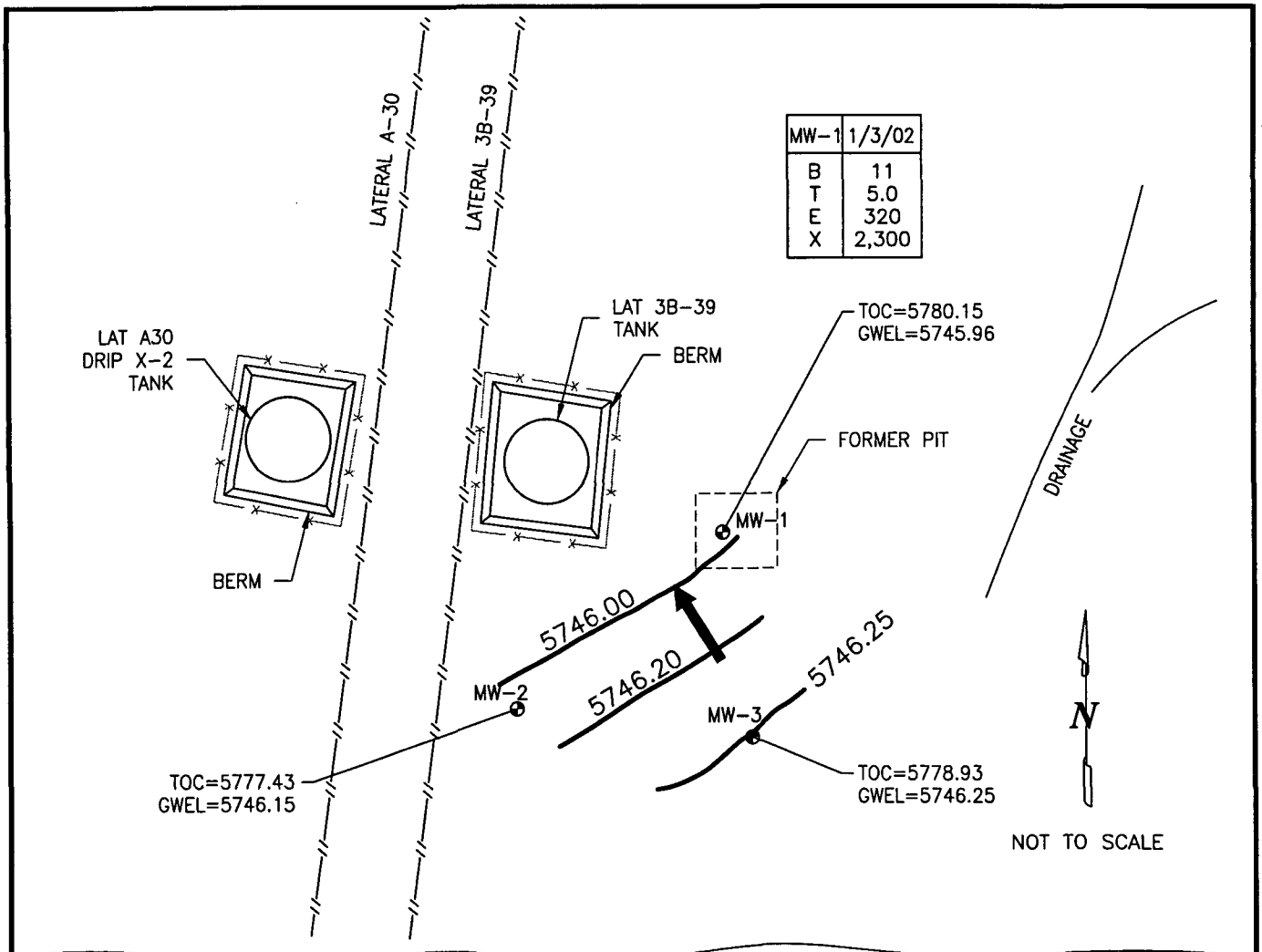
No isoconcentration maps were prepared for this site, however, the attached site maps present the potentiometric surface and analytical data collected during 2002.

CONCLUSIONS

- Potentiometric surface data collected during 2002 indicates that the groundwater flow direction at this site trends to the northwest, which is consistent with flow directions presented in both the 2000 and 2001 Annual Reports. However, the groundwater gradient across this site is extremely flat (approximately 0.20 feet) and local topography suggests that the shallow groundwater would likely be flowing toward the unnamed wash located south of the monitoring well network.
- Benzene concentrations in MW-1 continued to remain near 10 µg/l.
- Xylene concentrations in MW-1 have dramatically reduced from approximately 5,000 µg/l during 2001 to approximately 1,050 µg/l in October 2002.

RECOMMENDATIONS

- EPFS recommends that the monitoring network at this site be re-surveyed to ensure that the groundwater elevation data reflects actual site conditions.
- EPFS will continue quarterly groundwater sampling at MW-1 until closure criteria are achieved.
- Because historical groundwater sampling data have indicated that BTEX concentrations at MW-2 and MW-3 are below closure standards, EPFS recommends that these wells not be sampled until closure samples are scheduled for collection.



LEGEND

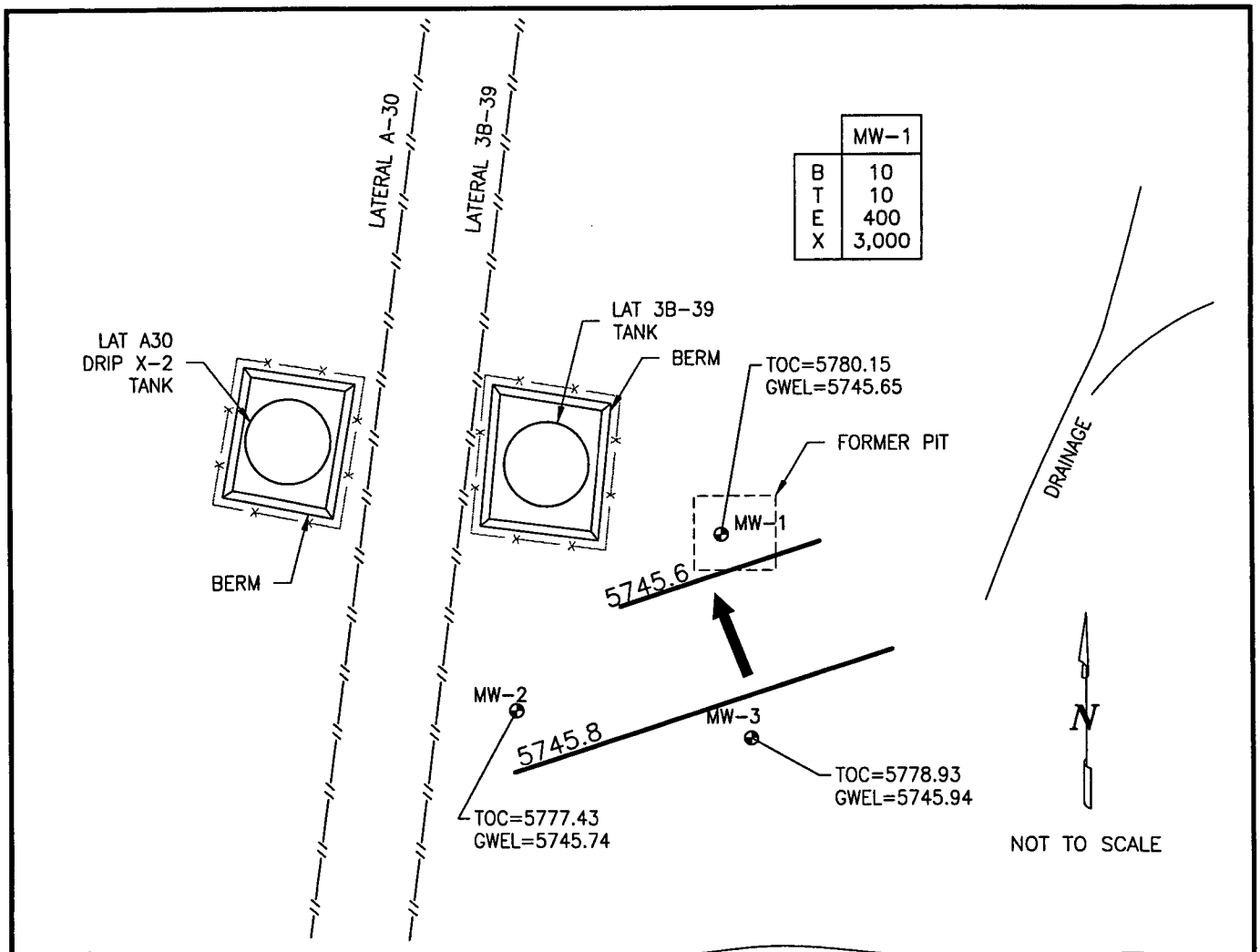
MW-1	Approximate Monitoring Well Location and Number	5746	Potentiometric Surface (Approximate & Assumed Where Dashed)
x x	Fence Line		
// //	Pipe Line	→	Direction of Groundwater Flow (Estimated)
B	Benzene (µg/L)		
T	Toluene (µg/L)	GWEL	Groundwater Elevation (FT Above Mean Sea Level Unless Noted Otherwise)
E	Ethylbenzene (µg/L)		
X	Total Xylenes (µg/L)	TOC	Top of Casing

lat3b39_02.dwg

LATERAL 3B-39, LD146
JANUARY, 2002

GROUNDWATER SITES
EL PASO FIELD SERVICES

FIGURE 1



LEGEND

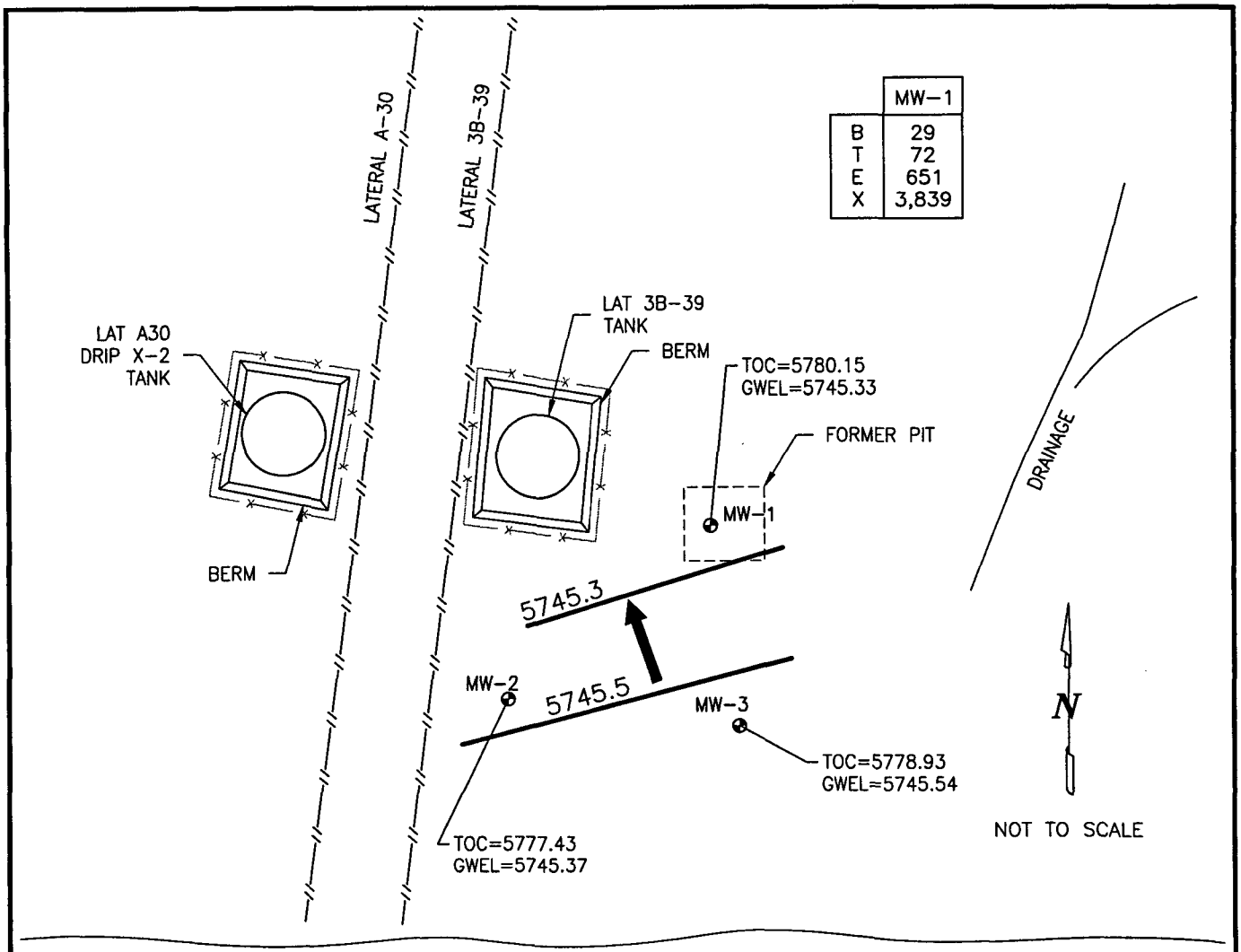
MW-1	Approximate Monitoring Well Location and Number	5746	Potentiometric Surface (Approximate & Assumed Where Dashed)
x x	Fence Line	→	Direction of Groundwater Flow (Estimated)
// //	Pipe Line	GWEL	Groundwater Elevation (FT Above Mean Sea Level Unless Noted Otherwise)
B	Benzene (µg/L)	TOC	Top of Casing
T	Toluene (µg/L)		
E	Ethylbenzene (µg/L)		
X	Total Xylenes (µg/L)		

lat3b39_02.dwg

LATERAL 3B-39, LD146
APRIL, 2002

GROUNDWATER SITES
EL PASO FIELD SERVICES

FIGURE 2



LEGEND

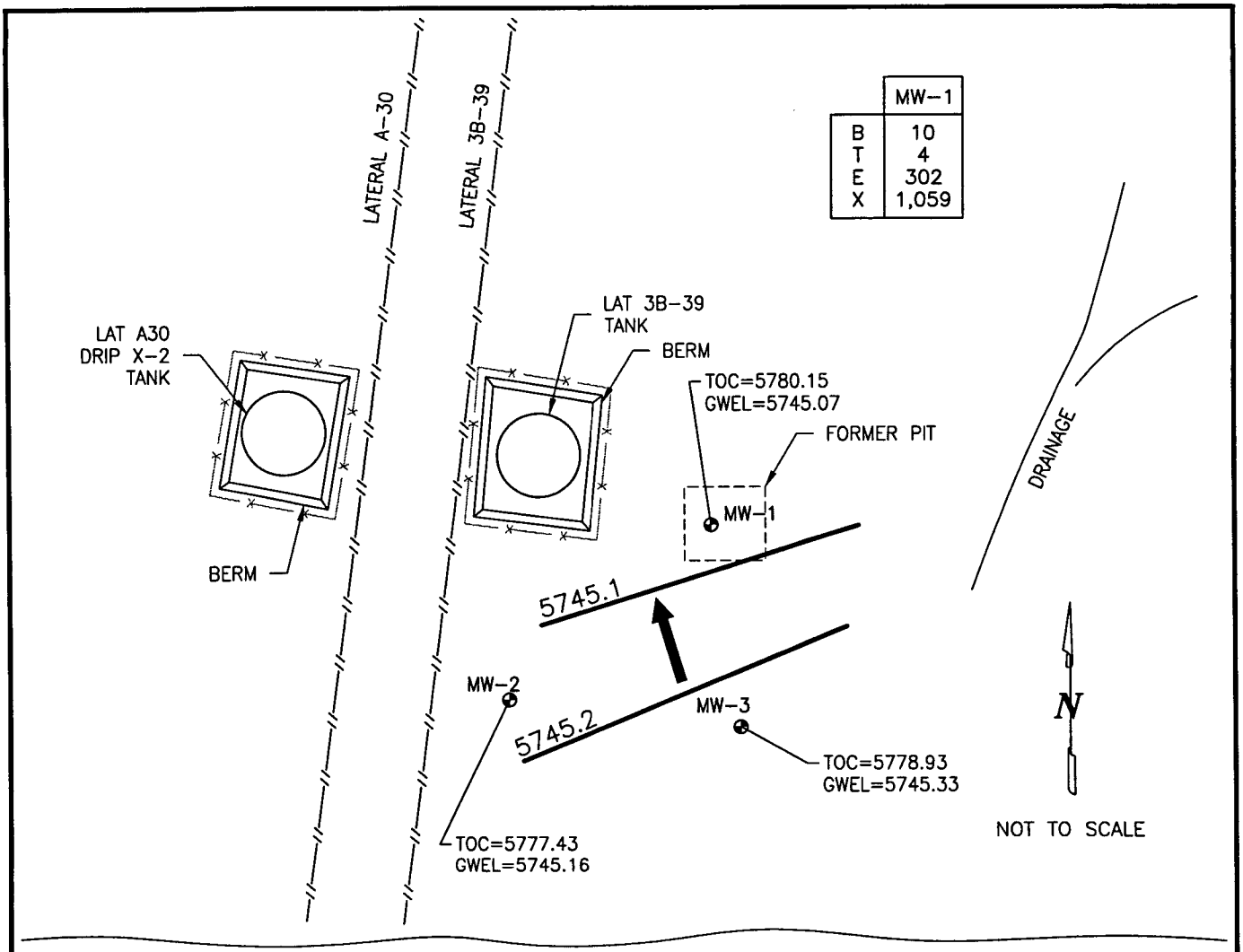
MW-1	Approximate Monitoring Well Location and Number	5746	Potentiometric Surface (Approximate & Assumed Where Dashed)
—x—x—	Fence Line	➡	Direction of Groundwater Flow (Estimated)
—//—//—	Pipe Line	GWEL	Groundwater Elevation (FT Above Mean Sea Level Unless Noted Otherwise)
B	Benzene (µg/L)	TOC	Top of Casing
T	Toluene (µg/L)		
E	Ethylbenzene (µg/L)		
X	Total Xylenes (µg/L)		

