

GW - 71-0

MONITORING REPORTS

DATE:

1996

January 16, 1997

Mr. Bill Olson
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505

JAN 17 1997

Dear Mr. Olson:

Please find enclosed reports on the following monitoring wells and waste water streams at the El Paso Natural Gas Co. Chaco Plant. These results are summarized on the attached tables.

- Tab 1 Semi-Annual analyses for monitoring wells 1 and 8
- Tab 2 Annual analysis for all other monitoring wells
- Tab 3 Annual analysis for the non-contact waste water discharge.

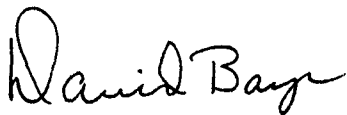
We have been unable to collect a sample from monitoring well number 1. That well has as yet never collected any liquids. Samples for well number 8 have been below any regulated levels for BTEX for the past two sampling periods.

The analysis for monitoring wells 2, 3, 4, 5, 6, and 7 did not indicate any abnormally high reading for any analyte.

The June 24 sample of the 20 inch waste water discharge line did show a chromium level slightly above New Mexico Water Quality standards. The chromium level in that sample was 0.132 milligrams per liter.

If you need any additional information for this reporting period, please call me at (505) 599-2256.

Sincerely yours,



David Bays
Sr. Environmental Scientist

cc: Denny Foust - NMOCD - Aztec
Gerry Hoover
S. D. Miller/R. D. Cosby/J. S. Sterrett/Chaco Regulatory File

Chaco Plant Groundwater Monitoring Well Results 1996

All Results Expressed as Micrograms/Liter (ppb)

Well 1	No Liquids
--------	------------

Moni

Moni

Benz

Tolu

Ethy

Xyl

Cad

Ch

Me

To

To

Well 8	3/12/96	5/29/96	7/2/96	9/9/96	11/1/96
	10.0	6.62	<1.0	<1.0	<1.0
	<1.0	<1.0	<1.0	<1.0	<1.0
	<1.0	<1.0	<1.0	<1.0	<1.0
	<3.0	<3.0	<3.0	<3.0	<3.0
	<0.0005	NA ₁	NA	<0.0002	NA
	0.022	NA	NA	<.0057	NA
	<0.0001	NA	NA	<0.002	NA
halenes	75	NA	NA	ND ₂	NA
pyrenes	<0.3	NA	NA	ND	NA

polyzed

2 - None Detected

**All Chemical Results Expressed as Milligrams/Liter (ppm)
pH Expressed in Standard Units (0 - 14 Scale)
Conductivity Expressed as Micromhos/Centimeter**

[illegible]

El Paso Field Services Co.

Chaco Plant

Monitoring Wells 1 and 8

Sampled March 12, 1996

EPFS

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	960263
SITE NAME:	Chaco Plant
SAMPLE SITE:	Monitor Well MW-8
SAMPLE DATE:	03/12/96
SAMPLE TIME (Hrs):	1154
SAMPLED BY:	D. Bird
DATE OF BTEX ANALYSIS:	03/13/96
SAMPLE TYPE:	Water

REMARKS: _____

EPA Method 8020 (BTEX) RESULTS

PARAMETER	RESULT PPB	QUALIFIER	WQCC LIMIT PPB
BENZENE	10.0		10
TOLUENE	< 1.0		740
ETHYL BENZENE	< 1.0		750
TOTAL XYLENES	< 3.0		620
SURROGATE % RECOVERY	95.2	Allowed Range 80 to 120 %	

NOTES:

Approved By: *John F. Fisher*

Date: 3/22/96

EPFS

EL PASO FIELD SERVICES

QUALITY CONTROL REPORT EPA METHOD 8020 - BTEX

Samples: 960263

QA/QC for 03/13/96 Sample Set

LABORATORY CALIBRATION CHECKS / LABORATORY CONTROL SAMPLES:

SAMPLE NUMBER ICV LA-52589 50 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
					RANGE	
Benzene	Standard	50.0	45.4	90.8	75 - 125 %	X
Toluene	Standard	50.0	45.6	91.2	75 - 125 %	X
Ethylbenzene	Standard	50.0	45.8	91.6	75 - 125 %	X
m & p - Xylene	Standard	100	92.8	92.8	75 - 125 %	X
o - Xylene	Standard	50.0	45.7	91.4	75 - 125 %	X
SAMPLE NUMBER LCS LA-45476 25 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
					RANGE	
Benzene	Standard	25.0	22.9	91.6	39 - 150	X
Toluene	Standard	25.0	22.6	90.4	46 - 148	X
Ethylbenzene	Standard	25.0	22.5	90.0	32 - 160	X
m & p - Xylene	Standard	50	45.9	91.8	Not Given	X
o - Xylene	Standard	25.0	22.6	90.4	Not Given	X
SAMPLE NUMBER CCV LA-52589 50 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
					RANGE	
Benzene	Standard	50.0	45.8	91.6	75 - 125 %	X
Toluene	Standard	50.0	45.7	91.4	75 - 125 %	X
Ethylbenzene	Standard	50.0	45.8	91.6	75 - 125 %	X
m & p - Xylene	Standard	100	91.4	91.4	75 - 125 %	X
o - Xylene	Standard	50.0	45.7	91.4	75 - 125 %	X
SAMPLE NUMBER CCV LA-52589 50 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
					RANGE	
Benzene	Standard	50.0		0.0	75 - 125 %	
Toluene	Standard	50.0		0.0	75 - 125 %	
Ethylbenzene	Standard	50.0		0.0	75 - 125 %	
m & p - Xylene	Standard	100		0.0	75 - 125 %	
o - Xylene	Standard	50.0		0.0	75 - 125 %	

Narrative: Acceptable.

EL PASO FIELD SERVICES LAB
QUALITY CONTROL REPORT
EPA METHOD 8020 - BTEX
Samples: 960263

LABORATORY DUPLICATES:

SAMPLE ID	TYPE	SAMPLE RESULT PPB	DUPLICATE RESULT PPB	RPD	ACCEPTABLE	
					YES	NO
960263					RANGE	
Benzene	Matrix Duplicate	10.0	10.4	3	+/- 20 %	X
Toluene	Matrix Duplicate	<1.0	<1.0	0	+/- 20 %	X
Ethylbenzene	Matrix Duplicate	<1.0	<1.0	0	+/- 20 %	X
m & p - Xylene	Matrix Duplicate	<2.0	<2.0	0	+/- 20 %	X
o - Xylene	Matrix Duplicate	<1.0	<1.0	0	+/- 20 %	X

Narrative: Acceptable.