lat3b39_02.dwg

LATERAL 3B-39, LD146
JULY, 2002

GROUNDWATER SITES
EL PASO FIELD SERVICES

FIGURE 3



LEGEND

MW-1	Approximate Monitoring Well Location and Number	5746	Potentiometric Surface (Approximate & Assumed Where Dashed)
—x—x—	Fence Line	→	Direction of Groundwater Flow (Estimated)
—//—//—	Pipe Line	GWEL	Groundwater Elevation (FT Above Mean Sea Level Unless Noted Otherwise)
B	Benzene (µg/L)	TOC	Top of Casing
T	Toluene (µg/L)		
E	Ethylbenzene (µg/L)		
X	Total Xylenes (µg/L)		

lat3b39_02.dwg

LATERAL 3B-39, LD146
OCTOBER, 2002

GROUNDWATER SITES
EL PASO FIELD SERVICES

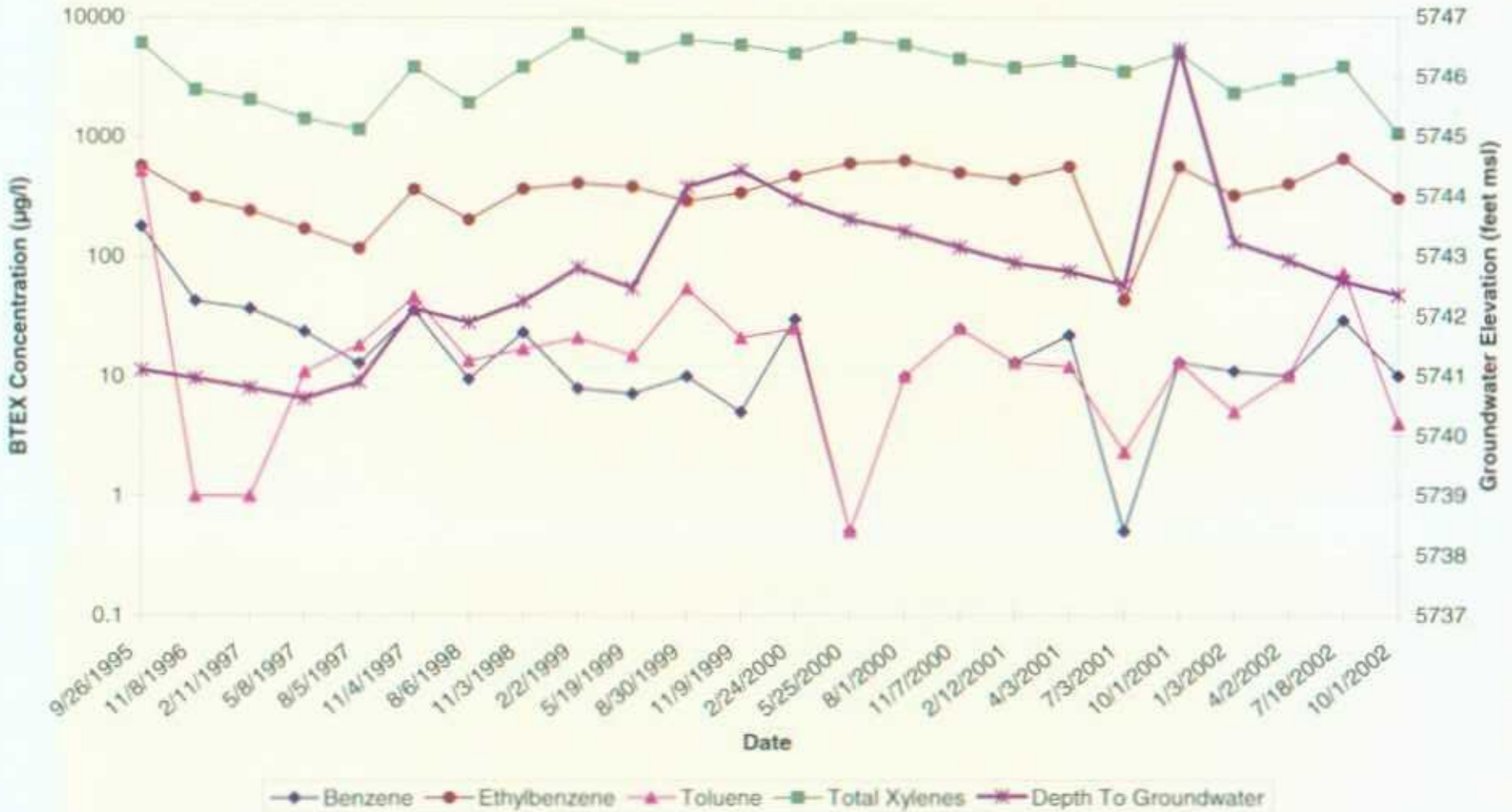
FIGURE 4

TABLE 1

SUMMARY OF BTEX COMPOUNDS IN GROUNDWATER
LAT 3B-39 (METER #LD146)

Sample Identification	Sample Date	MW Identification	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	m,p-Xylene (µg/l)	o-Xylene (µg/l)	Total Xylenes (µg/l)
146-0201-MW1	03-Jan-2002	1	11	<5.00	320	NA	NA	2300
146-0204-MW1	02-Apr-2002	1	<10	<10	400	NA	NA	3000
02-3933-3	18-Jul-2002	1	29	72	651	3630	209	3839
02-5228-2	01-Oct-2002	1	10	4	302	1040	19	1059

Figure 5
BTEX Concentration and Groundwater Elevation vs. Time
Lat 3B-39 (Meter #LD146)
MW-1



ATTACHMENT 1

LABORATORY REPORTS

DATA VALIDATION WORKSHEET

Analytical Method/Analytes: SW-846 8021B (BTEX) **Sample Collection Date(s):** 10/01/02

Laboratory: APCL **MWH Job Number:** EPC-SJRB (Ground Water)

Batch Identification: 02-05228 **Matrix:** Water

QC Identification[a]: _____ **Page:** 1 of 2

Validation Complete: Brian Buttars 10-22-02 (Date/Signature)

Site ID	Sample ID	Lab. ID	Hits (Y/N)	Quals.	Comments
GW	Coldiron Com	02-05228-01	Y	B B	Ethylbenzene @ 32.1 µg/l m/p-Xylene @ 134 µg/l
GW	Lat 3B 39	02-05228-02	Y	B B	Ethylbenzene @ 302 µg/l m/p-Xylene @ 1,040 µg/l
QC	TB02100101	02-05228-03	Y		Ethylbenzene @ 0.9 µg/l m/p-Xylene @ 1T µg/l

DATA VALIDATION WORKSHEET

Analytical Method: SW-846 8021B (BTEX) **MWH Job Number:** EPC-SJRB (Ground Water)

Laboratory: APCL **Batch Identification:** 02-05228

Validation Criteria								
Sample ID	**Coldiron Com**	**Lat 3B 39**	**TB021001 01**					
Lab ID	**02-05228-01**	**02-05228-02**	**02-05228-03**					
Hardcopy vs. Chain-of-Custody	A	A	A					
Holding Time	A	A	A					
Analyte List	A	A	A					
Reporting Limits	A	A	A					
Method Blank	A	A	A					
Trip Blank	A'	A'	A'					
Equipment Rinseate Blanks	N/A	N/A	N/A					
Field Duplicate/Replicate	N/A	N/A	N/A					
Initial Calibration	N	N	N					
Initial Calibration Verification (ICV)	N	N	N					
Continuing Calibration Verification (CCV)	A	A	A					
Laboratory Control Sample (LCS)	A	A	A					
Laboratory Control Sample Duplicate (LCSD)	N	N	N					
Matrix Spike/Matrix Spike Dup. (MS/MSD)	N/A	N/A	N/A					
Surrogate Spike Recovery	A	A	A					
Retention Time Window	N	N	N					
Injection Time(s)	N	N	N					
EDD vs. Hardcopy	N	N	N					
EDD vs. Chain of Custody	N	N	N					

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method or sample
N/R indicates data not available for review

NOTES:

1) The following analytes were detected in the trip blank:
   a) Ethylbenzene @ 0.9 µg/L, qualify all sample concentrations less than or equal to 4.5 µg/L with a "UB" flag and all sample concentrations greater than 4.5 µg/l with a "B" flag.
   b) m/p-Xylene @ 1T µg/L, qualify all sample concentrations less than or equal to 5.0 µg/L with a "UB" flag and all sample concentrations greater than 5.0 µg/l with a "B" flag.

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Submitted to:
Montgomery Watson Harza
Attention: Brian Buttars
10619 South Jordan Gateway
Salt Lake City UT 84095
Tel: (801)617-3200 Fax: (801)617-4200

Service ID #: 801-025228
Collected by: Ashley Lowe
Collected on: 10/01/02

Received: 10/02/02
Extracted: N/A
Tested: 10/04/02
Reported: 10/08/02

Sample Description: Water
Project Description: 220013 San Juan River Basin

Analysis of Water Samples

Component Analyzed	Method	Unit	PQL	Analysis Result GW Coldiron Com 02-05228-1	GW Lat 3B 39 02-05228-2	TB02100101 02-05228-3
BTXE						
Dilution Factor				1	5	1
BENZENE	8021B	µg/L	0.5	22.4	10	<0.5
ETHYLBENZENE	8021B	µg/L	0.5	32.1	302	0.9
TOLUENE	8021B	µg/L	0.5	2.7	4	<0.5
O-XYLENE	8021B	µg/L	0.5	48.2	19	<0.5
M,P-XYLENE	8021B	µg/L	1	134	1,040	1J

PQL: Practical Quantitation Limit. MDL: Method Detection Limit. CRDL: Contract Required Detection Limit
N.D.: Not Detected or less than the practical quantitation limit. "-": Analysis is not required.
J: Reported between PQL and MDL.
Listed Dilution Factors (DF) are relative to the method default DF. All unlisted DFs are 1.0

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

CHAIN OF CUSTODY RECORD/LAB WORK REQUEST

LABORATORY APCL
Contract El Paso Corp., San Jaun River Basin

Chain of Custody ID 021001AL01
Page 1 of 1
Air Bill No. 836557901544

MWH
Phone (801) 617-3200 FAX (801) 617-4200
MWH Contact Brian Buttars
Project San Juan River Basin
Project Number 220013
Date Due 21 Days
Sampler's Name Ashley Lowe
(print clearly)

Location ID	Sample ID	Depth Interval (ft)	Date Collected	Time Collected	Matrix [a]	Sampling Technique [b]	ANALYSES REQUESTED: BTEX SW-846 8021B	Alkalinity SM 2320B	TDS USEPA 160.1	NM WQCC Metals SW-846 6010B & 7470A	Cations SW-846 6010B	Anions USEPA 300.0	Nitrate USEPA 300.0	Nitrite USEPA 300.0				
GW Coldiron Com	MW-1		10-01-02	9:29	WG	B	✓											
GW Lat 3B 39	MW-1		10-01-02	12:35	WG	B	✓											
TB021001 01			10-01-02				✓											

5228

[a] **Matrix:**
SO – Soil
WS – Surface Water
WG – Ground Water
AA – Air
WQ – Trip Blank/ Equipment Blanks
WW – Wastewater

[b] **Sampling Technique:**
Composite=C
Grab=G
Hand Auger=HA
Submersible Pump=SP
Bladder Pump=BP
Bailer=B
Wellhead Faucet=WF
Hydropunch=HP

Location IDs:
Groundwater Sites=GW
Bisti=BI
Jaquez=JA
North Flare Pit=NF
South Flare Pit=SF
San Juan River Plant=SJ

Relinquished by/Affiliation	Received by/Affiliation	Date	Time
Ashley Lowe/AESE	APCL 10/2/02 1000	10-01-02	15:00

LABORATORY USE ONLY

SAMPLES WERE:
1 Shipped or hand delivered
Notes:
2 Ambient or Chilled
Notes:
3 Temperature _____
4 Received Broken/Leaking (Improperly Sealed)
Y N
Notes:
5 Properly Preserved
Y N
Notes:
6 Received Within Holding Times
Y N
Notes:

COC Tape Was:
1 Present on Outer Package
Y N NA
2 Unbroken on Outer Package
Y N NA
3 Present on Sample
Y N NA
4 Unbroken on Sample
Y N NA
Notes:

Discrepancies Between Sample Labels and COC Record?
Y N
Notes:

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

APCL QA/QC Report

Submitted to:
Montgomery Watson Harza
Attention: Brian Buttars
10619 South Jordan Gateway
Salt Lake City, UT 84095
Tel: (801)617-3200 Fax: (801)617-4200

Service ID #: 801-025228
Collected by: Ashley Lowe
Collected on: 10/01/02
Sample description:
Water
Project: San Juan River Basin /220013

Received: 10/02/02
Tested: 10/04/02
Reported: 10/09/02

Analysis of Water

801-025228QC

Component Name	Analysis Batch #	CCV (μg/L)	CCV %Rec	M-Blank	Conc. Unit	SP Level	LCS %Rec	MS %Rec	MSD %Rec	MS/MSD %RPD	Control Limit %Rec	Control Limit %Diff
BTXE												
Benzene	02G4108	100	100	N.D.	μg/L	18.0	90	91	88	4	68-130	31
Toluene	02G4108	100	100	N.D.	μg/L	70.0	94	98	94	5	66-133	33
Ethylbenzene	02G4108	100	104	N.D.	μg/L	18.0	99	99	95	4	65-134	35
m/p-Xylene	02G4108	200	97	N.D.	μg/L	70.0	95	99	95	4	65-134	35
o-Xylene	02G4108	100	98	N.D.	μg/L	25.0	95	101	96	5	65-134	35

Notation:

ICV – Initial Calibration Verification
CCV – Continuation Calibration Verification
LCS – Lab Control Spike
MS – Matrix Spike
MSD – Matrix Spike Duplicate
ICS – Interference Check Standard
MD – Matrix Duplicate
N.D. – Not detected or less than PQL
CCB – Continuation Calibration Blank
M-blank – Method Blank
SP Level – Spike Level
%Rec – Recovery Percent
%RPD – Relative Percent Differences
%Diff – Control Limit for %RPD
ICP-SD – ICP Serial Dilution
N.A. – Not Applicable

Respectfully submitted,

Regina Kirakozova,
Associate QA/QC Director
Applied P & Ch Laboratory

FORM-2A

Applied P & Ch Laboratory

Surrogate Recovery Summary for Method 8021B

Client Name:	Montgomery Watson Harza	Contract No:		Lab Code:	APCL
Case No:		SAS No:		SDG Number:	025228
Project ID:	San Juan River Basin	Project No:	220013	Sample Matrix:	Water
		Batch No:	02G4108		

#	Client Sample No	Lab Sample ID	S1 % #	TOT OUT
1		02G4108-LCS-01	82	0
2		02G4108-LSD-01	80	0
3		02G4108-MB-02	82	0
4	TB02100101	02-5228-3	87	0
5	GW COLDIRON COM	02-5228-1	113	0
6	GW LAT 3B 39	02-5228-2	103	0
7	EFF02OCT02	02-5254-2MS	86	0
8	EFF02OCT02	02-5254-2MSD	86	0
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

	QC Control Limit
S1 = 4-BROMO-FLUOROBENZENE (PID)	65-134

Column to be used to flag recovery values:

* - Values outside of contract required QC Limits D - Surrogate diluted out I - Matrix Interference

Applied P & Ch Laboratory
13760 Magnolia Ave., Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

Sample Receiving Checklist

APCL ServiceID: 5228 Client Name/Project: San Juan River

1. Sample Arrival

Date/Time Received 10/2/02 1000 Date/Time Opened 10/2/02 1000 By (name): ERIC

Custody Transfer: ☐ Client ☐ Golden State ☐ UPS ☐ US Mail ☒ FedEx ☐ APCL Empl: _____

2. Chain-of-Custody (CoC)

☒ With Samples? ☐ Faxed? ☐ Client has Copy? ☒ Signed, dated? By: Ashley Lane
☒ Project ID? ☒ Analyses Clear? ☐ Hold Samples? #on Hold _____ # Received 3
☒ CoC/Docs Zip-Locked under lid? ☐ Compos.#: _ ☒ #Samples OK? _____
☐ Discrepancies? ☐ Client notified? ☐ Response (attach docs): _____

3. Shipping Container/Cooler

☒ Cooler Used? # of 1 Cooled by: ☒ Ice ☐ Blue Ice ☐ Dry Ice ☐ None
Temp °C 4.2 _____ _____ _____ _____ _____
(Cooler temperature measured from temp blank if present, otherwise measured from the cooler).
Cooler Custody Seal? ☐ Absent ☒ Intact ☐ Tampered?

4. Sample Preservation

☐ pH <2 ☐ pH >12
If Not, pH = _____ Preserved by: ☐ Client ☐ APCL ☐ Third Party _____

5. Holding-time Requirements

☐ pH 24hr ☐ BACT 6/24hr ☐ Cr^{VI} 24hr ☐ NO_3^- 48hr ☐ BOD 48hr
☐ Cl_2 ASAP ☐ Turbidity 48hr ☐ DO ASAP ☐ Fe(II) ASAP
☐ HT Expired? ☐ Client notified?

6. Sample Container Condition

☐ Intact? ☐ Broken? ☐ Documented? Number: ____
Type: ☐ plastic ☒ glass ☐ Tube: brass/SS ☐ Tedlar Bag
☒ Quantity OK? ☐ Leaking? ☐ Anomaly?
☒ Caps tight? ☐ Air Bubbles? ☐ Anomaly?
Labels: ☒ Unique ID? ☐ Date/Time ☐ Preserved?

7. Turn Around Time

☒ RUSH TAT: 5 ☐ Std (7-10 days) ☐ Not Marked

8. Sample Matrix

☐ Drinking H_2O ☐ Other Liq ☐ Soil ☐ Wipe ☐ Polymer ☐ Air ☐ Other: _____
☒ Ground H_2O ☐ Sludge ☐ Filter ☐ Oil/Petro ☐ Paint ☐ W. Water ☐ Extract ☐ Unknown

9. Pre-Login Check List Completed & OK?

☒ ALL OK? (if not, attach docs) ☐ Client Contact? (Name:_____)Date/Time:_____

Received/Checked by: _____ Date: 2 Oct 2002 Time: 8:55 a.m.

*HT: Samples must be analyzed for results to reflect total concentrations. Results generated outside required of holding times are considered minimal values and may be used to define waste as hazardous but not as non-hazardous.

DocumentFile: [eal.taxfiles]smprclst.rev.

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

Sample Login: Check List

02-05228 (0984_ 974) (2721900_ 974)

10/02/02

Part 1: General Information

☐	Company Information	Name:	*Montgomery Watson Harza*
		Address:	*10619 South Jordan Gateway ,Salt Lake City ,UT 84095*
☐	Project Information	Project Description:	*San Juan River Basin*
			Hill AFB
		Project #:	*220013*
☐	Billing Information	P.O. #:	
		Bill Address:	*10619 South Jordan Gateway ,Salt Lake City ,UT 84095*
		Lab Project ID:	*1999-0746*
		Client Database #:	*04*
☐	Receiving Information	Who Received Sample?	*Eric Wendland*
		Receiving Date/Time:	*10/02/02 1000*
		COC No.	
☐	Shipping Information	Shipping Company	*Express*
		Packing Information:	*Cooler/Ice Chester*
		Cooler Temperature:	*4.2 °C*
☐	Container Information	Container Provider:	*Client*
☐	Sampling Information	Sampling Person:	
		Sampling Company:	*Client*
☐	Turn-Around-Time Option:		*Rush 5 working day(s)*
☐	QC Option:		*QC and Surro. Rep.*
☐	Disposal Option:		*Not specify*

Part 2: Sample Information

Seq. #	Sample ID (on COC)	Sample Sub-ID	APCL Sample ID	Matrix	Cont-tainer	Preser-vative	Vol, ml Am. g	# of Replica	Condition G, L, B	Collected mmddyy	Hold ?	Composite Group	TAT Days	
1	GW Coldiron Com	VOA	02-05228-1	W	V	C	40	2	G	100102	N	0	7	☐
2	GW Lat 3B 39	VOA	02-05228-2	W	V	C	40	2	G	100102	N	0	7	☐
3	TB02100101	VOA	02-05228-3	W	V	C	40	2	G	100102	N	0	7	☐

Part 3: Analysis Information

Test Items: ☐ ~~8021B~~ **BTXE**

Seq. #	Client"s Sample ID (as given on COC)	Sample Sub-ID	APCL Sample ID	Matrix	BTXE	
1	GW Coldiron Com	VOA	02-05228-1	W	X	☐
2	GW Lat 3B 39	VOA	02-05228-2	W	X	☐
3	TB02100101	VOA	02-05228-3	W	X	☐

Login By En-Yu Paul Kou

Check By DY

CHAIN OF CUSTODY RECORD/LAB WORK REQUEST

LABORATORY APCL
Contract El Paso Corp., San Juan River Basin

Chain of Custody ID 021001AL01
Page 1 of 1
Air Bill No. 836557901544

MWH
Phone (801) 617-3200 FAX (801) 617-4200
MWH Contact Brian Buttars

Project San Juan River Basin
Project Number 220013
Date Due 21 Days
Sampler's Name Ashley Lowe
(print clearly)

Location ID	Sample ID	Depth Interval (ft)	Date Collected	Time Collected	Matrix [a]	Sampling Technique [b]	ANALYSES REQUESTED: BTEX SW-846 8021B	Alkalinity SM 2320B	TDS USEPA 160.1	NM WQCC Metals SW-846 6010B & 7470A	Cations SW-846 6010B	Anions USEPA 300.0	Nitrate USEPA 300.0	Nitrite USEPA 300.0				
GW Coldiron Com	MW-1		10-01-02	9:29	WG	B	✓											
GW Lat 3B 39	MW-1		10-01-02	12:35	WG	B	✓											
TB021001 01			10-01-02				✓											

5228

[a] Matrix:
SO – Soil
WS – Surface Water
WG – Ground Water
AA – Air
WQ – Trip Blank/ Equipment Blanks
WW – Wastewater

[b] Sampling Technique:
Composite=C
Grab=G
Hand Auger=HA
Submersible Pump=SP
Bladder Pump=BP
Bailer=B
Wellhead Faucet=WF
Hydropunch=HP

Location IDs:
Groundwater Sites=GW
Bisti=BI
Jaquez=JA
North Flare Pit=NF
South Flare Pit=SF
San Juan River Plant=SJ

Relinquished by/Affiliation	Received by/Affiliation	Date	Time
Ashley Lowe/AESE	APCL 10/2/02 1000	10-01-02	15:00

LABORATORY USE ONLY

SAMPLES WERE:

1 Shipped or hand delivered
Notes:

2 Ambient or Chilled
Notes:

3 Temperature _____

4 Received Broken/Leaking (Improperly Sealed)
Y N
Notes:

5 Properly Preserved
Y N
Notes:

6 Received Within Holding Times
Y N
Notes:

COC Tape Was:

1 Present on Outer Package
Y N NA

2 Unbroken on Outer Package
Y N NA

3 Present on Sample
Y N NA

4 Unbroken on Sample
Y N NA
Notes:

Discrepancies Between Sample Labels and COC Record?
Y N
Notes:

FedEx Express USA Airbill 836557901544

0200 Sender's Copy

1 From
Date 10-01-02 Sender's FedEx Account Number 236245993
Sender's Name Ashley Lowe Phone (505) 566-9116
Company AESE
Address 906 San Juan Blvd, Ste D
City Farmington State NM ZIP 87401

2 Your Internal Billing Reference

3 To
Recipient's Name Eric Wendland Phone (909) 590-1828
Company APCL
Address 13760 Magnolia Ave
Address
City Chino State CA ZIP 91710

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☐ FedEx 2Day ☐ FedEx Express Saver

4b Express Freight Service
Packages over 150 lbs.
☐ FedEx 1Day Freight* ☐ FedEx 2Day Freight ☐ FedEx 3Day Freight
* Call for Confirmation:

5 Packaging
☐ FedEx Envelope* ☐ FedEx Pak* ☑ Other
* Declared value limit $500

6 Special Handling
SATURDAY Delivery
NOT Available for FedEx First Overnight
☐ HOLD Weekday at FedEx Location
NOT Available for FedEx First Overnight
☐ HOLD Saturday at FedEx location
Only available for FedEx Priority Overnight and FedEx 2Day
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 ☐ Dry Ice Dry Ice, 9, UN 1845 x kg
Cargo Aircraft Only

7 Payment Bill to:
☐ Sender ☑ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check
Credit Card No. Exp. Date

Total Packages: 1 Total Weight: 10 lbs Total Declared Value: $ .00
FedEx Use Only

8 Release Signature
By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify us from any resulting claims.
446

RETAIN THIS COPY FOR YOUR RECORDS.

DATA VALIDATION WORKSHEET

Analytical Method/Analytes: SW-846 8021B (BTEX) **Sample Collection Date(s):** 07/18/02

Laboratory: APCL **MWH Job Number:** EPC-SJRB (Jaquez & Groundwater)

Batch Identification: 02-03933 **Matrix:** Water

QC Identification[a]: **Page:** 1 of 2

Validation Complete: Bjorn Buttars 8-8-02
(Date/Signature)

Site ID	Sample ID	Lab. ID	Hits (Y/N)	Quals.	Comments
JZ	Jaquez Downstream	02-03933-01	Y	UB UB	Ethylbenzene @ 0.7 µg/L m/p-Xylene @ 0.9F µg/L
JZ	Jaquez Upstream	02-03933-02	Y	UB UB UB	Ethylbenzene @ 1 µg/L o-Xylene @ 0.3F µg/L m/p-Xylene @ 1 µg/L
GW	Lat 3B-39 MW-1	02-03933-03	Y	B B B	Ethylbenzene @ 651 µg/L o-Xylene @ 209 µg/L m/p-Xylene @ 3,630 µg/L
QC	Trip Blank	02-03933-04	Y		

DATA VALIDATION WORKSHEET

Analytical Method: SW-846 8021B (BTEX) **MWH Job Number:** EPC-SJRB (Jaquez & Groundwater)

Laboratory: APCL **Batch Identification:** 02-03933

Validation Criteria								
Sample ID	**Jaquez Down stream**	**Jaquez Upstream**	**Lat 3B-39 MW-1**					
Lab ID	**02-03933-01**	**02-03933-02**	**02-03933-03**					
Hardcopy vs. Chain-of-Custody	A	A	A					
Holding Time	A	A	A					
Analyte List	A	A	A					
Reporting Limits	A	A	A					
Method Blank	A	A	A					
Trip Blank	A'	A'	A'					
Equipment Rinseate Blanks	N/A	N/A	N/A					
Field Duplicate/Replicate	N/A	N/A	N/A					
Surrogate Spike Recovery	A	A	A					
Laboratory Control Sample (LCS)	A	A	A					
Laboratory Control Sample Duplicate (LCSD)	N	N	N					
Matrix Spike/Matrix Spike Dup. (MS/MSD)	A	N/A	A					
Initial Calibration	N	N	N					
Initial Calibration Verification (ICV)	N	N	N					
Continuing Calibration Verification (CCV)	A	A	A					
Retention Time Window	N	N	N					
Injection Time(s)	N	N	N					
EDD vs. Hardcopy	N	N	N					
EDD vs. Chain of Custody	N	N	N					

(a) List QC batch identification if different than Batch ID
A indicates validation criteria were met
A/L indicates validation criteria met based upon Laboratory's QC Summary Form
X indicates validation criteria were not met
N indicates data review were not a project specific requirement
N/A indicates criteria are not applicable for the specified analytical method or sample
N/R indicates data not available for review

NOTES:

1) The following analytes were detected in the trip blank:
   a) Ethylbenzene @ 0.8 µg/L, qualify all sample concentrations less than or equal to 4.0 µg/L with a "UB" flag and all sample concentrations greater than 4.0 µg/l with a "B" flag.
   b) o-Xylene @ 0.6 µg/L, qualify all sample concentrations less than or equal to 3.0 µg/L with a "UB" flag and all sample concentrations greater than 3.0 µg/l with a "B" flag.
   c) m/p-Xylene @ 0.8F µg/L, qualify all sample concentrations less than or equal to 4.0 µg/L with a "UB" flag and all sample concentrations greater than 4.0 µg/l with a "B" flag.

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Submitted to:
Montgomery Watson Harza
Attention: Brian Buttars
10619 South Jordan Gateway
Salt Lake City UT 84095
Tel: (801)617-3200 Fax: (801)617-4200

Service ID #: 801-023933
Collected by:
Collected on: 07/18/02

Received: 07/19/02
Extracted: N/A
Tested: 07/19-26/02
Reported: 07/29/02

Sample Description: Water
Project Description: 220013 San Juan River Basin

Analysis of Water Samples

Component Analyzed	Method	Unit	PQL	Analysis Result: Jaquez Downstream 02-03933-1	Analysis Result: Jaquez Upstream 02-03933-2
BTXE					
Dilution Factor				1	1
BENZENE	8021B	µg/L	0.5	<0.5	<0.5
ETHYLBENZENE	8021B	µg/L	0.5	0.7	1
TOLUENE	8021B	µg/L	0.5	0.4J	0.6
O-XYLENE	8021B	µg/L	0.5	<0.5	0.3J
M,P-XYLENE	8021B	µg/L	1	0.9J	1

Component Analyzed	Method	Unit	PQL	Analysis Result: Lat 3B-39 MW-1 02-03933-3	Analysis Result: Trip Blank 02-03933-4
BTXE					
Dilution Factor				20	1
BENZENE	8021B	µg/L	0.5	29	<0.5
ETHYLBENZENE	8021B	µg/L	0.5	651	0.8
TOLUENE	8021B	µg/L	0.5	72	<0.5
O-XYLENE	8021B	µg/L	0.5	209	0.6
M,P-XYLENE	8021B	µg/L	1	3,630	0.8J

PQL: Practical Quantitation Limit. MDL: Method Detection Limit. CRDL: Contract Required Detection Limit
N.D.: Not Detected or less than the practical quantitation limit. "-": Analysis is not required.
J: Reported between PQL and MDL.
Listed Dilution Factors (DF) are relative to the method default DF. All unlisted DFs are 1.0

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

APCL QA/QC Report

Submitted to:
Montgomery Watson Harza
Attention: Brian Buttars
10619 South Jordan Gateway
Salt Lake City, UT 84095
Tel: (801)617-3200 Fax: (801)617-4200

Service ID #: 801-023933
Collected by:
Collected on: 07/18/02
Sample description:
Water
Project: San Juan River Basin /220013

Received: 07/19/02
Tested: 07/19-26/02
Reported: 07/31/02

Analysis of Water

801-023933QC

Component Name	Analysis Batch #	CCV (µg/L)	CCV %Rec	M-Blank	Conc. Unit	SP Level	LCS %Rec	MS %Rec	MSD %Rec	MS/MSD %RPD	Control Limit %Rec	Control Limit %Diff
BTXE												
Benzene	02G3209	100	97	N.D.	µg/L	18.0	88	88	87	1	68-130	31
Toluene	02G3209	100	98	N.D.	µg/L	70.0	96	95	93	2	66-133	33
Ethylbenzene	02G3209	100	101	N.D.	µg/L	18.0	103	97	96	1	65-134	35
m/p-Xylene	02G3209	200	93	N.D.	µg/L	70.0	101	97	94	3	65-134	35
o-Xylene	02G3209	100	96	N.D.	µg/L	25.0	100	98	95	3	65-134	35

Component Name	Analysis Batch #	CCV (µg/L)	CCV %Rec	M-Blank	Conc. Unit	SP Level	LCS %Rec	MS %Rec	MSD %Rec	MS/MSD %RPD	Control Limit %Rec	Control Limit %Diff
BTXE												
Benzene	02G3233	100	98	N.D.	µg/L	360	82	79	80	2	68-130	31
Toluene	02G3233	100	99	N.D.	µg/L	1400	94	92	94	2	66-133	33
Ethylbenzene	02G3233	100	101	N.D.	µg/L	18.0	104	104*	103*	1	82-134	35
m/p-Xylene	02G3233	200	93	N.D.	µg/L	70.0	99	99*	99*	0	73-134	35
o-Xylene	02G3233	100	96	N.D.	µg/L	500	100	95	100	5	65-134	35

Component Name	Analysis Batch #	CCV (µg/L)	CCV %Rec	M-Blank	Conc. Unit	SP Level	LCS %Rec	MS %Rec	MSD %Rec	MS/MSD %RPD	Control Limit %Rec	Control Limit %Diff
BTXE												
Benzene	02G3281	100	96	N.D.	µg/L	18.0	92	93	93	0	68-130	31
Toluene	02G3281	100	98	N.D.	µg/L	70.0	93	95	95	0	66-133	33
Ethylbenzene	02G3281	100	100	N.D.	µg/L	18.0	96	100	100	1	65-134	35
m/p-Xylene	02G3281	200	93	N.D.	µg/L	70.0	93	94	95	1	65-134	35
o-Xylene	02G3281	100	94	N.D.	µg/L	25.0	95	97	98	1	65-134	35

Applied P & Ch Laboratory

13760 Magnolia Ave. Chino CA 91710

Tel: (909) 590-1828 Fax: (909) 590-1498

APCL QA/QC Report

*: LCS/LCSD is used.