LABORATORY SPIKES:

SAMPLE ID	SPIKE ADDED PPB	SAMPLE RESULT PPB	SPIKE SAMPLE RESULT PPB	%R	ACCEPTABLE	
					YES	NO
2nd Analysis 960263					RANGE	
Benzene	50	10.00	56.2	92.4	75 - 125 %	X
Toluene	50	<1.0	45.8	91.6	75 - 125 %	X
Ethylbenzene	50	<1.0	46.4	92.8	75 - 125 %	X
m & p - Xylene	100	<2.0	91.9	91.9	75 - 125 %	X
o - Xylene	50	<1.0	45.8	91.6	75 - 125 %	X

Narrative: Acceptable.

ADDITIONAL ANALYTICAL BLANKS:

AUTO BLANK	SOURCE	PPB	STATUS
Benzene	Boiled Water	<1.0	ACCEPTABLE
Toluene	Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Boiled Water	<3.0	ACCEPTABLE

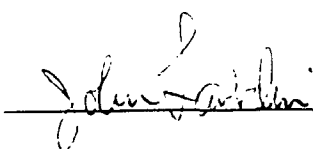
Narrative: Acceptable.

SOIL VIAL BLANK	SOURCE Lot M12151	PPB (Analyzed with this set)	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

CONTAMINATION CARRYOVER CHECK	SOURCE	PPB (None analyzed with this set)	STATUS
Benzene	Vial + Boiled Water	<1.0	NA
Toluene	Vial + Boiled Water	<1.0	NA
Ethylbenzene	Vial + Boiled Water	<1.0	NA
Total Xylenes	Vial + Boiled Water	<3.0	NA

Narrative:

Approved By: 

Date: 13-Mar-96

EPFS

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	960263
LOCATION:	Chaco Plant
SAMPLE DATE:	03/12/96
SAMPLE TIME (Hrs):	1154
SAMPLED BY:	D. Bird
SAMPLE POINT:	Monitor Well MW-8

REMARKS: _____

RESULTS

PARAMETER	RESULT (mg/L)	NM WQCC LIMIT (mg/L)
CADMIUM	< 0.0005	0.010
CHROMIUM	0.022 *	0.050
MERCURY	< 0.0001	0.002

NOTE: The sample results have been corrected for volume adjustment associated with Method 3015.

* This analyte was also detected in the associated Method Blank at a level corresponding to 0.004 mg/L.

References:

Method 3015, Microwave Assisted Acid Digestion of Aqueous Samples and Extracts, Test Methods for Evaluating Solid Waste, SW-846, Sept., 1994.
Method 7061A, Arsenic (Atomic Absorption, Gaseous Hydride), Test Methods for Evaluating Solid Waste SW-846, USEPA, July, 1992.
Method 7080A, Barium (Atomic Absorption, Direct Aspiration), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept, 1994.
Method 7131, Cadmium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept, 1986.
Method 7191, Chromium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept, 1986.
Method 7421, Lead (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept, 1986.
Method 245.5, Mercury (Automated Cold Vapor Technique), Methods for the Determination of Metals in Environmental Samples, EPA600/4-91/010, USEPA, June, 1991.
Method 7741A, Selenium (Atomic Absorption, Gaseous Hydride), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept, 1994.
Method 7761, Silver (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, July, 1992.

Reported By: mh

Approved By: _____

John-Lambert

Date: 4/8/96

EPFS

EL PASO FIELD SERVICES

QUALITY CONTROL REPORT

Sample ID: 960263 & 960264
 Date Sampled: 03/12 - 03/13/96
 Location: Chaco / Blanco

Date Reported: 04/05/96

TOTAL METALS

LABORATORY CONTROL SAMPLE

Analyte	Found Value (µg/L)	Known Value (µg/L)	% Recovery
Arsenic	14.3	13.5	106%
Barium	278	315	88.3%
Cadmium	3.18	2.90	110%
Chromium	7.20	6.70	107%
Lead	37.3	39.5	94.5%
Mercury	1.78	1.75	102%
Selenium	29.8	31.0	96.2%
Silver	3.56	3.06	116%

DUPLICATE ANALYSIS (µg/L)

Analyte	Original Sample Result	Duplicate Sample Result	% RPD
Arsenic	ND	ND	NA
Barium	ND	ND	NA
Cadmium	ND	ND	NA
Chromium	5.21	5.23	0.4%
Lead	ND	ND	NA
Mercury	ND	ND	NA
Selenium	ND	ND	NA
Silver	ND	ND	NA

SPIKE ANALYSIS (µg/L)

Analyte	Original Sample Result	Spike Sample Result	Spike Added	Recovery Percent
Arsenic	ND	13.1	9.60	131%
Barium	47	1070	1000	107%
Cadmium	ND	8.92	9.60	93.0%
Chromium	5.21	53.3	45.5	107%
Lead	ND	48.0	45.5	96.0%
Mercury	ND	2.11	2.00	105%
Selenium	ND	9.93	9.60	97.0%
Silver	ND	47.1	45.5	103%

METHOD BLANK

Analyte	Found Value (µg/L)	Detection Level (µg/L)
Arsenic	ND	1
Barium	ND	500
Cadmium	ND	0.5
Chromium	4.11*	1
Lead	ND	4
Mercury	ND	0.1
Selenium	ND	1
Silver	ND	0.4

ND: Not Detected at stated detection level.

NA: Not Applicable.

* This analyte was traced to the nitric acid used for sample digestion.

Reported By: mh

Approved By:

John Fowler

Date: 4/8/96

American Environmental Network, Inc.

ATI I.D. 603332



April 3, 1996

El Paso Natural Gas Company
P.O. Box 4990
Farmington, NM 87499

Project Name/Number: CHACO PLT. MW-8

/ PFH'S

Attention: John Lambdin

On 03/13/96, American Environmental Network (NM), Inc., (ADHS License No. AZ0015), (formerly ATI-NM), received a request to analyze **aqueous** sample(s). The sample(s) 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.

All analyses were performed by American Environmental Network (FL), Inc., 11 East Olive Road, Pensacola, FL.

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

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:mc

Enclosure

American Environmental Network, Inc.