Notation:

ICV – Initial Calibration Verification
CCV – Continuation Calibration Verification
LCS – Lab Control Spike
MS – Matrix Spike
MSD – Matrix Spike Duplicate
ICS – Interference Check Standard
MD – Matrix Duplicate
N.D. – Not detected or less than PQL

CCB – Continuation Calibration Blank
M-blank – Method Blank
SP Level – Spike Level
%Rec – Recovery Percent
%RPD – Relative Percent Differences
%Diff – Control Limit for %RPD
ICP-SD – ICP Serial Dilution
N.A. – Not Applicable

Respectfully submitted,

Kevin Xie, Ph. D.,
QA Director
Applied P & Ch Laboratory

FORM-2A

Applied P & Ch Laboratory

Surrogate Recovery Summary for Method 8021B

Client Name:	Montgomery Watson Harza	Contract No:		Lab Code:	APCL
Case No:		SAS No:		SDG Number:	023933
Project ID:	San Juan River Basin	Project No:	220013	Sample Matrix:	Water
		Batch No:	02G3209		

#	Client Sample No	Lab Sample ID	S1 %	S1 #	TOT OUT
1		02G3209-MB-02	90		0
2	JAQUEZ DOWNSTREAM	02-3933-1	91		0
3	JAQUEZ UPSTREAM	02-3933-2	90		0
4		02G3209-LCS-01	90		0
5		02G3209-LSD-01	87		0
6	JAQUEZ DOWNSTREAM	02-3933-1MS	88		0
7	JAQUEZ DOWNSTREAM	02-3933-1MSD	85		0
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

QC Control Limit

S1 = 4-BROMO-FLUOROBENZENE (PID) 65-134

Column to be used to flag recovery values:

* – Values outside of contract required QC Limits D – Surrogate diluted out I – Matrix Interference

FORM-2A

Applied P & Ch Laboratory

Surrogate Recovery Summary for Method 8021B

Client Name:	Montgomery Watson Harza	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	023933
Project ID:	San Juan River Basin	Project No:	220013	Sample Matrix:	Water
		Batch No:	02G3233		

#	Client Sample No	Lab Sample ID	S1 % #	TOT OUT
1		02G3233-MB-02	93	0
2	LAT 3B-39 MW-1	02-3933-3	101	0
3		02G3233-LCS-01	89	0
4		02G3233-LSD-01	89	0
5	LAT 3B-39 MW-1	02-3933-3MS	94	0
6	LAT 3B-39 MW-1	02-3933-3MSD	95	0
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

	QC Control Limit
S1 = 4-BROMO-FLUOROBENZENE (PID)	65-134

Column to be used to flag recovery values:

* – Values outside of contract required QC Limits D – Surrogate diluted out I – Matrix Interference

FORM-2A

Applied P & Ch Laboratory

Surrogate Recovery Summary for Method 8021B

Client Name:	Montgomery Watson Harza	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	023933
Project ID:	San Juan River Basin	Project No:	220013	Sample Matrix:	Water
		Batch No:	02G3281		

#	Client Sample No	Lab Sample ID	S1 % #	TOT OUT
1		02G3281-LCS-01	85	0
2		02G3281-LSD-01	84	0
3		02G3281-MB-01	87	0
4	TRIP BLANK	02-3933-4	90	0
5	EFF24JUL02	02-4018-1MS	85	0
6	EFF24JUL02	02-4018-1MSD	87	0
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

	QC Control Limit
S1 = 4-BROMO-FLUOROBENZENE (PID)	65-134

Column to be used to flag recovery values:

* – Values outside of contract required QC Limits D – Surrogate diluted out I – Matrix Interference

PINNACLE LABORATORIES

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 07/18/02 PAGE: 1 OF 1

PLI Accession #:

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: Ashley Lowe

COMPANY: AESE

ADDRESS: 906 San Juan Blvd, Ste D
Farmington, NM 87401

PHONE: 505-566-9116

FAX: 505-566-9120

BILL TO: Montgomery Watson Harza

COMPANY:

ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.
Jaquez Downstream	07/18/02	8:25	H_2O	
Jaquez Upstream	07/18/02	8:34	H_2O	
Lat 3B-39 MW-1	07/18/02	11:58	H_2O	
Jaquez Effluent	07/18/02	8:45	air	

Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐MTBE ☐TMB ☐PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐ / DBCP ☐	Air - BTEX	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:		Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:		NUMBER OF CONTAINERS
				✓																							
				✓																							
				✓																							
										✓																	
							8021																				

PROJECT INFORMATION

PROJ. NO.: 220013

PROJ. NAME: San Juan River Basin

P.O. NO.:

SHIPPED VIA: FedEx

SAMPLE RECEIPT

NO CONTAINERS	
CUSTODY SEALS	Y / N / NA
RECEIVED INTACT	
BLUE ICE	

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐24hr ☐48hr ☐72hr ☐1 WEEK (NORMAL) ☑

CERTIFICATION REQUIRED ☐NM ☐SDWA ☐OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: Ashley Lowe Time: 13:50	Signature: Time:
Printed Name: Ashley Lowe Date: 07/18/02	Printed Name: Date:
Company: AESE	Company:
See reverse side (Force Majeure)	
RECEIVED BY: 1.	**RECEIVED BY: (LAB) 2.**
Signature: Time: 7/19/02 10:4	Signature: Time:
Printed Name: Paul Kon Date: 7/19/02 10:4	Printed Name: Date:
Company: APCI	Pinnacle Laboratories Inc.

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **204015**
April 23, 2002

AMEC EARTH & ENVIRONMENTAL
2060 AFTON PLACE
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELLY STREET
FARMINGTON, NM 87401

Project Name LAT 3 B 39
Project Number 1517000121

Attention: LISA WINN/SCOTT POPE

On 04/03/02 Pinnacle Laboratories, Inc., (ADHS License No. AZ0592 pending), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

This report is being reissued at the request of the client. Original report was issued on April 19, 2002.

If you have any questions or comments, please do not hesitate to contact us at (505)344-3777.

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: AMEC EARTH & ENVIRONMENTAL	PINNACLE ID	: 204015
PROJECT #	: 1517000121	DATE RECEIVED	: 04/03/02
PROJECT NAME	: LAT 3 B 39	REPORT DATE	: 04/23/02

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
204015 - 01	146-0204-MW1	AQUEOUS	04/02/02

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : AMEC EARTH & ENVIRONMENTAL PINNACLE I.D.: 204015
PROJECT # : 1517000121
PROJECT NAME : LAT 3 B 39

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR	
01	146-0204-MW1	AQUEOUS	04/02/02	NA	04/05/02	20	**D20**

PARAMETER	DET. LIMIT	UNITS	146-0204-MW1
BENZENE	0.5	UG/L	< 10
TOLUENE	0.5	UG/L	< 10
ETHYLBENZENE	0.5	**UG/L**	**400**
TOTAL XYLENES	1.0	**UG/L**	**3000**

SURROGATE:
B[redacted]FLUOROBENZENE (%) 108
SU[redacted]GATE LIMITS (80 - 120)

CHEMIST NOTES:
D20 = This sample was analyzed at a 20X dilution due to matrix interference.

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 204015
BLANK I. D.	: 040502	DATE EXTRACTED	: N/A
CLIENT	: AMEC EARTH & ENVIRONMENTAL	DATE ANALYZED	: 04/05/02
PROJECT #	: 1517000121	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: LAT 3 B 39		

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<1.0
SURROGATE:		
BROMOFLUOROBENZENE (%)		88
SURROGATE LIMITS:	(80 - 120)	

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 204015
BATCH #	: 040502	DATE EXTRACTED	: N/A
CLIENT	: AMEC EARTH & ENVIRONMENTAL	DATE ANALYZED	: 04/05/02
PROJECT #	: 1517000121	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: LAT 3 B 39	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	18.9	95	18.0	90	5	(80 - 120)	20
TOLUENE	<0.5	20.0	19.0	95	18.7	94	2	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	19.5	98	19.2	96	2	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	62.0	103	61.0	102	2	(80 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 4-2-02 PAGE: 1 OF 1

PLI Accession #: 20405

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: LISA Winn

COMPANY: AMEC
ADDRESS: 2060 AFTON Place
Farmington N.M. 87401
PHONE: (505) 327 7928
FAX: (505) 326 5721

BILL TO: SCOTT Pope
COMPANY: El Paso Field Services
ADDRESS: 614 Reilly AVE
Farmington NM. 87401

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐ MTBE ☐ TMB ☐ PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐ / DBCP ☐	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides /PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:		Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:		# CONTAINERS
146-0201-MW1	4-2-02	1002	H_2O	20405					X																						2

PROJECT INFORMATION

PROJ. NO.: 15170000121
PROJ. NAME: EPFS G.W. project
P.O. NO.:
SHIPPED VIA: Greyhound

SAMPLE RECEIPT

NO. CONTAINERS: 2
CUSTODY SEALS: Y / N (NA)
RECEIVED INTACT: Y / N
BLUE ICE / ICE: 5.8°C

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

LAT 3B 39
(LD 146)

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: Christine Mar Time: 1630	Signature: Time:
Printed Name: Christine Mar Date: 4 2 02	Printed Name: Date:
Company: AMEC	Company:
See reverse side (Force Majeure)	
RECEIVED BY: 1.	**RECEIVED BY: (LAB) 2.**
Signature: Time:	Signature: Francine Tanno 0915
Printed Name: Date:	Printed Name: Francine Tanno Date: 4/3/02
Company:	Pinnacle Laboratories Inc.

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **201014**
January 29, 2002

AMEC EARTH & ENVIRONMENTAL
2060 AFTON PLACE
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELLY STREET
FARMINGTON, NM 87401

Project Name LAT 31339
Project Number 1517000121

Attention: LISA WINN/SCOTT POPE

On 01/04/02 Pinnacle Laboratories, Inc., (ADHS License No. AZ0592 pending), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

At the request of the client, this report is being reissued. We apologize for the inconvenience this may have caused. Original report was issued on January 14, 2002.

If you have any questions or comments, please do not hesitate to contact us at (505)344-3777.

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: AMEC EARTH & ENVIRONMENTAL	PINNACLE ID	: 201014
PROJECT #	: 1517000121	DATE RECEIVED	: 01/04/02
PROJECT NAME	: LAT 31339	REPORT DATE	: 01/29/02

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
201014 - 01	146-0201-MW1	AQUEOUS	01/03/02

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

'EST : EPA 8021 MODIFIED
:LIENT : AMEC EARTH & ENVIRONMENTAL PINNACLE I.D.: 201014
'ROJECT # : 1517000121
'ROJECT NAME : LAT 31339

SAMPLE D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR	
)1	146-0201-MW1	AQUEOUS	01/03/02	NA	01/11/02	10	*

PARAMETER	DET. LIMIT	UNITS	146-0201-MW1
BENZENE	0.5	UG/L	**11**
TOLUENE	0.5	UG/L	< 5.0
ETHYLBENZENE	0.5	UG/L	**320**
TOTAL XYLENES	0.5	UG/L	**2300**
SURROGATE:			
BROMOFLUOROBENZENE (%)			119
SURROGATE LIMITS	(80 - 120)		

CHEMIST NOTES:
* **Dilution is due to matrix interference with surrogate.**

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 201014
BLANK I. D.	: 011002B	DATE EXTRACTED	: N/A
CLIENT	: AMEC EARTH & ENVIRONMENTAL	DATE ANALYZED	: 01/10/02
PROJECT #	: 1517000121	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: LAT 31339		

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5
SURROGATE:		
BFB - FLUOROBENZENE (%)		103
SURROGATE LIMITS:	(80 - 120)	

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8021 MODIFIED		
BATCH ID#	: 011002B	PINNACLE I.D.	: 201014
CLIENT	: AMEC EARTH & ENVIRONMENTAL	DATE EXTRACTED	: N/A
PROJECT #	: 1517000121	DATE ANALYZED	: 01/10/02
PROJECT NAME	: LAT 31339	SAMPLE MATRIX	: AQUEOUS
		UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	N/A	20.0	21.0	105	21.0	105	0	(80 - 120)	20
TOLUENE	N/A	20.0	20.8	104	20.6	103	1	(80 - 120)	20
ETHYLBENZENE	N/A	20.0	21.0	105	20.8	104	1	(80 - 120)	20
TOTAL XYLENES	N/A	60.0	63.6	106	62.6	104	2	(80 - 120)	20

CHEMIST NOTES:
N/A

$$\%\ \text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

'EST	: EPA 8021 MODIFIED		
/ISMSD #	: 201020-09	PINNACLE I.D.	: 201014
:LIENT	: AMEC EARTH & ENVIRONMENTAL	DATE EXRACTED	: N/A
?ROJECT #	: 1517000121	DATE ANALYZED	: 01/11/02
?ROJECT NAME	: LAT 31339	SAMPLE MATRIX	: AQUEOUS
		UNITS	: UG/L

?ARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
3ENZENE	<0.5	20.0	21.2	106	20.8	104	2	(80 - 120)	20
TOLUENE	<0.5	20.0	21.0	105	20.6	103	2	(80 - 120)	20
:THYLBENZENE	<0.5	20.0	21.4	107	20.8	104	3	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	64.7	108	62.7	105	3	(80 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 1-3-02 PAGE: 1 OF 1

PLI Accession #: 20101

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: LISA Winn

COMPANY: AMEC
ADDRESS: 2060 AFTON Place
Farmington N.M. 87401
PHONE: (505) 327-7928
FAX: (505) 326-5721

BILL TO: Scott Pope
COMPANY: El Paso Field Services
ADDRESS: 614 Reilly AVE
Farmington NM 87401

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.
146-0201-MW 1	1-3-02	1105	H_2O	01

Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐ MTBE ☐ TMB ☐ PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐ / DBCP ☐	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides /PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:		Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:		NUMBER OF CONTAINERS
				X																					2

PROJECT INFORMATION

PROJ. NO.: 157000 121
PROJ. NAME: EPFS GW project
P.O. NO.:
SHIPPED VIA: Grey Hound

SAMPLE RECEIPT

NO. CONTAINERS	2
CUSTODY SEALS	Y / N (NA)
RECEIVED INTACT	Y / N
BLUE ICE/ICE	6.2°C

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

LAT 3B 39
(LD 146)

RELINQUISHED BY: 1.

Signature: Time: 1630
Printed Name: Chris Mage Date: 1-3-02
Company: AMEC
See reverse side (Force Majeure)

RECEIVED BY: 1.

Signature: Time:
Printed Name: Date:
Company:

RELINQUISHED BY: 2.

Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY: (LAB) 2.

Signature: Time: 0915
Printed Name: Date: 1/4/02
Pinnacle Laboratories Inc.

ATTACHMENT 2

FIELD DOCUMENTATION

WELL DEVELOPMENT AND SAMPLING LOG

Project No: 220013 Project Name: San Juan River Basin Client: MWH

Location: Lot 3B 39 Well No: MW-1 Development ☐ Sampling ☑

Project Manager Ashley Lowe Date 10/01/02 Start Time 11:35 Weather 63°, Cloudy & Drizzle

Depth to Water 35.08 Depth to Product NA Product Thickness NA Measuring Point TOC

Water Column Height 6.3' Well Dia. 4" TD 41.345

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer ☑ Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal ☑ Sabilization of Indicator Parameters ☐ Other or bail dry

Gal/ft x ft of water	Water Volume in Well		Gal/oz to be removed
	Gallons	Ounces	
0.65 x 6.3	4.1 x 3		12.2 gal

Time (military)	pH	SC (umhos/cm)	Temp (°C)	Eh-ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (gal.)	Comments/ Flow rate
11:44	5.10	1110	18.2				½ gal	light gray, clear
	5.04	1000	17.4				2	strong odor, clear sheen
	5.12	800	16.6				4	grayer
	5.14	720	15.9				6	
	5.15	690	15.6				8	
	5.15	670	15.6				9	
	5.19	660	15.4				10	v. black
	5.23	670	15.3				11	bailing down
	5.24	660	15.3				12	
	5.23	660	15.3				12.5	

Final:

Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow rate
12:35	5.23	660	15.3					12.5gal	

COMMENTS: Started raining during sample collection.

INSTRUMENTATION: pH Meter ☑ _____ Temperature Meter ☑ _____

DO Monitor ☐ _____ Other ☐ _____

Conductivity Meter ☑ _____

Water Disposal Kutz Plant

Sample ID Lot 3B 39 MW-1 Sample Time 12:35 BTEX ☑ VOCs ☐ Alkilinity ☐

TDS ☐ Cations ☐ Anions ☐ Nitrate ☐ Nitrite ☐ Ammonia ☐ TKN ☐ NM WQCC Metals ☐

Total Phosphorus ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐

MS/MSD _____ BD _____ BD Name/Time _____ TB TB02100101

Product Recovery and Well Observation Data

Project Name: San Juan River Basin
Project Manager: Ashley Lowe
Client Company: MWH
Site Name: Lat 3B 39

Project No: 220013
Date: 10/01/02

Well	Time	Depth to Water (ft)	Depth to Product (ft)	Total Well Depth (ft)	Product Thickness (ft)	Volume Removed	Comments
MW-1	11:35	35.08	—	41.345	—	—	sampled
MW-2	12:40	32.275	—	37.388	—	—	
MW-3	12:35	33.605		38.258	—	—	

COMMENTS:

Signature: Ashley L Lowe
Date: 10/01/02

CHAIN OF CUSTODY RECORD/LAB WORK REQUEST

LABORATORY APCL
Contract El Paso Corp., San Jaun River Basin

Chain of Custody ID 021001AL01
Page 1 of 1
Air Bill No. 836557901544

MWH
Phone (801) 617-3200 FAX (801) 617-4200
MWH Contact Brian Buttars
Project San Juan River Basin
Project Number 220013
Date Due 21 Days
Sampler's Name Ashley Lowe
(print clearly)

Location ID	Sample ID	Depth Interval (ft)	Date Collected	Time Collected	Matrix [a]	Sampling Technique [b]	ANALYSES REQUESTED: BTEX SW-846 8021B	Alkalinity SM 2320B	TDS USEPA 160.1	NM WQCC Metals SW-846 6010B & 7470A	Cations SW-846 6010B	Anions USEPA 300.0	Nitrate USEPA 300.0	Nitrite USEPA 300.0				
GW Coldiron Com	MW-1		10-01-02	9:29	WG	B	✓											
GW Lat 3B 39	MW-1		10-01-02	12:35	WG	B	✓											

[a] Matrix:
SO – Soil
WS – Surface Water
WG – Ground Water
AA – Air
WQ – Trip Blank/ Equipment Blanks
WW – Wastewater

[b] Sampling Technique:
Composite=C
Grab=G
Hand Auger=HA
Submersible Pump=SP
Bladder Pump=BP
Bailer=B
Wellhead Faucet=WF
Hydropunch=HP

Location IDs:
Groundwater Sites=GW
Bisti=BI
Jaquez=JA
North Flare Pit=NF
South Flare Pit=SF
San Juan River Plant=SJ

Relinquished by/Affiliation	Received by/Affiliation	Date	Time
Ashley Lowe/AESE		10-01-02	15:00

LABORATORY USE ONLY

SAMPLES WERE:

1 Shipped or hand delivered
Notes:

2 Ambient or Chilled
Notes:

3 Temperature _____

4 Received Broken/Leaking (Improperly Sealed)
Y N
Notes:

5 Properly Preserved
Y N
Notes:

6 Received Within Holding Times
Y N
Notes:

COC Tape Was:

1 Present on Outer Package
Y N NA

2 Unbroken on Outer Package
Y N NA

3 Present on Sample
Y N NA

4 Unbroken on Sample
Y N NA
Notes:

Discrepancies Between Sample Labels and COC Record?
Y N
Notes:

FedEx Express **USA Airbill** FedEx Tracking Number **836557901544**

0206 **Sender's Copy**

1 From *Please print and press hard.*

Date 10-01-02 Sender's FedEx Account Number 236245993

Sender's Name Ashley Lowe Phone (505) 566-9116

Company AESE

Address 906 San Juan Blvd, Ste D

Dept./Floor/Suite/Room

City Farmington State NM ZIP 87401

2 Your Internal Billing Reference OPTIONAL
First 24 characters will appear on invoice.

3 To

Recipient's Name Eric Wendland Phone (909) 590-1828

Company APCL

Address 13760 Magnolia Ave

To "HOLD" at FedEx location, print FedEx address. We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

Dept./Floor/Suite/Room

City Chino State CA ZIP 91710

Try online shipping at fedex.com

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Questions? Visit our Web site at fedex.com
or call 1.800.Go.FedEx® 800.463.3339.

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Delivery commitment may be later in some areas.

- [x] FedEx Priority Overnight — Next business morning
- [ ] FedEx Standard Overnight — Next business afternoon
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations
- [ ] FedEx 2Day — Second business day
- [ ] FedEx Express Saver — Third business day

FedEx Envelope rate not available. Minimum charge: One-pound rate

4b Express Freight Service *Packages over 150 lbs.*
Delivery commitment may be later in some areas.

- [ ] FedEx 1Day Freight* — Next business day
- [ ] FedEx 2Day Freight — Second business day
- [ ] FedEx 3Day Freight — Third business day

* Call for Confirmation:

5 Packaging * Declared value limit $500

- [ ] FedEx Envelope*
- [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak
- [x] Other

6 Special Handling Include FedEx address in Section 3.

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- [ ] HOLD Weekday at FedEx Location — NOT Available for FedEx First Overnight
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- [x] No
- [ ] Yes — As per attached Shipper's Declaration
- [ ] Yes — Shipper's Declaration not required
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous Goods (including Dry Ice) cannot be shipped in FedEx packaging.

- [ ] Cargo Aircraft Only

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- [ ] Sender — Acct. No. in Section 1 will be billed.
- [x] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

FedEx Acct. No. / Credit Card No. Exp. Date

Total Packages	Total Weight	Total Declared Value†
1	10 lbs	$ .00

†Our liability is limited to $100 unless you declare a higher value. See back for details. FedEx Use Only

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By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

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AESE
906 San Juan Blvd.Ste.D
Farmington, NM 87401
505.566.9116(9120fax)

WELL OBSERVATION DATA

Project Name San Juan River Basin Project No. _____

Project Manager Ashley Lowe Date 07/18/02

Client Company Montgomery Watson Harza

Site Name Lat 3B-39

Well	Time	Depth to Water (ft)	Depth to Product (ft)	Total Well Depth (ft)	Product Thickness (ft)	Comments
MW-2	11:19	32.062	—	37.388	—	
MW-3	11:15	33.385	—	38.258	—	cleared cobwebs & brush from around well

Comments _____

Signature Ashley Lowe Date 07/18/02

AESE

906 San Juan Blvd.Ste.D
Farmington, NM 87401
505.566.9116(9120fax)

Well Number Lat 3B-39 MW-1

Development / Purging

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Project Name San Juan River Basin | Project Manager Ashley Lowe | Project No.

Client Company Montgomery Watson Harza | Phase.Task No.

Site Name Lat 3B-39 | Site Address

Development Criterin
- ☑ 3 to 5 Casing Volumes of Water Removal
- ☐ Stabilization of Indicator Parameters
- ☐ Other

Water Volume Calculation
Initial Depth of Well (feet) 41.360' BTOC
Initial Depth to Water (feet) 34.852' BTOC
Height of Water Column in Well (feet) 6.51'
Diameter (inches): Well 4" Gravel Pack

Gal/ft * water column	Water Volume in Well: Gallons	Water Volume in Well: Ounces	Gal/Oz to be Removed
0.65 x 6.51 =	4.23 x 3 =		

Instruments — Serial No. (if applicable)
- ☑ PH Meter
- ☑ DO Monitor
- ☑ Conductivity Meter
- ☑ Temperature Meter
- ☐ Other

Methods of Development

Pump
- ☐ Centrifugal
- ☐ Submersible
- ☐ Peristaltic

Bailer
- ☑ Bottom Valve
- ☐ Double Check Valve
- ☐ Stainless-steel Kemmerer

☐ Other

Water Disposal

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Water Volume Removed (gallons): Increment	Water Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
07/16/02	11:07		✓		1 gal	27.1	6.29	9140		slight smell, fairly clear in color
					2	23.6	6.37	7090		
					3.75	19.6	6.28	6990		
					5.75	20.2	6.30	6650		light brown color, strong odor
					7.75	20.5	6.29	6740		
		d(in)	gal/ft		9.75	20.5	6.26	6540		grayish-black color
		2	0.16		11.75	20.4	6.24	6680		
		4	0.65		13.75	20.5	6.23	6690		
		6	1.47		15.75	20.5	6.23	6680		11:58 - sampled after sampling DO = 0.67 mg/L @ 17.5°C

Circle the date and time that the development criteria are met.

Comments odor increased as more water was purged. Color became darker. Recovery was good during purge process

Developer's Signature (s) Ashley Lowe Date 07/18/02 Reviewer Date

WELL OBSERVATION DATA

amec

Project Name: EPFS G.W. Project

Project No.: 15/7060121

Project Mngr: Lisa Winn

Task: 2

Client Co.: El Paso Field Services

Date: 4 2 02

Site Name: LAT 3B 39 (LD 146)

Well or Piezometer	Time	Reason Not Measured	Depth to Floating Product (Feet)	Depth to Water (Feet)	Depth to Sinking Product (Feet)	Total Well Depth (Feet)	Floating Product Thickness	Sinking Product Thickness	Comments
MW 2	0951			31.69					
MW 3	0957			32.99					

Reason Not Measured: D = Dry; O = Obstructed; N = Not Accessible

Comments:

Signature: Chris A. May

Date: 4 2 02

PINNACLE LABORATORIES

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 4-02 PAGE: 1 OF 1

PLI Accession #:

SHADED AREAS ARE FOR LAB USE ONLY.

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PROJECT MANAGER: LISA Winn

COMPANY: AMEC
ADDRESS: 2060 AFTON Place
Farmington N.M. 87401
PHONE: (505) 327-7928
FAX: (505) 326-5721

BILL TO: Scott Pope
COMPANY: El Paso Field Services
ADDRESS: 614 Reilly AVE
Farmington NM. 87401

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐ MTBE ☐ TMB ☐ PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐ / DBCP ☐	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides /PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:		Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:		NO. OF CONTAINERS
146-0201-MW1	4-2-02	1002	H_2O						X																					2

PROJECT INFORMATION	
PROJ. NO.:	1517000121
PROJ. NAME:	EPFS G.W. project
P.O. NO.:	
SHIPPED VIA:	Greyhound

SAMPLE RECEIPT	
NO. CONTAINERS	
CUSTODY SEALS	Y / N / NA
RECEIVED INTACT	
BLUE ICE/ICE	

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

LAT 36 39
(LO 146)

RELINQUISHED BY: 1.	RELINQUISHED BY:
Signature: Time: 1630	Signature: Time:
Printed Name: Date: 4-2-02	Printed Name: Date:
Company: AMEC	Company:
See reverse side (Force Majeure)	
RECEIVED BY: 1.	**RECEIVED BY: (LAB) 2.**
Signature: Time:	Signature: Time:
Printed Name: Date:	Printed Name: Date:
Company:	Pinnacle Laboratories Inc.

☐ Development
☑ Purging

WELL DEVELOPMENT AND PURGING DATA FORM

Well Number MW 1

Page 1 of 1

Project Name EPFS G.W. project Project Manager LISA Winn Project No. 151200012 1

Client Company El paso Field Services

Site Name LAT 36 39 (LO146) Site Address Rural San Juan Co

Development Criteria

☑ 3 to 5 Casing Volumes of Water Removal
☑ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

Pump	Bailer
☐ Centrifugal	☒ Bottom Valve
☐ Submersible	☐ Double Check Valve
☐ Peristaltic	☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 41.41
Initial Depth to Water (feet) 34.5
Height of Water Column in Well (feet) 6.91
Diameter (inches): Well ____ Gravel Pack ____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing	6.91	45 1 X 3	13.53
Gravel Pack			
Drilling Fluids			
Total			13.53

Instruments

	Serial No. (If applicable)
☑ pH Meter	YSI 63
☑ DO Monitor	YSI 95
☑ Conductivity Meter	YSI 63
☑ Temperature Meter	YSI 63
☐ Other _____	

Water Disposal

KWIK Seperator Bloomfield NM.

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons)		Product Volume Removed (gallons)		Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative					
4-2-02	0924		X				2.75	2.75			15.7	6.91	852		Cloudy, Light Grey, Product odor, Sheen
	0929		X				2.75	5.5			15.7	7.18	863		Cloudy, Grey, Product odor, Sheen
	0934		X				2.75	8.25			15.6	7.32	832		" "
	0939		X				2.75	11			15.5	7.34	853		" "
	0946		X			38.35	2.75	13.75			15.6	7.47	802	1.29	no Change

Comments Sampled for BTEX 1002

Developer's Signature(s) [signature] Date 4-2-02 Reviewer [signature] Date 4/4/02

L:\forms\MW Dvlpmnt 2.dot 11/29/01

☐ Development
☑ Purging

WELL DEVELOPMENT AND PURGING DATA FORM

Page 1 of 1

Well Number MW 1

Project Name EPFS GW project Project Manager LISA Winn Project No. 15120001.21

Client Company El paso Field Services

Site Name LAT 3B 39 (LD146) Site Address Rural San Juan Co

Development Criteria

☑ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

Pump	Bailer
☐ Centrifugal	☑ Bottom Valve
☐ Submersible	☐ Double Check Valve
☐ Peristaltic	☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 41.41
Initial Depth to Water (feet) 34.19
Height of Water Column in Well (feet) 7.22
Diameter (inches): Well 4" Gravel Pack _____

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	7.22	4.71 X 3	14.13
Gravel Pack			
Drilling Fluids			
Total			14.13

Instruments

	Serial No. (If applicable)
☑ pH Meter	Y SI 63
☐ DO Monitor	
☑ Conductivity Meter	Y SI 63
☑ Temperature Meter	Y SI 63
☐ Other _____	

Water Disposal

Kurz Separator Bloomfield N.M.

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
1-3-02	1017		X				3	3			15.2	7.02	1093		Cloudy, Sheen with Rotten Egg odor
	1023		X				3	6			15	7.27	1023		" "
	1029		X				3	9			15.4	7.31	1014		Cloudy Gray, Sheen with Rotten Egg odor
	1033		X				3	12			15.3	7.33	1009		" "
	1040		X			35.91	3	15			15.3	7.39	991		No Change

Comments Sampled for BTEX 1105

Developer Signature(s) Chris A. Mary Date 1-3-02 Reviewer [signature] Date 1/9/0

WELL OBSERVATION DATA

amec

Project Name: EPFS GW project Project No.: 1517000121

Project Mngr: Lisa Winn Task: 2

Client Co.: El Paso Field Services Date: 1-3-02

Site Name: LAT 3B 39 (LD146)

Well or Piezometer	Time	Reason Not Measured	Depth to Floating Product (Feet)	Depth to Water (Feet)	Depth to Sinking Product (Feet)	Total Well Depth (Feet)	Floating Product Thickness	Sinking Product Thickness	Comments
MW 2	1054			31,34					
MW 3	1051			32.64					

Reason Not Measured: D = Dry; O = Obstructed; N = Not Accessible

Comments:

Signature: Chris L. May Date: 1-3-02

PINNACLE LABORATORIES

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 1-3-02 PAGE: 1 OF 1

PLI Accession #:

SHADED AREAS FOR LAB USE ONLY

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: LISA Winn

COMPANY: AMEC
ADDRESS: 2060 AFTON Place
Farmington N.M. 87401
PHONE: (505) 327-7928
FAX: (505) 326-5721

BILL TO: SCOTT Pope
COMPANY: El Paso Field Services
ADDRESS: 614 Reilly AVE
Farmington NM 87401

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.
146-0201-MW 1	1-3-02	1105	H_2O	

ANALYSIS REQUEST

Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐ MTBE ☐ TMB ☐ PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐ / DBCP ☐	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides /PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:		Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:		NUMBER OF CONTAINERS
				X																						

PROJECT INFORMATION

PROJ. NO.: 151700.121
PROJ. NAME: EPFS GW project
P.O. NO.:
SHIPPED VIA: Grey Hound

SAMPLE RECEIPT

NO. CONTAINERS	
CUSTODY SEALS	Y/N/NA
RECEIVED INTACT	
BLUE ICE	

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

LAT 313 39
(LD 146)

RELINQUISHED BY: 1	RELINQUISHED BY: 2
Signature: Time: 1630	Signature: Time:
Printed Name: Chris Mace Date: 1-3-02	Printed Name: Date:
Company: AMEC	Company:
See reverse side (Force Majeure)	
RECEIVED BY: 1	**RECEIVED BY: (LAB) 2**
Signature: Time:	Signature: Time:
Printed Name: Date:	Printed Name: Date:
Company:	Pinnacle Laboratories Inc.

3R - 210

REPORTS

DATE:

2001

elpaso Field Services

Certified Mail: #7001 1940 0003 1553 8513

February 28, 2002

Mr. William C. Olson
New Mexico Oil Conservation Division
1220 St. Francis Dr.
Santa Fe, NM 87504

RE: 2001 Pit Project Annual Groundwater Report

Dear Mr. Olson:

In accordance with reporting requirements, El Paso Field Services (EPFS) has enclosed annual reports for the 30 remaining groundwater impacted sites that were identified during our pit closure project of 1994 / 1995.

EPFS has organized the 30 reports (Volumes IA, IB, II and III), reports by land type. Volume IA and IB contain annual reports for sites found on Federal land. Volume II contains Non Federal sites and Volume III contains sites on Navajo land. Of the 30 reports submitted EPFS is requesting closure of three sites located on Navajo lands. Of the three Navajo sites submitted for closure OCD has closed the Charley Pah #4 and the John Charles #8. The Rementa et al #1 has not been closed by either agency. EPFS understands closure of groundwater sites on Navajo land falls under jurisdiction of the Navajo Environmental Protection Agency and original documents have been submitted to them for review. Other Navajo sites are included in the report for your information.

The Jaquez Com. C #1 and Jaquez Com. E #1 site is not included in with this report and will be submitted by the required deadline of April 1, 2002.

If you have any questions concerning the enclosed reports, please call me at (505) 599-2124.

Sincerely,

Scott T. Pope P.G.
Senior Environmental Scientist

xc: Mr. Denny Foust, NMOCD, Aztec - w / enclosures; **Certified Mail # 7001 1940 0003 1553 8506**
Mr. Bill Liesse, BLM – w / enclosures (federal sites only), **Certified Mail # 7001 1940 0003 1553 8520**

SAN JUAN BASIN PIT CLOSURES

San Juan Basin, New Mexico

El Paso Field Services
Pit Project Groundwater Sites
Annual Report
Volume II-Non-Federal Sites

March 2002

Prepared for

El Paso Field Services
Farmington, New Mexico

elpaso

MWH
MONTGOMERY WATSON HARZA

EL PASO FIELD SERVICES ANNUAL GROUNDWATER REPORT

NON-FEDERAL SITES VOLUME II

TABLE OF CONTENTS

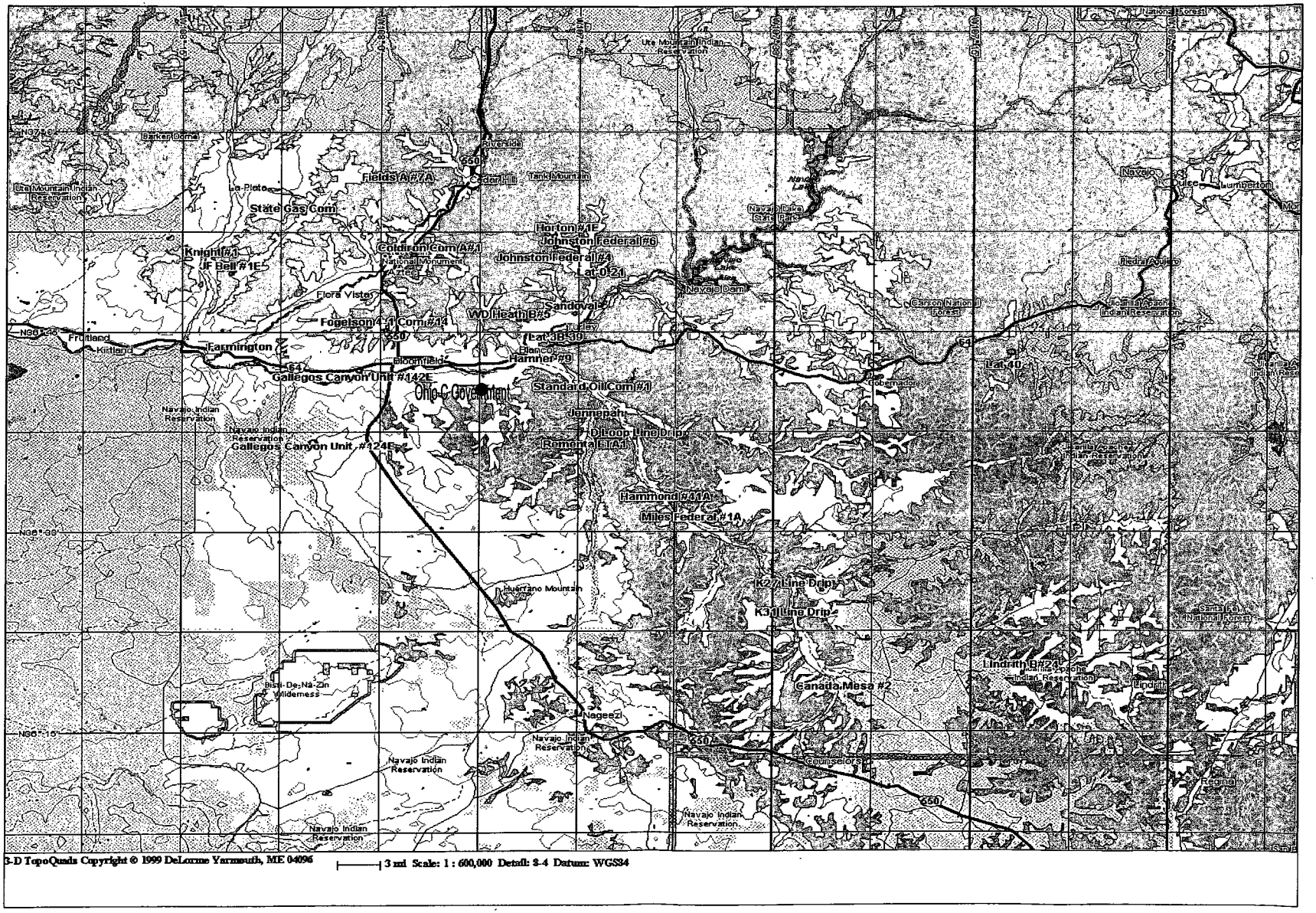
Site Map

METER or LINE ID	SITE NAME	TOWNSHIP	RANGE	SECTION	UNIT
71669	State Gas Com N #1	31N	12W	16	H
70194	Johnston Fed #4	31N	09W	33	H
93388	Horton #1E	31N	09W	28	H
72556	Knight #1	30N	13W	5	A
73551	Coldiron A #1	30N	11W	2	K
03906	GCU Com A #142E	29N	12W	25	G
70445	Standard Oil Com #1	29N	09W	36	N
LD146	Lat 3B-39 Line Drip	29N	09W	10	M
LD087	K-31 Line Drip	25N	06W	16	N
94967	Lindrith B #24	24N	03W	9	N

elpaso

MWH
MONTGOMERY WATSON HARZA

Groundwater Site Map



EPFS GROUNDWATER PITS
2001 ANNUAL GROUNDWATER REPORT

Lat 3B-39 Line Drip

Meter Code LD146

SITE DETAILS

Legals Twn: 29N Rng: 09W Sec: 10 UNIT: M

NMOCD Haz Ranking 40 Land Type: Fee Operator: EPFS

PREVIOUS ACTIVITIES

Site Assessment: Jan-94 Excavation Jan-95 (60cy) Soil Boring: Sep-95 Monitor Well: Sep-95