CLIENT : EL PASO NATURAL GAS CO. DATE RECEIVED : 03/13/96
PROJECT # : (NONE)
PROJECT NAME : CHACO PLT. MW-8 REPORT DATE : 04/03/96

ATI ID: 603332

	AEN ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	603332-01	960263	AQUEOUS	03/12/96

*Chaco Plant
mw - 08*



---TOTALS---

<u>MATRIX</u>	<u>#SAMPLES</u>
AQUEOUS	1

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.



"FINAL REPORT FORMAT - SINGLE"

Access: 603218
 Client: AMERICAN ENVIRONMENTAL NETWORK OF NEW MEXICO
 Project Number: 603332
 Project Name: EPN
 Test Station: CHACO PLT. MW-8
 Analytical Method: POLYNUCLEAR AROMATICS BY 8310
 Extraction Method: 8310 / SW 846, 3rd Edition, September 1986 and Revision 1, July 1992
 Matrix Method: 8310 / SW-846, 3rd Edition, September 1986 and Revision 1, July 1992
 QC Level: WATER
 II

Lab ID: 001
 Client Sample Id: 603332-01
 Sample Date/Time: 12-MAR-96 1154
 Received Date: 14-MAR-96
 Batch: 0050
 Blank: Dry Weight %: N/A
 Extraction Date: 14-MAR-96
 Analysis Date: 19-MAR-96

Param	Units:	Results:	Rpt Lmts:	Q:
ACENAPHTHENE	UG/L	14	10	
ANTHRACENE	UG/L	19	10	
BENZOPHANTHRENE	UG/L	ND	1.0	
BENZOPHANTHRENE	UG/L	ND	0.50	
BENZOPHANTHRENE	UG/L	ND	0.3	
BENZOPHANTHRENE	UG/L	ND	1.0	
BENZOPHANTHRENE	UG/L	ND	1.0	
CHRYSENE	UG/L	ND	0.50	
DIBENZOPHANTHRENE	UG/L	ND	0.50	
FLUORANTHENE	UG/L	ND	1.0	
FLUORANTHENE	UG/L	ND	1.0	
INDENOPHANTHRENE	UG/L	3	1.0	
NAPHTHENE	UG/L	ND	1.0	
PHENANTHRENE	UG/L	28	5.0	
PYRENE	UG/L	0.61	0.50	
1-METHYLNAPHTHALENE	UG/L	ND	0.50	
2-METHYLNAPHTHALENE	UG/L	38	10	
2-CHLORONAPHTHALENE	UG/L	9	10	
ANALYTICAL ANTHRACENE	%REC/SURR	80	23-138	
	INITIALS	LJT		

Comments:

PAH'S WQCC Limits

TOTAL Naphthalenes + mono. Aro/naphthalenes = 30 UG/L
 = 0.7 UG/L

BENZO-A-PYRENE

Sample # 960263 Total Naph + = 75 UG/L Fails WQCC

BENZO-A-PYRENE = < 0.3 UG/L PASSES WQCC

JR 4/8/96

"Method Report Summary"

Accession Number: 603218
Client: AMERICAN ENVIRONMENTAL NETWORK OF NEW MEXICO
Project Number: 603332
Project Name: EPN
Project Location: CHACO PLT. MW-8
Test: POLYNUCLEAR AROMATICS BY 8310

Client Sample Id:	Parameter:	Unit:	Result:
603332-01	ACENAPHTHENE	UG/L	14
	ACENAPHTHYLENE	UG/L	18
	FLUORENE	UG/L	3
	NAPHTHALENE	UG/L	28
	PHENANTHRENE	UG/L	0.61
	1-METHYLNAPHTHALENE	UG/L	38
	2-METHYLNAPHTHALENE	UG/L	9

American Environmental Network, Inc.

"QC Report"

Title: Water Blank
Batch: PAW050
Analysis Method: 8310 / SW 846, 3rd Edition, September 1986 and Revision 1, July 1992
Extraction Method: 3510 / SW-846, 3rd Edition, September 1986 and Revision 1, July 1992

Blank Id: B Date Analyzed: 19-MAR-96 Date Extracted: 14-MAR-96

Parameters:	Units:	Results:	Reporting Limits:
ACENAPHTHENE	UG/L	ND	1
ACENAPHTHYLENE	UG/L	ND	1
ANTHRACENE	UG/L	ND	1
BENZO (a) ANTHRACENE	UG/L	ND	1
BENZO (a) PYRENE	UG/L	ND	1
BENZO (b) FLUORANTHENE	UG/L	ND	1
BENZO (g, h, i) PERYLENE	UG/L	ND	1
BENZO (k) FLUORANTHENE	UG/L	ND	1
CHRYSENE	UG/L	ND	1
DIBENZO (a, h) ANTHRACENE	UG/L	ND	1
FLUORANTHENE	UG/L	ND	1
FLUORENE	UG/L	ND	1
INDENO (1, 2, 3-cd) PYRENE	UG/L	ND	1
NAPHTHALENE	UG/L	ND	1
PHENANTHRENE	UG/L	ND	1
PYRENE	UG/L	ND	1
1-METHYLNAPHTHALENE	UG/L	ND	1
2-METHYLNAPHTHALENE	UG/L	ND	1
2-CHLOROANTHRACENE	%REC/SURR	83	28-138
ANALYST	INITIALS	LJT	

Comments:

Healy
4/5/96

American Environmental Network, Inc.

"QC Report"

Title: Water Reagent
Batch: PAW050
Analysis Method: 8310 / SW 846, 3rd Edition, September 1986 and Revision 1, July 1992
Extraction Method: 3510 / SW-846, 3rd Edition, September 1986 and Revision 1, July 1992

RS Date Analyzed: 16-MAR-96
RSD Date Analyzed: 16-MAR-96

RS Date Extracted: 13-MAR-96
RSD Date Extracted: 13-MAR-96

Parameters:	Spike Added	Sample Conc	RS Conc	RS %Rec	RSD Conc	RSD %Rec	RPD	RPD Lmts	Rec Lmts
ACENAPHTHYLENE	10.0	<1	8.4	84	8.7	87	4	46	46-110
BENZO(k) FLUORANTHENE	10.0	<1	10.4	104	10.1	101	3	30	58-128
CHRYSENE	10.0	<1	10.4	104	10.0	100	4	29	62-129
PHENANTHRENE	10.0	<1	9.8	98	9.7	97	1	28	61-116
PYRENE	10.0	<1	9.5	95	9.2	92	3	26	62-120
Surrogates:									
2-CHLOROANTHRACENE				100		99			28-138

Comments:

Notes:

N/S = NOT SUBMITTED N/A = NOT APPLICABLE D = DILUTED OUT
UG/L = PARTS PER BILLION. < = LESS THAN REPORTING LIMIT.
* = VALUES OUTSIDE OF QUALITY CONTROL LIMITS.
SOURCES FOR CONTROL LIMITS ARE INTERNAL LABORATORY QUALITY ASSURANCE
PROGRAM AND REFERENCED METHOD.