Geoprobe: Nov-96 Additional MWs: Nov-00 Downgradient MW's: Nov-00 Replace MW: NA

PSH Removal Initiated: NA ORC Nutrient Injection NA Re-Excavation: NA

Quarterly Initiated Nov-96 Annual Initiated NA Quarterly Resumed: NA

2001 ACTIVITY

Groundwater monitoring - Quarterly sampling continued through 2001.

The site was re-surveyed for December 18, 2001, for site features, topography, well locations and top of monitor well elevations.

SUMMARY TABLES AND GRAPHS

Groundwater analytical data are presented in Table 1 BTEX. Copies of the laboratory data sheets and the associated quality assurance/quality control data are presented as Attachment 1. Included is a BTEX Data graph for MW-1.

SITE MAP

Site Maps with BTEX concentrations and groundwater elevations are attached.

GEOLOGIC LOGS AND WELL COMPLETION DIAGRAMS

No drilling activities were performed at this site for 2001.

DISPOSITION OF GENERATED WASTES

No wastes were generated at this site for 2001.

EPFS GROUNDWATER PITS
2001 ANNUAL GROUNDWATER REPORT

Lat 3B-39 Line Drip

Meter Code: LD146

ISOCONCENTRATION MAPS

No isoconcentration maps were generated at this site.

CONCLUSIONS

MW-1 is trending around 10 ppb Benzene. However, Xylene continues to be above NMWQCC standards. MW-2 and MW-3 have been clean since installation.

Groundwater flow based on the new survey data flows towards the northwest.

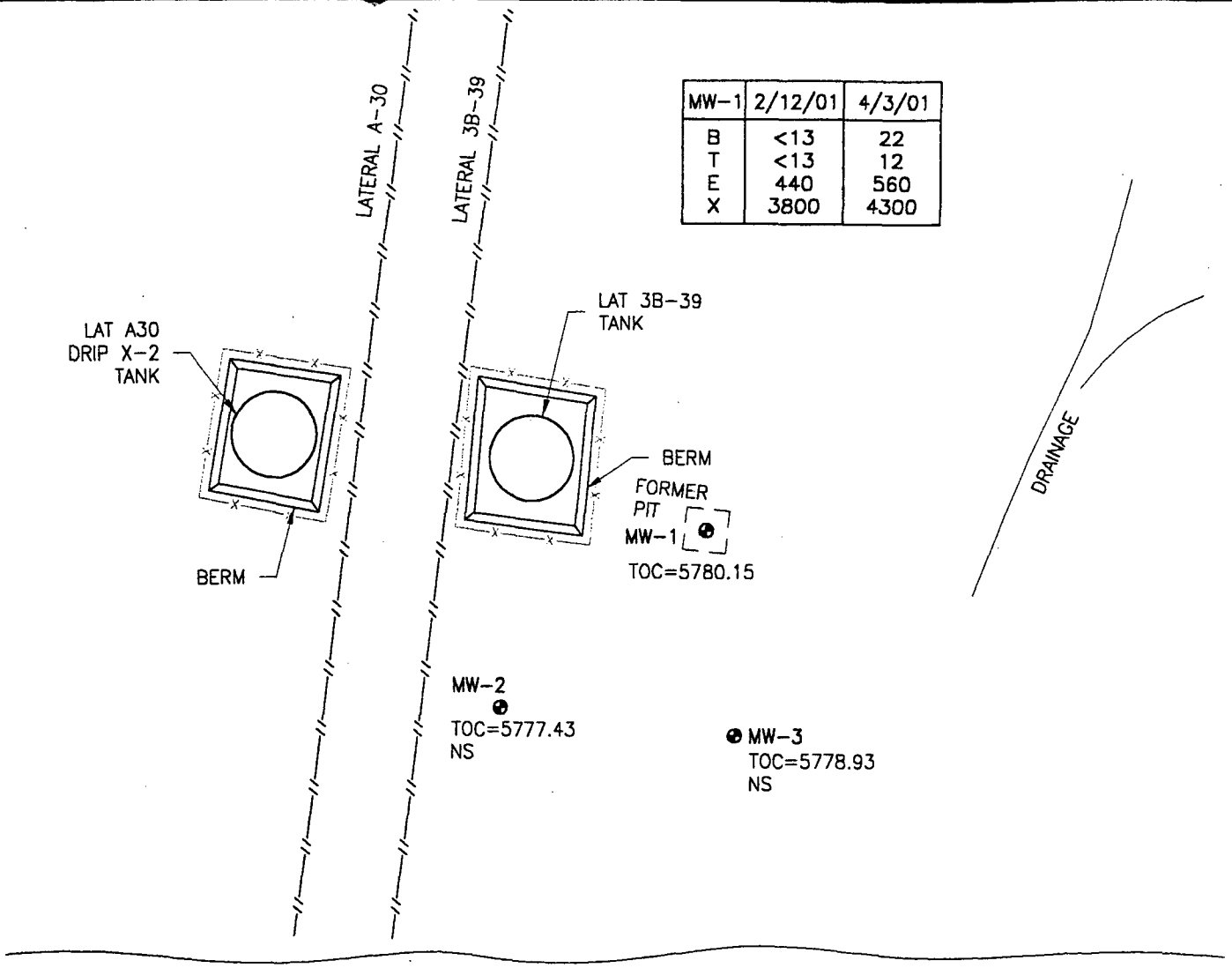
RECOMMENDATIONS

> EPFS will continue quarterly sampling at MW-1 until BTEX constituents fall below NMWQCC standards for four consecutive quarters.

> Evaluate and confirm groundwater flow direction.

> Following OCD approval for closure, monitor wells will be abandoned using OCD approved guidelines.

> MW-2 and MW-3 wells will be sampled at closure.



MW-1	2/12/01	4/3/01
B	<13	22
T	<13	12
E	440	560
X	3800	4300

LEGEND

MW-1	Approximate Monitoring Well Location and Number
——x——x——	Fence Line
——//——//——	Pipe Line
B	Benzene (µg/L)
T	Toluene (µg/L)
E	Ethylbenzene (µg/L)
X	Total Xylenes (µg/L)
NS	Not Sampled
GWEL	Groundwater Elevation (FT Above Mean Sea Level Unless Noted Otherwise)
TOC	Top of Casing

N

0 40

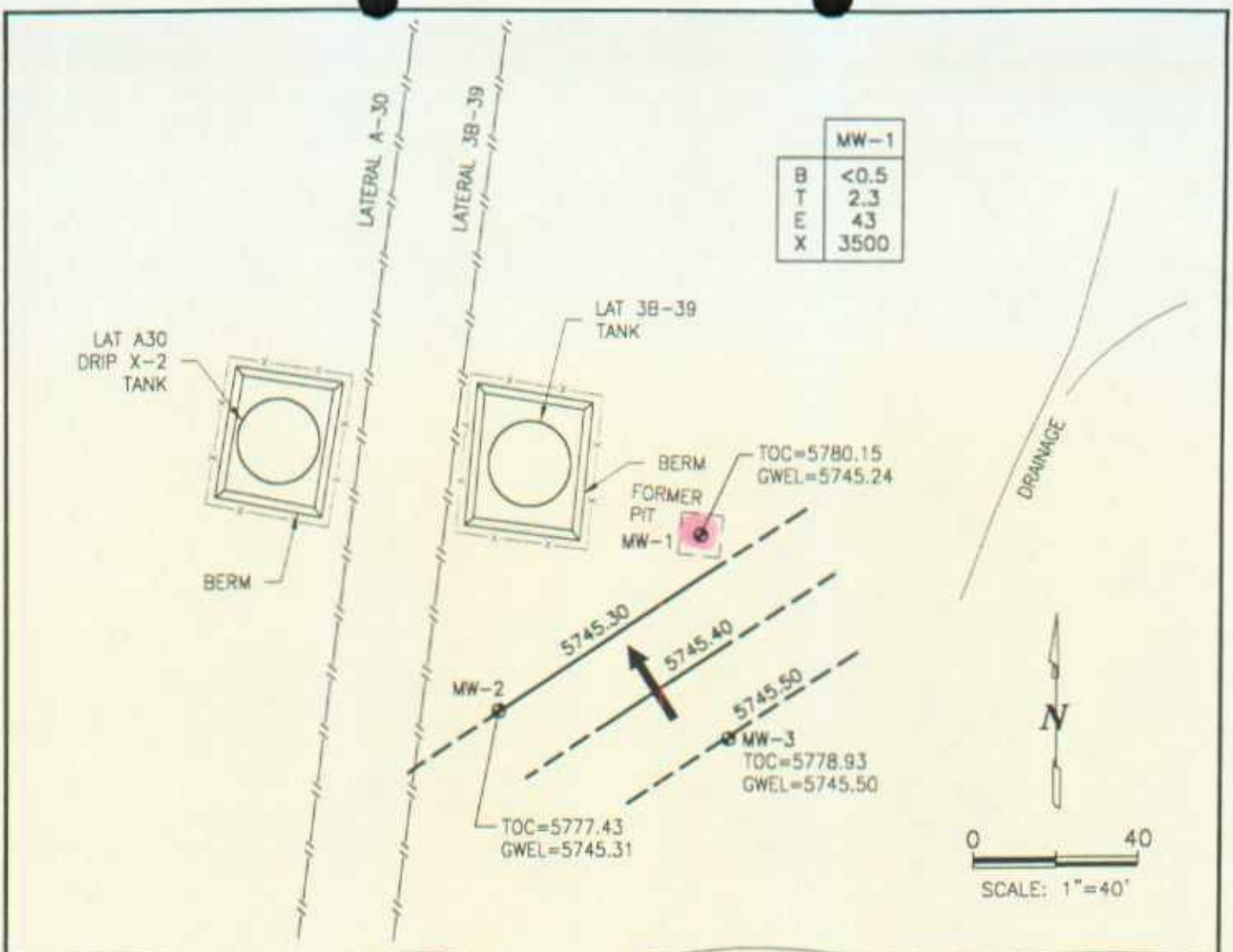
SCALE: 1"=40'

lat3b39_01.dwg

LATERAL 3B-39, LD146
FEBRUARY AND APRIL, 2001

GROUNDWATER SITES
EL PASO FIELD SERVICES

FIGURE 1



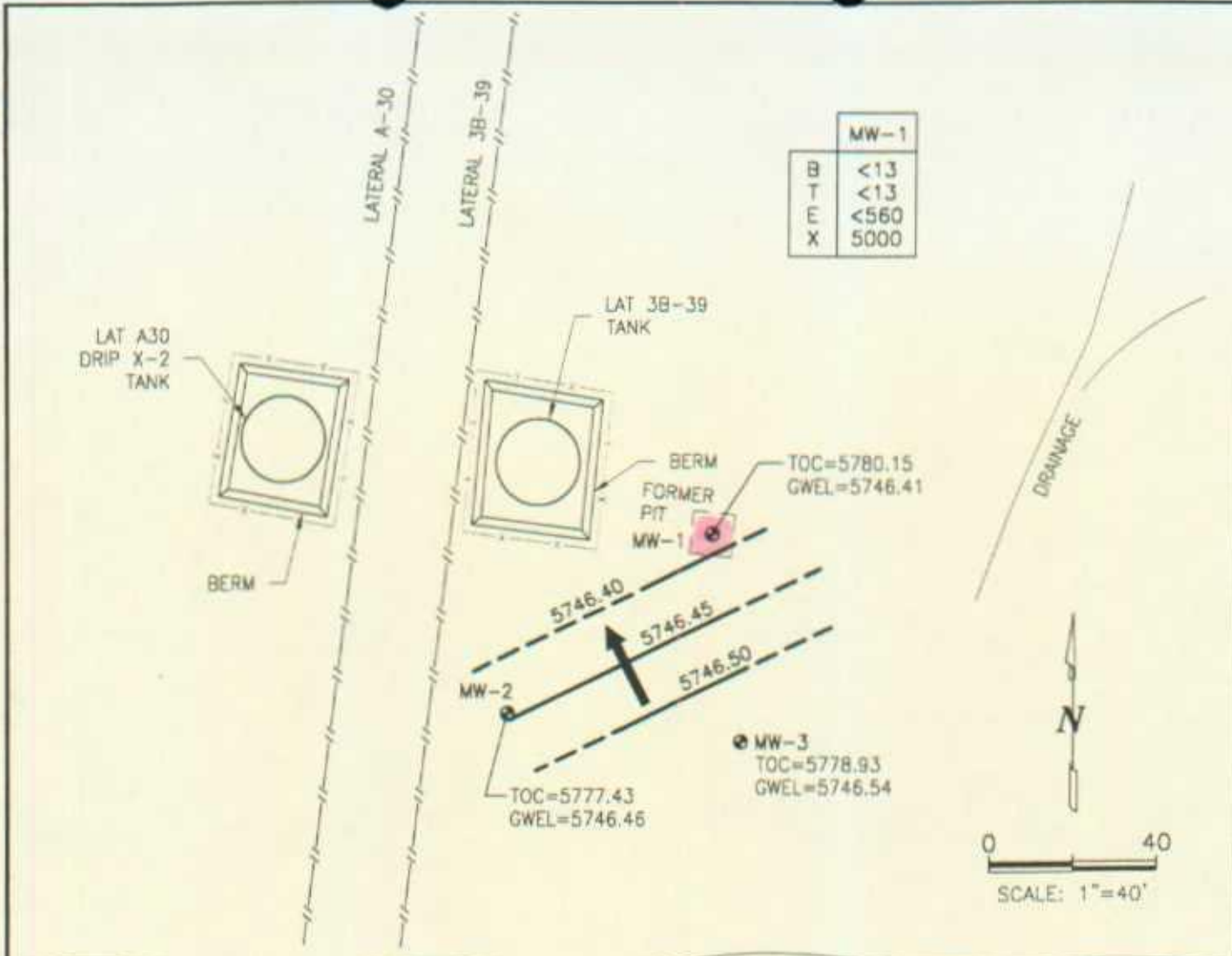
LEGEND

MW-1	Approximate Monitoring Well Location and Number	5746	Potentiometric Surface (Approximate & Assumed Where Dashed)
x x	Fence Line	→	Direction of Groundwater Flow (Estimated)
// //	Pipe Line	GWEL	Groundwater Elevation (FT Above Mean Sea Level Unless Noted Otherwise)
B	Benzene (µg/L)	TOC	Top of Casing
T	Toluene (µg/L)		
E	Ethylbenzene (µg/L)		
X	Total Xylenes (µg/L)		

LATERAL 3B-39, LD146
JULY, 2001

GROUNDWATER SITES
EL PASO FIELD SERVICES

FIGURE 2



LEGEND

MW-1	Approximate Monitoring Well Location and Number	5746	Potentiometric Surface (Approximate & Assumed Where Dashed)
	Fence Line	→	Direction of Groundwater Flow (Estimated)
	Pipe Line	GWEL	Groundwater Elevation (FT Above Mean Sea Level Unless Noted Otherwise)
B	Benzene (µg/L)	TOC	Top of Casing
T	Toluene (µg/L)		
E	Ethylbenzene (µg/L)		
X	Total Xylenes (µg/L)		

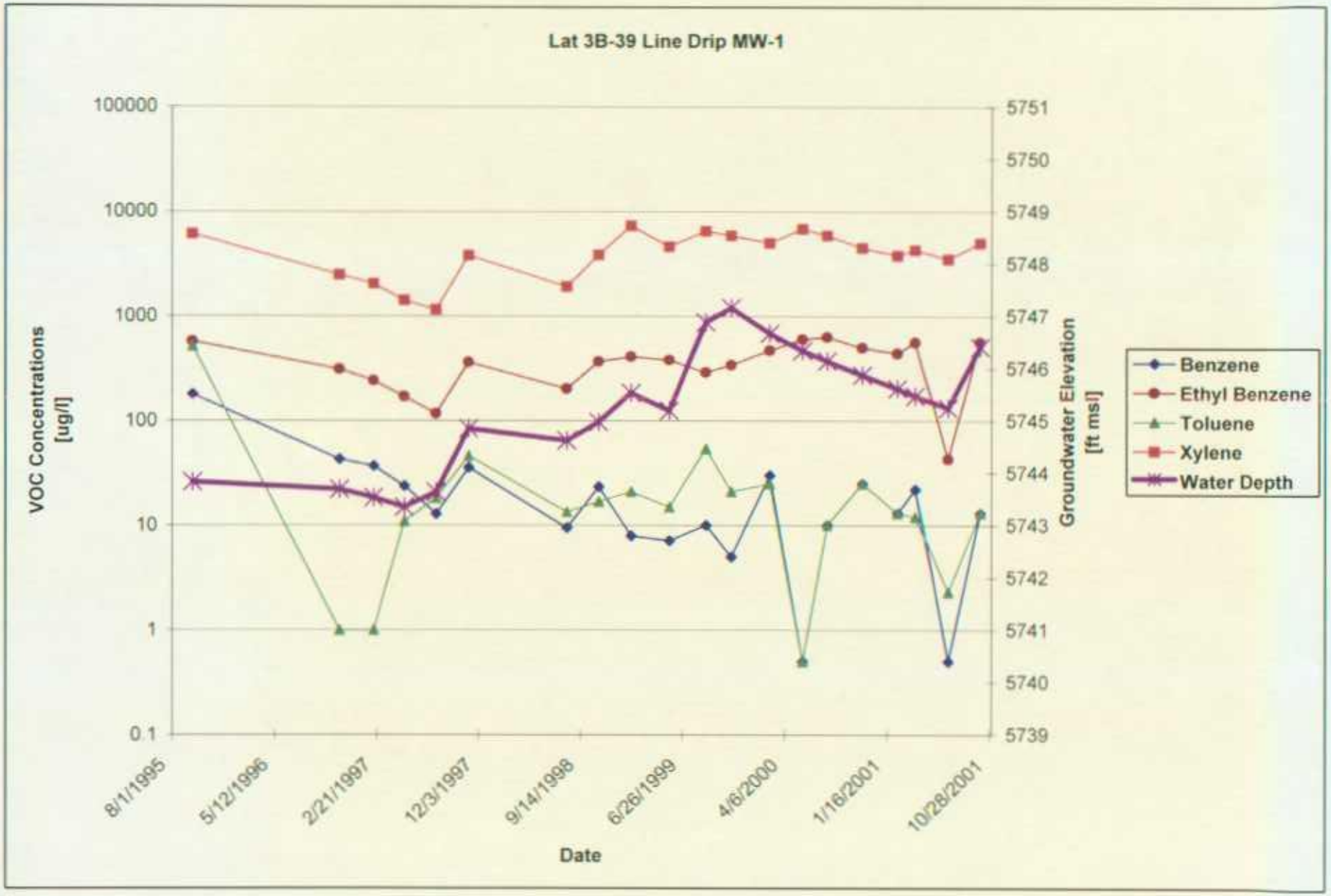
LATERAL 3B-39, LD146
OCTOBER, 2001

GROUNDWATER SITES
EL PASO FIELD SERVICES

FIGURE 3

Table 1 BTEX
Lat 3B-39 Line Drip

Sample #	Meter Line #	Site Name	Sample Date	MW#	Benzene (µg/l)	Ethyl Benzene (µg/l)	Toluene (µg/l)	Total Xylenes (µg/l)	Depth to Water (Feet)	Groundwater Elevation (feet)
1460104	LD146	Lat 3B-39 Line Drip	4/3/2001	1	22	560	12	4300	34.68	5745.47
1460107	LD146	Lat 3B-39 Line Drip	7/3/2001	1	< 0.5	43	2.3	3500	34.91	5745.24
146-0110	LD146	Lat 3B-39 Line Drip	10/1/2001	1	13	560	13	5000	33.74	5746.41


Lat 3B-39 Line Drip MW-1
VOC Concentrations [ug/l]
100000
10000
1000
100
10
1
0.1
Groundwater Elevation [ft msl]
5751
5750
5749
5748
5747
5746
5745
5744
5743
5742
5741
5740
5739
8/1/1995
5/12/1996
2/21/1997
12/3/1997
9/14/1998
6/26/1999
4/6/2000
1/16/2001
10/28/2001
Date
Benzene
Ethyl Benzene
Toluene
Xylene
Water Depth

ATTACHMENT 1

2001 GROUNDWATER ANALYTICAL

WELL OBSERVATION DATA

Project Name: EPFS GW project

Project No.: 1517000121

Project Mngr: Lisa Winn

Task: 2

Client Co.: El Paso Field Services

Date: 1-3-02

Site Name: LAT 3B 39 (LD146)

Well or Piezometer	Time	Reason Not Measured	Depth to Floating Product (Feet)	Depth to Water (Feet)	Depth to Sinking Product (Feet)	Total Well Depth (Feet)	Floating Product Thickness	Sinking Product Thickness	Comments
MW 2	1054			31.34					
MW 3	1051			32.64					

Reason Not Measured: D = Dry; O = Obstructed; N = Not Accessible

Comments:

Signature: Chris L. Mar

Date: 1-3-02

0950 11 av

amec

☐ Development
☑ Purging

WELL DEVELOPMENT AND PURGING DATA FORM

Well Number MW 1

Page 1 of 1

Project Name EPFS GW project

Project Manager LISA Winn

Project No. 15/2000121

Client Company El paso Field Services

Site Name LAT 3B 39 (LO144)

Site Address Rural San Juan CO

Development Criteria

☑ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

Pump	Bailer
☐ Centrifugal	☑ Bottom Valve
☐ Submersible	☐ Double Check Valve
☐ Peristaltic	☐ Stainless-steel Kemmerer

☐ Other _____

Water Volume Calculation

Initial Depth of Well (feet) 41.41
Initial Depth to Water (feet) 34.19
Height of Water Column in Well (feet) 7.22
Diameter (inches): Well 4" Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing	7.22	4.71 X 3	14.13
Gravel Pack			
Drilling Fluids			
Total			14.13

Instruments

	Serial No. (If applicable)
☑ pH Meter	Y SI 63
☐ DO Monitor	
☑ Conductivity Meter	Y SI 63
☑ Temperature Meter	Y SI 63
☐ Other	

Water Disposal

Kurz Separator Bloomfield NM.

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
1-3-02	1017		X				3	3			15.2	7.02	1093		Cloudy, Sheen Mild Bottom Egg odor
	1023		X				3	6			15	7.27	1023		" "
	1029		X				3	9			15.4	7.31	1014		Cloudy Gray, Sheen Mild Bottom Egg odor
	1033		X				3	12			15.3	7.33	1009		" "
	1040		X			35.91	3	15			15.3	7.39	991		No Change

Comments Sampled for BTEX 1105

Developer's Signature(s) Chris A Mary Date 1-3-02 Reviewer [signature] Date 1/9/02

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 1-3-02 PAGE: 1 OF 1

PLI Accession #:

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: LISA WINN

COMPANY: AMEC
ADDRESS: 2060 AFTON PLACE
FARMINGTON N.M. 87401
PHONE: (505) 327-7928
FAX: (505) 326-5721

BILL TO: SCOTT POPE
COMPANY: EL PASO FIELD SERVICES
ADDRESS: 614 REILLY AVE
FARMINGTON NM 87401

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.
146-0201-MW 1	1-3-02	1105	H_2O	

Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐ MTBE ☐ TMB ☐ PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐ / DBCP ☐	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides /PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:		Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:		NUMBER OF CONTAINERS
				X																						

PROJECT INFORMATION

PROJ. NO.: 517000121
PROJ. NAME: EPFS GW PROJECT
P.O. NO.:
SHIPPED VIA: GREYHOUND

SAMPLE RECEIPT

NO. CONTAINERS	
CUSTODY SEALS	Y / N / NA
RECEIVED INTACT	
BLUE ICE	

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

LAT 313 39
(LD 146)

RELINQUISHED BY: 1.

Signature: Time: 1630
Printed Name: Chris Macy Date: 1-3-02
Company: AMEC
See reverse side (Force Majeure)

RECEIVED BY: 1.

Signature: Time:
Printed Name: Date:
Company:

RELINQUISHED BY: 2.

Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY: (LAB) 2.

Signature: Time:
Printed Name: Date:
Pinnacle Laboratories Inc.

Well Development and Purging Data

Project No. 6169 | Development ☐ | Purging ☑ | Page 1 of 1

Task No.

Well No. MW 1 | Site Name/Identification LAT 313-39 (LD146) | Site Address Rural San Juan CO

Client/Project Name Ehp-50 Field Services EPFS Remediation Project | Project Manager LISA Winn

Development Criteria
- ☐ 3 to 5 Casing Volumes of Water Removal
- ☑ Stabilization of Indicator Parameters
- ☐ Other

Water Volume Calculation
- Initial Depth of Well (feet) 41.41
- Initial Depth to Water (feet) 33.74
- Height of Water Column in Well (feet) 7.67
- Diameter (inches): Well 4" Gravel Pack

Instruments | **Serial No. (if applicable)**
- ☑ PH Meter — Hydac
- ☐ DO Monitor
- ☑ Conductivity Meter — Hydac
- ☑ Temperature Meter — Hydac
- ☐ Other

Methods of Development

Pump
- ☐ Centrifugal
- ☐ Submersible
- ☐ Peristaltic

Bailer
- ☐ Bottom Valve
- ☐ Double Check Valve
- ☐ Stainless-steel Kemmerer

☐ Other "

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	7.67	500x3	15
Gravel Pack			
Drilling Fluids			
Total			15

Water Disposal " "
Lutz Separator Bloomfield NM.

Sampling Activities
Type of Container VOA | No. of Containers 2
Parameters Sampled For BTEX

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
10-1-01	1414		X				3	3			20.6	6.36	2060		Cloudy, Gray, Sheen mild product odor
	1417		X				3	6			19.1	6.80	1210		" "
	1422		X				3	9			18.2	6.92	0940		" "
	1425		X				3	12			17.8	6.96	0930		" "
	1429		X			36.03	3	15			17.5	7.03	0910		no Change

Circle the date and time that the development criteria are met.

Comments Sampled for BTEX 1445

Developer Signature (s) Chris A Mercer Date 10-1-01 Reviewer JWinn Date 10/3/01

WELL OBSERVATION DATA

Project Name EPFS Remediation project Project No. 6169

Project Manager LISA WINN Cost Code

Client Company El Paso Field Services Date 10-1-01

Site Name LAT 33 39 (LD 146)

Well or Piezometer	Time	Reason Not Measured	Depth to Floating Product (Feet)	Depth to Water (Feet)	Depth to Sinking Product (Feet)	Total Well Depth (Feet)	Floating Product Thickness	Sinking Product Thickness	Comments
MW2	1438			30.97					
MW3	1435			32.26					

Reason Not Measured: D = Dry; O = Obstructed; N = Not Accessible

Comments

Signature Chris A. May Date 10-1-01

PINNACLE LABORATORIES

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 10-1-01 PAGE: 1 OF 1

PLI Accession #:

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: Lisa Hunter

COMPANY: GEM

ADDRESS: 906 South Bloomfield Suite D
Farmington NM 87401

PHONE: (505) 326-9116

FAX: (505) 326-9120

BILL TO: Scott Pope

COMPANY: El Paso Field Services

ADDRESS: 604 Reilly Ave
Farmington N.M. 87401

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.
LLC-0110-MW 1	10-1-01	1445	H2O	

	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject		(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐ MTBE ☐ TMB ☐ PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐ / DBCP ☐		8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides /PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:		Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:		NUMBER OF CONTAINERS
LLC-0110-MW 1						X																							

PROJECT INFORMATION	
PROJ. NO.:	6116
PROJ. NAME:	EPFS Remediation Project
P.O. NO.:	
SHIPPED VIA:	

SAMPLE RECEIPT	
NO. CONTAINERS	
CUSTODY SEALS	Y / N / NA
RECEIVED INTACT	
BLUE ICE/ICE	

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☑

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

LAT 313 39 (LD146)

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: Time: 0930	Signature: Time:
Printed Name: Date: 10-2-01	Printed Name: Date:
Company:	Company:
See reverse side (Force Majeure)	
RECEIVED BY: 1.	**RECEIVED BY: (LAB) 2.**
Signature: Time:	Signature: Time:
Printed Name: Date:	Printed Name: Date:
Company:	Pinnacle Laboratories Inc.

Well Development and Purging Data

Project No. 6169 Development ☐
Task No. Purging ☑
Well No. MW 1 Site Name/Identification LAT 36 39 (LD146) Site Address Rural San Juan CO.
Client/Project Name El paso Field Services EPFS Remediation project Project Manager LISA WINN

Page 1 of 1

Development Criteria
☐ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other

Water Volume Calculation
Initial Depth of Well (feet) 41.41
Initial Depth to Water (feet) 34.91
Height of Water Column in Well (feet) 6.5
Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	6.5	4.24X3	12.72
Gravel Pack			
Drilling Fluids			
Total			12.72

Instruments / **Serial No. (if applicable)**
☑ PH Meter — Hydac
☐ DO Monitor
☑ Conductivity Meter — Hydac
☑ Temperature Meter — Hydac
☐ Other

Methods of Development
Pump: ☐ Centrifugal ☐ Submersible ☐ Peristaltic
Bailer: ☑ Bottom Valve ☐ Double Check Valve ☐ Stainless-steel Kemmerer
☐ Other

Water Disposal
Knt2 Seperator Bloomfield N.M.

Sampling Activities
Type of Container VOA No. of Containers 2
Parameters Sampled For BTEX

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
7-3-01	1357						2.75	2.75			23.4	6.2	1120		Cloudy, Sheen, product odor
	1400						2.75	5.5			21.3	6.8	0940		" "
	1404					39.95	2.75	8.25			22.1	6.9	0880		No Change

Circle the above readings that the development criteria are met.

Comments AFTer Bailing Approximately 8.25 gal Bailed well Dry Let Recover Sampled for Btex 1430

Developer's Signature(s) Chris A. McCoy Date 7-3-01 Reviewer L Winn Date 7/[illegible]/01

PHILIP ENVIRONMENTAL

Well Number MW 1

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

Project Name EpFS quarterly Sampling

Project No. 62800107

Client Company El paso Field Services

Phase.Task No. 0301

Site Name LAT 3B-39 LD 146

Rural San Juan CO

Development Criteria

- ☐ 3 to 5 Casing Volumes of Water Removal
- ☑ Stabilization of Indicator Parameters
- ☐ Other

Methods of Development

Pump	Bailer
☐ Centrifugal	☑ Bottom Valve
☐ Submersible	☐ Double Check Valve
☐ Peristaltic	☐ Stainless-steel Kemmerer

☐ Other

	41.41		
	34.68		
	6.73		
	4"		
	6.73	4.39X3	13.17
			13.17

Instruments / Serial No. (if applicable)

- ☑ pH Meter — Hydac
- ☐ DO Monitor
- ☑ Conductivity Meter — Hydac
- ☑ Temperature Meter — Hydac
- ☐ Other

Water Disposal: KUTZ Separator Bloomfield N.M.

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Casing Water Depth (feet)				pH	Conductivity (micromhos/cm)	Dissolved Oxygen (mg/L)	Comments
4-3-01	1250		X				2.75	2.75		19.7	5.87	1010		cloudy product odor
	1255		X				2.75	5.50		18	5.52	0820		" "
	1301		X				2.75	8.25		19	5.40	0800		" "
	1305		X				2.75	11		19	5.23	0780		" "
	1313		X				2.75	13.75		19.4	5.02	0780		no Change

Circle the date and time that the development criteria are met.

Comments Sampled for BTEX 1330

Developer's Signature(s)

Date 4-3-01 Reviewer RT Date 4/3/01

PHILIP ENVIRONMENTAL

Well Number MW 01

☐ Development ☑ Purging

WELL DEVELOPMENT AND PURGING DATA

Serial No. WDPD-

Page 1 of 1

Project Name EPFS Quarterly Samplings

Project Manager R Thompson

Project No. 62800107

Client Company El Paso Field Services

Phase.Task No. 0301

Site Name LAT 36 39 (LD 146)

Site Address Rural San Juan CO

Development Criteria

☑ (3) to 5 Casing Volumes of Water Removal

☑ Stabilization of Indicator Parameters

☐ Other

Water Volume Calculation

Initial Depth of Well (feet) 41.41

Initial Depth to Water (feet) 34.54

Height of Water Column in Well (feet) 6.87

Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well: Cubic Feet	Water Volume in Well: Gallons	Gallons to be Removed
Well Casing	6.87	4.48 x 3	13.44
Gravel Pack			
Drilling Fluids			
Total			13.44

Instruments

	Serial No. (If applicable)
☑ pH Meter	Hydac
☐ DO Monitor	
☑ Conductivity Meter	Hydac
☑ Temperature Meter	Hydac
☐ Other	

Methods of Development

Pump	Bailer
☐ Centrifugal	☑ Bottom Valve
☐ Submersible	☐ Double Check Valve
☐ Peristaltic	☐ Stainless-steel Kemmerer

☐ Other

Water Disposal KLTZ Separator Bloomfield NM.