Accepted
JH
12/96

"QC Report"

Title: Water Matrix
 Batch: PAW050
 Analysis Method: 8310 / SW 846, 3rd Edition, September 1986 and Revision 1, July 1992
 Extraction Method: 3510 / SW-846, 3rd Edition, September 1986 and Revision 1, July 1992

Dry Weight %: N/A MS Date Analyzed: 22-MAR-96 MS Date Extracted: 14-MAR-96
 Sample Spiked: 603218-1 MSD Date Analyzed: 22-MAR-96 MSD Date Extracted: 14-MAR-96

Parameters:	Spike Added	Sample Conc	MS Conc	MS %Rec	MSD Conc	MSD %Rec	RPD	RPD Lmts	Rec Lmts
ACENAPHTHYLENE	10.0	18	17.0	-10*	18.0	0*	200*42		14-135
BENZO(k) FLUORANTHENE	10.0	<1	7.7	77	8.0	80	±	58	25-142
CHRYSENE	10.0	<1	8.2	82	8.3	83	±	51	3-176
PHENANTHRENE	10.0	<1	8.0	80	7.9	79	±	55	27-146
PYRENE	10.0	<1	7.3	73	7.3	73	0	47	15-157

Surrogates:
 2-CHLOROANTHRACENE 88 89 28-138

Comments:
 MATRIX SPIKE/MATRIX SPIKE DUPLICATE HAD RECOVERY(S) AND/OR
 RPD(S) OUTSIDE ACCEPTANCE LIMITS DUE TO MATRIX INTERFERENCE.
 REFER TO REAGENT SPIKE/REAGENT SPIKE DUPLICATE DATA.

Notes:
 N/S = NOT SUBMITTED N/A = NOT APPLICABLE D = DILUTED OUT
 UG/L = PARTS PER BILLION. < = LESS THAN REPORTING LIMIT.
 * = VALUES OUTSIDE OF QUALITY CONTROL LIMITS.
 SOURCES FOR CONTROL LIMITS ARE INTERNAL LABORATORY QUALITY ASSURANCE
 PROGRAM AND REFERENCED METHOD.

Acceptable with
 rejection to Acetylation
 JF
 4/18/96

American Environmental Network, Inc.

Common notation for Organic reporting

N/S = NOT SUBMITTED
N/A = NOT APPLICABLE
D = DILUTED OUT
UG = MICROGRAMS
UG/L = PARTS PER BILLION.
UG/KG = PARTS PER BILLION.
MG/M3 = MILLIGRAM PER CUBIC METER.
PPMV = PART PER MILLION BY VOLUME.
MG/KG = PARTS PER MILLION.
MG/L = PARTS PER MILLION.
< = LESS THAN DETECTION LIMIT.
* = VALUES OUTSIDE OF QUALITY CONTROL LIMITS

SOURCES FOR CONTROL LIMITS ARE INTERNAL LABORATORY QUALITY ASSURANCE PROGRAM AND REFERENCED METHOD.

ORGANIC SOILS ARE REPORTED ON A DRYWEIGHT BASIS.

ND = NOT DETECTED ABOVE REPORTING LIMIT.

RPT LIMIT = REPORTING LIMITS BASED ON METHOD DETECTION LIMIT STUDIES.

RPD = RELATIVE PERCENT DIFFERENCE (OR DEVIATION)

ATI/GC/FID

ATI GAS CHROMATOGRAPHIC METHOD EMPLOYING DIRECT INJECTION ON COLUMN WITH FLAME IONIZATION DETECTOR (FID).

ATI/GC/FIX

ATI GAS CHROMATOGRAPHIC METHOD FOR ANALYSIS OF FIXED GASES EMPLOYING DIRECT INJECTION ON COLUMN WITH THERMAL CONDUCTIVITY DETECTOR (TCD) AND FLAME IONIZATION DETECTOR (FID).

ATI/GC/FPD

ATI GAS CHROMATOGRAPHIC METHOD EMPLOYING DIRECT INJECTION ON COLUMN WITH FLAME PHOTOMETRIC DETECTOR (FPD) IN SULFUR-SPECIFIC MODE.

ATI/GC/PID

ATI GAS CHROMATOGRAPHIC METHOD EMPLOYING DIRECT INJECTION ON COLUMN WITH PHOTOIONIZATION DETECTOR (PID).

ATI/GC/TCD

ATI GAS CHROMATOGRAPHIC METHOD EMPLOYING DIRECT INJECTION ON COLUMN WITH THERMAL CONDUCTIVITY DETECTOR (TCD).

LJT = LISA THOMASON
SW = STEVE WILHITE
KW = KAREN WADSWORTH
PL = PAUL LESCHENSKY
RW = ROBERT WOLFE
BV = BEN VAUGHN
KS = KENDALL SMITH
KK = KERRY KUST
DWB = DAVID W. BOWERS
RP = ROB PEREZ



CHAIN OF CUSTODY

DATE: 3-12-96 PAGE 1 OF 1

ATI LAB I.D. # 603332

PROJECT MANAGER: JOHN CAMBON

COMPANY: BL PARS FIELD SERVICES
ADDRESS: P.O. BOX 44990
FARMINGTON, N.M. 87499
PHONE: 505-599-2144
FAX: 505-599-2261

BILL TO: SAME AS ABOVE
COMPANY:
ADDRESS:

SAMPLE ID	DATE	TIME	MATRIX	LAB ID
960263	3-12-96	1154	WATER	-01

PROJECT INFORMATION

PROJ. NO.: 2

PROJ. NAME: CHACO PRT. MW-3

P.O. NO.: 603332

SHIPPED VIA: AIR EXPRESS

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒ 2 WEEK

Comments: CHARGE: 6000-615-515
SEND RESULTS TO JOHN CAMBON
AT THE ABOVE ADDRESS.