Water Removal Data

Date	Time	Development Method: Pump	Development Method: Bailer	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons): Increment	Water Volume Removed (gallons): Cumulative	Product Volume Removed (gallons): Increment	Product Volume Removed (gallons): Cumulative	Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
02-12-01	1516		X				2.75	2.75			17	6.34	1400		Cloudy Grey Sheen petroleum odor
	1520		X				2.75	5.50			14.9	5.89	1220		" "
	1525		X				2.75	8.25			13.6	5.99	1160		" "
	1530		X				2.75	11			13.6	5.75	1160		" "
	1535		X				2.75	13.75			13.3	5.68	1140		No Change

Circle the date and time that the development criteria are met.

Comments SAmpled for BTEX 1600

Developer's Signature(s) Chris T. May Date 02-12-01 Reviewer RT Date 2/13/01

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **110011**
October 11, 2001

GOLDEN ENVIRONMENTAL MNGT.
906 SAN JUAN BLVD.
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELLY STREET
FARMINGTON, NM 87401

Lat 3B39

Project Name EPFS REMEDIATION PROJECT
Project Number 6169

Attention: LISA WINN/SCOTT POPE

On 10/02/01 Pinnacle Laboratories, Inc., (ADHS License No. AZ0592 pending), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (505)344-3777.

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: GOLDEN ENVIRONMENTAL MNGT.	PINNACLE ID	: 110011
PROJECT #	: 6169	DATE RECEIVED	: 10/02/01
PROJECT NAME	: EPFS REMEDIATION PROJECT	REPORT DATE	: 10/11/01

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
110011 - 01	146-0110-MW1	AQUEOUS	10/01/01

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : GOLDEN ENVIRONMENTAL MNGT. PINNACLE I.D.: 110011
PROJECT # : 6169
PROJECT NAME : EPFS REMEDIATION PROJECT

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	146-0110-MW1	AQUEOUS	10/01/01	NA	10/04/01	25

PARAMETER	DET. LIMIT	UNITS	146-0110-MW1
BENZENE	0.5	UG/L	< 13
TOLUENE	0.5	UG/L	< 13
ETHYLBENZENE	0.5	**UG/L**	**560**
TOTAL XYLENES	0.5	**UG/L**	**5000**

SURROGATE:
BROMOFLUOROBENZENE (%) 100
SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

EST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 110011
LANK I. D.	: 100401	DATE EXTRACTED	: NA
LIENT	: GOLDEN ENVIRONMENTAL MNGT.	DATE ANALYZED	: 10/04/01
ROJECT #	: 6169	SAMPLE MATRIX	: AQUEOUS
ROJECT NAME	: EPFS REMEDIATION PROJECT		

ARAMETER	UNITS	
ENZENE	UG/L	<0.5
OLUENE	UG/L	<0.5
THYLBENZENE	UG/L	<0.5
OTAL XYLENES	UG/L	<0.5
URROGATE:		
ROMOFLUOROBENZENE (%)		90
URROGATE LIMITS:	(80 - 120)	

H T NOTES:
/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

EST	: EPA 8021 MODIFIED		
MSMSD #	: 100401	PINNACLE I.D.	: 110011
CLIENT	: GOLDEN ENVIRONMENTAL MNGT.	DATE EXTRACTED	: NA
PROJECT #	: 6169	DATE ANALYZED	: 10/04/01
PROJECT NAME	: EPFS REMEDIATION PROJECT	SAMPLE MATRIX	: AQUEOUS
		UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	20.0	100	19.5	98	3	(80 - 120)	20
TOLUENE	<0.5	20.0	18.5	93	18.0	90	3	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	19.0	95	18.5	93	3	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	57.4	96	56.3	94	2	(80 - 120)	20

CHECKLIST NOTES:
N/A

$$\frac{\text{(Spike Sample Result - Sample Result)}}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{\text{(Sample Result - Duplicate Result)}}{\text{Average Result}} \times 100$$

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 10-1-01 PAGE: 1 OF 1

PLI Accession #: 11001

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PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: Lisa Winn

COMPANY: G.E.M.
ADDRESS: 906 San Juan Blvd. Suite D
Farmington NM. 87401
PHONE: (505) 566-9116
FAX: (505) 566-9120

BILL TO: Scott Pope
COMPANY: El Paso Field Services
ADDRESS: 604 Reilly AVE
Farmington N.M. 87401

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	NUMB. OF CONTAINERS
146-0110-MW 1	10-1-01	1445	H_2O	01	2

Petroleum Hydrocarbons (418.1) TRPH
(MOD.8015) Diesel/Direct Inject
(M8015) Gas/Purge & Trap
8021 (BTEX)/8015 (Gasoline) MTBE
8021 (BTEX) ☐ MTBE ☐ TMB ☐ PCE — X
8021 (TCL)
8021 (EDX)
8021 (HALO)
8021 (CUST)
504.1 EDB ☐ / DBCP ☐
8260 (TCL) Volatile Organics
8260 (Full) Volatile Organics
8260 (CUST) Volatile Organics
8260 (Landfill) Volatile Organics
Pesticides /PCB (608/8081/8082)
Herbicides (615/8151)
Base/Neutral/Acid Compounds GC/MS (625/8270)
Polynuclear Aromatics (610/8310/8270-SIMS)
General Chemistry:
Priority Pollutant Metals (13)
Target Analyte List Metals (23)
RCRA Metals (8)
RCRA Metals by TCLP (Method 1311)
Metals:

PROJECT INFORMATION

PROJ. NO.: GILC
PROJ. NAME: EPFS Remediation Project
P.O. NO.:
SHIPPED VIA:

SAMPLE RECEIPT

NO. CONTAINERS	2
CUSTODY SEALS	Y/N/NA
RECEIVED INTACT	Y
BLUE ICE/ICE	4.3°

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☑

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

LAT 313 39 (LD146)

RELINQUISHED BY: 1.

Signature: Time: 0930
Printed Name: Chris Meer Date: 10-2-01
Company:
See reverse side (Force Majeure)

RECEIVED BY: 1.

Signature: Time:
Printed Name: Date:
Company:

RELINQUISHED BY: 2.

Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY: (LAB) 2.

Signature: Time: 4:20
Printed Name: JACINTA TENORIO Date: 10/2
Pinnacle Laboratories Inc.

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **107027**
July 12, 2001

GOLDEN ENVIRONMENTAL MNGT.
906 SAN JUAN BLVD.
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELLY STREET
FARMINGTON, NM 87401

Project Name EPFS REMEDIATION PROJECT
Project Number 6169

Attention: LISA WINN/SCOTT POPE

On 07/06/01 Pinnacle Laboratories, Inc., (ADHS License No. AZ0592 pending), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (505)344-3777.

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: GOLDEN ENVIRONMENTAL MNGT.	PINNACLE ID	: 107027
PROJECT #	: 6169	DATE RECEIVED	: 07/06/01
PROJECT NAME	: EPFS REMEDIATION PROJECT	REPORT DATE	: 07/12/01

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
107027 - 01	146-0107-MW1	AQUEOUS	07/03/01

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : GOLDEN ENVIRONMENTAL MNGT. PINNACLE I.D.: 107027
PROJECT # : 6169
PROJECT NAME : EPFS REMEDIATION PROJECT

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	146-0107-MW1	AQUEOUS	07/03/01	NA	07/09/01	20

PARAMETER	DET. LIMIT	UNITS	146-0107-MW1
BENZENE	0.5	UG/L	< 0.5 (D1)
TOLUENE	0.5	**UG/L**	**2.3 (D1)**
ETHYLBENZENE	0.5	**UG/L**	**43**
TOTAL XYLENES	0.5	**UG/L**	**3500**

SURROGATE:
BROMOFLUOROBENZENE (%) 106
SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:
D1 = 1x dilution analyzed on 7/9/01.

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 107027
BLANK I. D.	: 070901	DATE EXTRACTED	: NA
CLIENT	: GOLDEN ENVIRONMENTAL MNGT.	DATE ANALYZED	: 07/09/01
PROJECT #	: 6169	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS REMEDIATION PROJECT		

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		94
SURROGATE LIMITS:	(80 - 120)	

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

TEST	: EPA 8021 MODIFIED		
MSMSD #	: 107026-01	PINNACLE I.D.	: 107027
CLIENT	: GOLDEN ENVIRONMENTAL MNGT.	DATE EXTRACTED	: NA
PROJECT #	: 6169	DATE ANALYZED	: 07/09/01
PROJECT NAME	: EPFS REMEDIATION PROJECT	SAMPLE MATRIX	: AQUEOUS
		UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	19.7	99	19.9	100	1	(80 - 120)	20
TOLUENE	<0.5	20.0	20.1	101	20.5	103	2	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.5	103	20.8	104	1	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	61.6	103	62.5	104	1	(80 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 2-3-01 PAGE: 1 OF 1

PLI Accession #: 107027

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: Lisa Winn

COMPANY: GEM
ADDRESS: 906 San Juan BLVD
Farmington N.M. 87401
PHONE: (505) 566-9116
FAX: (505) 566-9120

BILL TO: Scott Pope
COMPANY: El Paso Field Services
ADDRESS: 614 Reilly AVE.
Farmington N.M. 87401

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐ MTBE ☐ TMB ☐ PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐ / DBCP ☐	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides /PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:	NUMBER OF CONTAINERS
146-0107-MW 1	2-3-01	1430	H2O	01				X																					2

PROJECT INFORMATION

PROJ. NO.: 6169
PROJ. NAME: EPFS Remediation proj
P.O. NO.:
SHIPPED VIA:

SAMPLE RECEIPT

NO. CONTAINERS	2
CUSTODY SEALS	Y / N (NA)
RECEIVED INTACT	YES
BLUE ICE/ICE	2.3

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☑

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

LAT 313-39 (LD 146)

RELINQUISHED BY: 1.

Signature: [signature] Time: 0800
Printed Name: Chris A. Mercz Date: 7-6-01
Company:
See reverse side (Force Majeure)

RECEIVED BY: 1.

Signature: Time:
Printed Name: Date:
Company:

RELINQUISHED BY: 2.

Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY: (LAB) 2.

Signature: Francine Tanner Time: 1730
Printed Name: Francine Tanner Date: 7/6/01
Pinnacle Laboratories Inc.

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **104013**
April 12, 2001

PHILIP SERVICE CORPORATION
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELLY STREET
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: ROBERT THOMPSON/SCOTT POPE

On 04/04/01 Pinnacle Laboratories, Inc., (ADHS License No. AZ0592 pending), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (505)344-3777.

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: PHILIP SERVICE CORPORATION	PINNACLE ID	: 104013
PROJECT #	: 62800107	DATE RECEIVED	: 04/04/01
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 04/12/01

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
104013 - 01	146-0104-MW 1	AQUEOUS	04/03/01

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP SERVICE CORPORATION PINNACLE I.D.: 104013
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	146-0104-MW 1	AQUEOUS	04/03/01	NA	04/09/01	5

PARAMETER	DET. LIMIT	UNITS	146-0104-MW 1
BENZENE	0.5	**UG/L**	**22**
TOLUENE	0.5	**UG/L**	**12**
ETHYLBENZENE	0.5	**UG/L**	**560**
TOTAL XYLENES	0.5	**UG/L**	**4300(D50)**

SURROGATE:
BROMOFLUOROBENZENE (%) **
SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:
** = High surrogate recovery due to matrix interference.
(D50) = 50x dilution analyzed on 4/10/01.

PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 104013
BLANK I. D.	: 040901	DATE EXTRACTED	: NA
CLIENT	: PHILIP SERVICE CORPORATION	DATE ANALYZED	: 04/09/01
PROJECT #	: 62800107	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		96
SURROGATE LIMITS:	(80 - 120)	

CHEMIST NOTES:

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 104013
BLANK I. D.	: 041001	DATE EXTRACTED	: NA
CLIENT	: PHILIP SERVICE CORPORATION	DATE ANALYZED	: 04/10/01
PROJECT #	: 62800107	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		101
SURROGATE LIMITS:	(80 - 120)	

CHEMIST NOTES:

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

TEST	: EPA 8021 MODIFIED		
MSMSD #	: 104030-01	PINNACLE I.D.	: 104013
CLIENT	: PHILIP SERVICE CORPORATION	DATE EXTRACTED	: NA
PROJECT #	: 62800107	DATE ANALYZED	: 04/10/01
PROJECT NAME	: EPFS QUARTERLY SAMPLING	SAMPLE MATRIX	: AQUEOUS
		UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	20.3	102	19.8	99	2	(80 - 120)	20
TOLUENE	<0.5	20.0	20.8	104	20.0	100	4	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	21.8	109	20.9	105	4	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	60.6	101	57.0	95	6	(80 - 120)	20

MIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

PHILIP ENVIRONMENTAL

Chain of Custody Record

104013

4000 Monroe Road
Farmington, NM 87401

(505) 326-2262 Phone
(505) 326-2388 FAX

COC Serial No. C 2834

Project Name EpFS quarterly Sampling
Project Number 62900107 Phase . Task 0301 .
Samplers C. Maez
Laboratory Name PINNACLE
Location ALBQ N.M.

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX 8021				Lab ID#								Comments
146-0104-MW 1	4-3-01	1330	H_2O	2	X				01								LAT 36-39 LO 146

Relinquished by:

Signature	Date	Time
Chris A. Maez	4-4-01	0900

Received By:

Signature	Date	Time
Francine Jaramillo	4/4/01	1700

Samples Iced: ☑ Yes ☐ No

Preservatives (ONLY for Water Samples)

- ☐ Cyanide ..... Sodium hyroxide (NaOH)
- ☐ Volatile Organic Analysis ..... Hydrochloric acid (HCl)
- ☐ Metals ..... Nitric acid (HNO_3)
- ☐ TPH (418.1) ..... Sulfuric acid (H_2SO_4)
- ☑ Other (Specify) $HgCl_2$
- ☐ Other (Specify) _____

Carrier: Greyhound

Airbill No GLI 106919919

Shipping and Lab Notes:

Rec'd @ 5.3°C

PE-176 4/95

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **102069**
February 27, 2001

PHILIP ENVIRONMENTAL
4000 MONROE ROAD
FARMINGTON, NM 87401

EL PASO FIELD SERVICES
614 RIELLY STREET
FARMINGTON, NM 87401

Project Name EPFS QUARTERLY SAMPLING
Project Number 62800107

Attention: ROBERT THOMPSON/SCOTT POPE

On 02/16/01 Pinnacle Laboratories, Inc., (ADHS License No. AZ0592 pending), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

The scheduled reagent blank associated with this study did not run. However, clean samples validated the instrument in lieu of the reagent blank. The sample data is reported.

If you have any questions or comments, please do not hesitate to contact us at (505)344-3777.

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: PHILIP ENVIRONMENTAL	PINNACLE ID	: 102069
PROJECT #	: 62800107	DATE RECEIVED	: 02/16/01
PROJECT NAME	: EPFS QUARTERLY SAMPLING	REPORT DATE	: 02/27/01

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
102069 - 01	146-0201-MW01	AQUEOUS	02/12/01

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : PHILIP ENVIRONMENTAL
PROJECT # : 62800107
PROJECT NAME : EPFS QUARTERLY SAMPLING

PINNACLE I.D.: 102069

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	146-0201-MW01	AQUEOUS	02/12/01	NA	02/22/01	25

PARAMETER	DET. LIMIT	UNITS	146-0201-MW01
BENZENE	0.5	UG/L	< 13
TOLUENE	0.5	UG/L	< 13
ETHYLBENZENE	0.5	**UG/L**	**440**
TOTAL XYLENES	0.5	**UG/L**	**3800**

SURROGATE:
BROMOFLUOROBENZENE (%) 112
SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 102069
BLANK I. D.	: 022101-B	DATE EXTRACTED	: NA
CLIENT	: PHILIP ENVIRONMENTAL	DATE ANALYZED	: 02/21/01
PROJECT #	: 62800107	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: EPFS QUARTERLY SAMPLING		

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		101
SURROGATE LIMITS:	(80 - 120)	

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

TEST	: EPA 8021 MODIFIED		
MSMSD #	: 102067-01	PINNACLE I.D.	: 102069
CLIENT	: PHILIP ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 62800107	DATE ANALYZED	: 02/21/01
PROJECT NAME	: EPFS QUARTERLY SAMPLING	SAMPLE MATRIX	: AQUEOUS
		UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	19.1	96	19.3	97	1	(80 - 120)	20
TOLUENE	<0.5	20.0	18.0	90	17.9	90	1	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	19.4	97	19.7	99	2	(80 - 120)	20
TOTAL XYLENES	<0.5	60.0	57.5	96	57.5	96	0	(80 - 120)	20

CHEMIST NOTES:
N/A

$$\%\ \text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

102069

Chain of Custody Record

PHILIP ENVIRONMENTAL

4000 Monroe Road
Farmington, NM 87401
(505) 326-2262 Phone
(505) 326-2388 FAX

COC Serial No. C 2810

Project Name EDFS Quarterly Sampling
Project Number 62900107 Phase . Task 0301 .
Samplers C. McCoz
Laboratory Name PINNACLE
Location ALBQ N.M.

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: BTEX 8021	Comments
146-0201-MW01	02 12 01	1600	H2O	2	x	LAT 36 39 (LO 146) -01

Relinquished by:

Signature	Date	Time
Chris Ogm	02-15-01	1600

Received By:

Signature	Date	Time
[signature]	02.16.01	18:30

Samples Iced: ☑ Yes ☐ No

Preservatives (ONLY for Water Samples)

- ☐ Cyanide ..... Sodium hyroxide (NaOH)
- ☐ Volatile Organic Analysis ..... Hydrochloric acid (HCl)
- ☐ Metals ..... Nitric acid (HNO_3)
- ☐ TPH (418.1) ..... Sulfuric acid (H_2SO_4)
- ☐ Other (Specify) $HgCl_2$
- ☐ Other (Specify) _____

Carrier: Greyhound

Airbill No GLI 1606919464

Shipping and Lab Notes:

4.9°C

PE-176 4/95