ANALYSIS REQUEST										NUMBER OF CONTAINERS	
Petroleum Hydrocarbons (418.1)											
(MOD 8015) Gas/Diesel											
Diesel/Gasoline/BTXE/MTBE (MOD 8015/8020)											
BTXE/MTBE (8020)											
Chlorinated Hydrocarbons (601/8010)											
Aromatic Hydrocarbons (602/8020)											
SDWA Volatiles (502.1/503.1, 502.2 Reg. & Unreg.)											
Pesticides/PCB (608/8080)											
Herbicides (615/8150)											
Base/Neutral/Acid Compounds GC/MS (625/8270)											
Volatile Organics GC/MS (624/8240)											
Polynuclear Aromatics (610/8310)											
SDWA Primary Standards - Arizona											
SDWA Secondary Standards - Arizona											
SDWA Primary Standards - Federal											
SDWA Secondary Standards - Federal											
The 13 Priority Pollutant Metals											
RCRA Metals by Total Digestion											
RCRA Metals by TCLP (1311)											

SAMPLED & RELINQUISHED BY: 1.		RELINQUISHED BY: 2.		RELINQUISHED BY: 3.	
Signature: DENNIS BIRD	Time: 1:57	Signature:	Time:	Signature:	Time:
Printed Name: DENNIS BIRD	Date: 3-12-96	Printed Name:	Date:	Printed Name:	Date:
Company: BL PARS FIELD SERVICE	Phone: 505-599-2144	Company:		Company:	

RECEIVED BY: 1.		RECEIVED BY: 2.		RECEIVED BY: 3.	
Signature:	Time:	Signature:	Time:	Signature:	Time:
Printed Name:	Date:	Printed Name:	Date:	Printed Name:	Date:
Company:		Company:		Company:	

Interlab Chain of Custody

JETWORK PROJECT MANAGER: KIMBERLY D. MCNEILL

COMPANY: Analytical Technologies of New Mexico, Inc.
ADDRESS: 2709-D Pan American Freeway, NE
Albuquerque, NM 87107

CLIENT PROJECT MANAGER: Kim McNeill

[illegible]

ANALYSIS REQUEST

[illegible]

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJECT NUMBER: 60333Z		TOTAL NUMBER OF CONTAINERS	
PROJECT NAME: Chaco FLT. : EPN		CHARACTERISTICS	
QC LEVEL: STD IV		INTACT?	
QC REQUIRED: MS MSD BLANK		RECEIVED GOOD COND./GOLD	
TAT: STANDARD RUSH		LAB NUMBER	

Two#km 1163

* Benzo(a) pyrene needs to be
.3ppb detection limit

SPECIAL CERTIFICATION REQUIRED: ☐ YES ☐ NO

SAMPLES SENT TO:		RELINQUISHED BY:	1.	RELINQUISHED BY:
SAN DIEGO		Signature:	<i>Andrew Parker</i>	Time: 1700
FT. COLLINS		Printed Name:	<i>Andrew Parker</i>	Date: 3/13
HILTON	X	Analytical Technologies of New Mexico, Inc. Albuquerque		
PENSACOLA		RECEIVED BY: 1.		
PORTLAND		Signature:	<i>Robt Espen</i>	Time: 0930
PHOENIX		Printed Name:	<i>R. ELSPERMAN</i>	Date: 3/14/96
		Company:	AEN-FL	
		RECEIVED BY: (LAB) 2.		
		Signature:		Time:
		Printed Name:		Date:
		Company:		

El Paso Field Services Co.

Chaco Plant

Monitoring Wells 1 and 8

Sampled May 29, 1996



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY

ANALYTICAL REPORT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	960492
CODE:	NA
NAME:	Chaco Plant
LOCATION SITE:	Monitor Well MW-08
SAMPLE DATE:	05/29/96
SAMPLE TIME (Hrs):	1420
ANALYZED BY:	J. Lambdin
DATE OF BTEX ANALYSIS:	05/30/96
SAMPLE TYPE:	Water

REMARKS:

EPA Method 8020 (BTEX) RESULTS

PARAMETER	RESULT PPB	QUALIFIER	WQCC LIMIT PPB
BENZENE	6.62		10
TOLUENE	<1.0		740
ETHYL BENZENE	<1.0		750
TOTAL XYLENES	<3.0		620
PROXIMATE % RECOVERY	98.1	Allowed Range 80 to 120 %	

NOTES:

Reported By

mh

Approved By:

J. Lambdin

Date:

6/5/96

EPFS

EL PASO FIELD SERVICES

QUALITY CONTROL REPORT
EPA METHOD 8020 - BTEX

Samples: 960479 through 960487, and 960492

QA/QC for 05/29/96 Sample Set

LABORATORY CALIBRATION CHECKS / LABORATORY CONTROL SAMPLES:

SAMPLE NUMBER	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
ICV LA-52589 50 PPB					RANGE	
Benzene	Standard	50.0	48.5	97.0	75 - 125 %	X
Toluene	Standard	50.0	48.5	97.0	75 - 125 %	X
Ethylbenzene	Standard	50.0	48.4	96.8	75 - 125 %	X
m & p - Xylene	Standard	100	97.1	97.1	75 - 125 %	X
o - Xylene	Standard	50.0	48.1	96.2	75 - 125 %	X
LCS LA-45476 25 PPB					RANGE	
Benzene	Standard	25.0	24.6	98.4	39 - 150	X
Toluene	Standard	25.0	24.6	98.4	46 - 148	X
Ethylbenzene	Standard	25.0	24.5	98.0	32 - 160	X
m & p - Xylene	Standard	50	49.5	99.0	Not Given	X
o - Xylene	Standard	25.0	24.6	98.4	Not Given	X
CCV LA-52589 50 PPB					RANGE	
Benzene	Standard	50.0	50.1	100	75 - 125 %	X
Toluene	Standard	50.0	50.1	100	75 - 125 %	X
Ethylbenzene	Standard	50.0	50.3	101	75 - 125 %	X
m & p - Xylene	Standard	100	99.9	99.9	75 - 125 %	X
o - Xylene	Standard	50.0	50.2	100	75 - 125 %	X
CCV LA-52589 50 PPB					RANGE	
Benzene	Standard	50.0	50.7	101	75 - 125 %	X
Toluene	Standard	50.0	50.6	101	75 - 125 %	X
Ethylbenzene	Standard	50.0	50.5	101	75 - 125 %	X
m & p - Xylene	Standard	100	99.7	99.7	75 - 125 %	X
o - Xylene	Standard	50.0	50.3	101	75 - 125 %	X

narrative: Acceptable.

EL PASO FIELD SERVICES LAB

QUALITY CONTROL REPORT

EPA METHOD 8020 - BTEX

Samples: 960479 through 960487, and 960492

LABORATORY DUPLICATES:

SAMPLE ID	TYPE	SAMPLE RESULT PPB	DUPLICATE RESULT PPB	RPD	ACCEPTABLE	
					YES	NO
960480					RANGE	
Benzene	Matrix Duplicate	1.79	1.27	34	+/- 20 %	NA
Toluene	Matrix Duplicate	32.3	30.8	5	+/- 20 %	X
Ethylbenzene	Matrix Duplicate	32.3	32.6	1	+/- 20 %	X
m & p - Xylene	Matrix Duplicate	235	235	0	+/- 20 %	X
o - Xylene	Matrix Duplicate	63.5	64.0	1	+/- 20 %	X

Narrative: Benzene results are <5X MDL.

LABORATORY SPIKES:

SAMPLE ID	SPIKE ADDED PPB	SAMPLE RESULT PPB	SPIKE SAMPLE RESULT PPB	XR	ACCEPTABLE	
					YES	NO
2nd Analysis 960480					RANGE	
Benzene	50	1.79	50.4	97	75 - 125 %	X
Toluene	50	32.3	86.4	108.2	75 - 125 %	X
Ethylbenzene	50	32.3	80.6	96.6	75 - 125 %	X
m & p - Xylene	100	235	317	82.0	75 - 125 %	X
o - Xylene	50	63.5	109	91.0	75 - 125 %	X

Narrative: The spiked sample result for m & p - xylenes exceeded the calibration range.

ADDITIONAL ANALYTICAL BLANKS:

AUTO BLANK	SOURCE	PPB	STATUS
Benzene	Boiled Water	<1.0	ACCEPTABLE
Toluene	Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

SOIL VIAL BLANK	SOURCE	PPB	STATUS
	Lot MB1461	(Analyzed with this set)	
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

CONTAMINATION CARRYOVER CHECK	SOURCE	PPB	STATUS
		(Two analyzed with this set)	
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

Reported By: mh

Approved By: John Lankila

Date: 6/7/96

QW0629.XLS



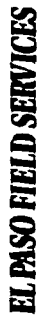
CHAIN OF CUSTODY RECORD

Project No.	Project Name	Requested Analysis			Contract Laboratory
Samplers (Signature)		Date	Receiving Temp. (°F)		
Lab ID	Date	Time	Matrix	Sample Number	
56946	5/29/06	1420	Water	960492	
56946	5/29/06	---	Water	TRIP BLANK	
Remarks: Monitor Up/1 MW-08 TRIP BLANK					
Intact?					
Chain of Custody Seals					
Total No. of Containers					
Composite or Grab					
See Attached					
BTEX					
Remarks					

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
<i>[Signature]</i>	5/29/06 1655						
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks:	Date/Time		
		LAG	5/29/06 1655				
Results & Invoices to:				Date Results Reported / by: (Signature)			



Date_____



Well Number 10-01

Site Name CHACO PLANT

Meter Code

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) 25.15'
Initial Depth to Water (feet) 25.15' - 25.00'
Height of Water Column in Well (feet) 0.15' 5/21/90

Diameter (inches): Well _____ Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing			
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☐ pH Meter
☐ DO Monitor
☐ Conductivity Meter
☐ Temperature Meter
☐ Other _____

Water Disposal

21/11

Water Removal Data

[illegible]

Comments: Not enough water in the well to sample or pump

Developer's Signature

Date 5/29/96 Reviewer _____

Date _____

El Paso Field Services Co.

Chaco Plant

Monitoring Wells 1 and 8

Sampled July 2, 1996

EPFS

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	960578
SITE NAME:	Chaco Plant
SAMPLE SITE:	Monitor Well MW-8
SAMPLE DATE:	07/02/96
SAMPLE TIME (Hrs):	1114
SAMPLED BY:	D. Bird
DATE OF BTEX ANALYSIS:	07/03/96
SAMPLE TYPE:	Water

REMARKS: _____

EPA Method 8020 (BTEX) RESULTS

PARAMETER	RESULT PPB	QUALIFIER	WQCC LIMIT PPB
BENZENE	<1.0		10
TOLUENE	<1.0		740
ETHYL BENZENE	<1.0		750
TOTAL XYLENES	<3.0		620
SURROGATE % RECOVERY	93.2	Allowed Range 80 to 120 %	

NOTES:

Reported By: mh

Approved By: John Larch

Date: 7/12/96

EPFS

EL PASO FIELD SERVICES

QUALITY CONTROL REPORT EPA METHOD 8020 - BTEX

Samples: 960578

QA/QC for 07/03/96 Sample 5

LABORATORY CALIBRATION CHECKS / LABORATORY CONTROL SAMPLES:

SAMPLE NUMBER ICV LA-52589 50 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
					RANGE	
Benzene	Standard	50.0	46.7	93.4	75 - 125 %	X
Toluene	Standard	50.0	46.8	93.6	75 - 125 %	X
Ethylbenzene	Standard	50.0	47.0	94.0	75 - 125 %	X
m & p - Xylene	Standard	100	94.7	94.7	75 - 125 %	X
o - Xylene	Standard	50.0	46.9	93.8	75 - 125 %	X
SAMPLE NUMBER LCS LA-45476 25 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
					RANGE	
Benzene	Standard	25.0	23.4	93.6	39 - 150	X
Toluene	Standard	25.0	23.5	94.0	46 - 148	X
Ethylbenzene	Standard	25.0	23.4	93.6	32 - 160	X
m & p - Xylene	Standard	50.0	47.5	95.0	Not Given	X
o - Xylene	Standard	25.0	23.6	94.4	Not Given	X
SAMPLE NUMBER CCV LA-52589 50 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
					RANGE	
Benzene	Standard	50.0	47.7	95.4	75 - 125 %	X
Toluene	Standard	50.0	47.8	95.6	75 - 125 %	X
Ethylbenzene	Standard	50.0	47.9	95.8	75 - 125 %	X
m & p - Xylene	Standard	100	95.6	95.6	75 - 125 %	X
o - Xylene	Standard	50.0	47.9	95.8	75 - 125 %	X
SAMPLE NUMBER CCV LA-52589 50 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
					RANGE	
Benzene	Standard	50.0		0.0	75 - 125 %	
Toluene	Standard	50.0		0.0	75 - 125 %	
Ethylbenzene	Standard	50.0		0.0	75 - 125 %	
m & p - Xylene	Standard	100		0.0	75 - 125 %	
o - Xylene	Standard	50.0		0.0	75 - 125 %	

Narrative: Acceptable.

EL PASO FIELD SERVICES LAB
QUALITY CONTROL REPORT
EPA METHOD 8020 - BTEX
Samples: 960578

LABORATORY DUPLICATES:

SAMPLE ID	TYPE	SAMPLE RESULT PPB	DUPLICATE RESULT PPB	RPD	ACCEPTABLE	
					YES	NO
960578					RANGE	
Benzene	Matrix Duplicate	<1.0	<1.0	0	+/- 20 %	X
Toluene	Matrix Duplicate	<1.0	<1.0	0	+/- 20 %	X
Ethylbenzene	Matrix Duplicate	<1.0	<1.0	0	+/- 20 %	X
m & p - Xylene	Matrix Duplicate	<2.0	<2.0	0	+/- 20 %	X
o - Xylene	Matrix Duplicate	<1.0	<1.0	0	+/- 20 %	X

Narrative: Acceptable.

LABORATORY SPIKES:

SAMPLE ID	SPIKE ADDED PPB	SAMPLE RESULT PPB	SPIKE SAMPLE RESULT PPB	%R	ACCEPTABLE	
					YES	NO
2nd Analysis 960578					RANGE	
Benzene	50	<1.0	48.0	96.0	75 - 125 %	X
Toluene	50	<1.0	47.6	95.2	75 - 125 %	X
Ethylbenzene	50	<1.0	47.8	95.6	75 - 125 %	X
m & p - Xylene	100	<2.0	95.4	95.4	75 - 125 %	X
o - Xylene	50	<1.0	47.8	95.6	75 - 125 %	X

Narrative: Acceptable.

ADDITIONAL ANALYTICAL BLANKS:

AUTO BLANK	SOURCE	PPB	STATUS
Benzene	Boiled Water	<1.0	ACCEPTABLE
Toluene	Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

SOIL VIAL BLANK	SOURCE Lot MB1461	PPB (Analyzed with this set)	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

CONTAMINATION CARRYOVER CHECK	SOURCE	PPB (None analyzed with this set)	STATUS
Benzene	Vial + Boiled Water	<1.0	NA
Toluene	Vial + Boiled Water	<1.0	NA
Ethylbenzene	Vial + Boiled Water	<1.0	NA
Total Xylenes	Vial + Boiled Water	<3.0	NA

Narrative: Acceptable.

Reported By: mh

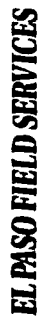
Approved By: John Larch

Date: 7/12/96



A 2485

Project No.	Project Name	Requested Analysis						Type and No. of Sample Containers	Preservation Technique	Remarks	
Samplers: (Signature)	CHACO PLANT	Date: 7-2-96									
Dennis Bird											
Date	Time	Comp.	GRAB	Sample Number							
7-2-96	1114	X	X	960578				G-2	X	MONITOR WELL MW-8	
7-2-96	—	X	X	—				G-1	X	TRIP BLANK	
[The following rows are crossed out with a diagonal line]											
Relinquished by: (Signature)	Dennis Bird	Date/Time	7-3-96	OTC	Received by: (Signature)		Relinquished by: (Signature)		Date/Time	Received by: (Signature)	
Relinquished by: (Signature)		Date/Time			Received by: (Signature)		Relinquished by: (Signature)		Date/Time	Received by: (Signature)	
Relinquished by: (Signature)		Date/Time			Received for Laboratory by: (Signature)	M. J. [Signature]	Remarks:	7/3/96	0905		
Carrier Co:	Date Results Reported / by: (Signature)										



Well Number MW-1

Site Name CHACO PLANT

Meter Code

Development Criteria

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

Methods of Development

- | Pump | Baller |
|--------------------------------------|---|
| ☐ Centrifugal | ☐ Bottom Valve |
| ☐ Submersible | ☐ Double Check Valve |
| ☐ Peristaltic | ☐ Stainless-steel Kemmerer |

Water Volume Calculation:

Initial Depth of Well (feet) 25.15'
Initial Depth to Water (feet) 25.06'
Height of Water Column in Well (feet) 0.09'

Diameter (inches): Well _____ Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing			
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☐ pH Meter
☐ DO Monitor
☐ Conductivity Meter
☐ Temperature Meter
☐ Other _____

Water Disposal

Water Removal Data

[illegible]

Comments: INSUFFICIENT WATER TO SAMPLE.

Lennis Bios

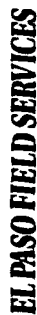
Developer's Signature

Date 7-2-96

Reviewer

0

95-6-2



Well Development and Purging Data

Well Number NW-8

Meter Code

Site Name CHACO PLANT

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 |

Water Volume Calculation

Initial Depth of Well (feet) 26.8'
Initial Depth to Water (feet) 16.88'
Height of Water Column in Well (feet) 9.93'

Diameter (inches). Well Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing			19.9
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.P.C.

Water Disposal

SOUTH CONTACT POND

Water Removal Data

[illegible]

Comments	Sampled	Day	P	170	98w.

Developer's Signature *Donna Bird*

Date 7-2-96

Reviewer_

Date _____

7-9-96

El Paso Field Services Co.

Chaco Plant

Monitoring Wells 1 and 8

Sampled September 9, 1996

EPFS

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	960742
SITE NAME:	Chaco Plant
SAMPLE SITE:	Monitor Well MW-8
METER CODE:	n/a
SAMPLE DATE:	09/09/96
SAMPLE TIME (Hrs):	1048
SAMPLED BY:	D. Bird
DATE OF BTEX ANALYSIS:	09/13/96
SAMPLE TYPE:	Water

REMARKS:

EPA Method 8020 (BTEX) RESULTS

PARAMETER	RESULT PPB	QUALIFIER	WQCC LIMIT PPB
BENZENE	<1		10
TOLUENE	<1		740
ETHYL BENZENE	<1		750
TOTAL XYLENES	<3		620
SURROGATE % RECOVERY	95.4	Allowed Range 80 to 120 %	

NOTES:

Reported By: Indo

Approved By: John Jacob

Date: 9/19/96

EPFS

EL PASO FIELD SERVICES

QUALITY CONTROL REPORT EPA METHOD 8020 - BTEX

Samples: 960742 and 960760

QA/QC for 09/13/96 Sample Set

LABORATORY CALIBRATION CHECKS / LABORATORY CONTROL SAMPLES:

SAMPLE NUMBER	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
					RANGE	
ICV LA-52589 50 PPB						
Benzene	Standard	50.0	47.9	95.8	75 - 125 %	X
Toluene	Standard	50.0	48.7	97.4	75 - 125 %	X
Ethylbenzene	Standard	50.0	48.9	97.8	75 - 125 %	X
m & p - Xylene	Standard	100	99.4	99.4	75 - 125 %	X
o - Xylene	Standard	50.0	49.0	98.0	75 - 125 %	X
LCS LA-45476 25 PPB						
Benzene	Standard	25.0	23.6	94.4	39 - 150	X
Toluene	Standard	25.0	24.2	96.8	46 - 148	X
Ethylbenzene	Standard	25.0	24.3	97.2	32 - 160	X
m & p - Xylene	Standard	50.0	49.3	98.6	Not Given	X
o - Xylene	Standard	25.0	24.4	97.6	Not Given	X
CCV LA-52589 50 PPB						
Benzene	Standard	50.0	49.3	98.6	75 - 125 %	X
Toluene	Standard	50.0	50.1	100	75 - 125 %	X
Ethylbenzene	Standard	50.0	50.0	100	75 - 125 %	X
m & p - Xylene	Standard	100	101	101	75 - 125 %	X
o - Xylene	Standard	50.0	50.1	100	75 - 125 %	X
CCV LA-52589 50 PPB						
Benzene	Standard	50.0	49.7	99.4	75 - 125 %	X
Toluene	Standard	50.0	50.6	101	75 - 125 %	X
Ethylbenzene	Standard	50.0	50.4	101	75 - 125 %	X
m & p - Xylene	Standard	100	101	101	75 - 125 %	X
o - Xylene	Standard	50.0	50.6	101	75 - 125 %	X

Narrative: Acceptable.

EL PASO FIELD SERVICES LAB
QUALITY CONTROL REPORT
EPA METHOD 8020 - BTEX
Samples: 960742 and 960760

LABORATORY DUPLICATES:

SAMPLE ID	TYPE	SAMPLE RESULT PPB	DUPLICATE RESULT PPB	RPD	ACCEPTABLE	
					RANGE	YES NO
960742						
Benzene	Matrix Duplicate	<1.0	<1.0	0.00	+/- 20 %	X
Toluene	Matrix Duplicate	<1.0	<1.0	0.00	+/- 20 %	X
Ethylbenzene	Matrix Duplicate	<1.0	<1.0	0.00	+/- 20 %	X
m & p - Xylene	Matrix Duplicate	<2.0	<2.0	0.00	+/- 20 %	X
o - Xylene	Matrix Duplicate	<1.0	<1.0	0.00	+/- 20 %	X

Narrative: Acceptable.

LABORATORY SPIKES:

SAMPLE ID	SPIKE ADDED PPB	SAMPLE RESULT PPB	SPIKE SAMPLE RESULT PPB	%R	ACCEPTABLE	
					RANGE	YES NO
2nd Analysis 960742						
Benzene	50.0	<1.0	48.9	97.8	75 - 125 %	X
Toluene	50.0	<1.0	49.5	99.0	75 - 125 %	X
Ethylbenzene	50.0	<1.0	49.5	99.0	75 - 125 %	X
m & p - Xylene	100	<2.0	99.9	99.9	75 - 125 %	X
o - Xylene	50.0	<1.0	49.6	99.2	75 - 125 %	X

Narrative: Acceptable

ADDITIONAL ANALYTICAL BLANKS:

AUTO BLANK	SOURCE	PPB	STATUS
Benzene	Boiled Water	<1.0	ACCEPTABLE
Toluene	Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

SOIL VIAL BLANK	SOURCE Lot MB1461	PPB (Analyzed with this set)	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

CONTAMINATION CARRYOVER CHECK	SOURCE	PPB (None analyzed with this set)	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

Reported By: Indu

Approved By: [Signature]

Date: 9/20/00

EPFS

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	960742
LOCATION:	Chaco Plant
SAMPLE DATE:	09/09/96
SAMPLE TIME (Hrs):	1048
SAMPLED BY:	D. Bird
SAMPLE POINT:	Monitor Well MW-8

REMARKS: _____

RESULTS

PARAMETER	TOTAL RESULT (mg/L)	DATE ANALYZED
CADMIUM	<0.0002	09/12/96
CHROMIUM	0.0057	09/12/96
MERCURY	<0.0002	09/11/96

NOTE: The sample results have been corrected for volume adjustment associated with Method 3015.

References:

Method 3015, Microwave Assisted Acid Digestion of Aqueous Samples and Extracts, Test Methods for Evaluating Solid Waste, SW-846, Sept., 1994.
Method 7131, Cadmium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1986.
Method 7191, Chromium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1986.
Method 245.5, Mercury (Automated Cold Vapor Technique), Methods for the Determination of Metals in Environmental Samples, EPA 600/4-91/010, USEPA, June, 1991.

Reported By: mh

Approved By: [Signature]

Date: 9/20/96

EPFS

EL PASO FIELD SERVICES

QUALITY CONTROL REPORT

Sample ID: 960742
Date Reported: 09/13/96

LABORATORY CONTROL SAMPLE

Analyte	Found Value (µg/L)	Known Value (µg/L)	% Recovery
Cadmium	2.39	2.38	100%
Chromium	5.64	4.76	118%
Mercury	4.21	4.59	91.7%

DUPLICATE ANALYSIS (µg/L)

Analyte	Original Sample Result	Duplicate Sample Result	% RPD
Cadmium	ND	ND	NA
Chromium	5.16	5.74	10.7%
Mercury	ND	ND	NA

SPIKE ANALYSIS (µg/L)

Analyte	Original Sample Result	Spike Sample Result	Spike Added	Recovery Percent
Cadmium	ND	8.71	9.60	90.8%
Chromium	5.16	52.7	45.5	106%
Mercury	ND	4.50	5.00	90.0%

METHOD BLANK

Analyte	Found Result (µg/L)	Detection Level (µg/L)
Cadmium	ND	0.20
Chromium	ND	1.00
Mercury	ND	0.24

ND: Not Detected at stated detection level.
NA: Not Applicable.

Reported By: mh

Approved By: [Signature]

Date: 9/20/96

American Environmental Network, Inc.

AEN I.D. 609310

September 20, 1996

El Paso Field Services
P.O. Box 4990
Farmington, NM 87499



Project Name/Number: CHACO PCT MW-8 (NONE)

Attention: John Lambdin

On 09/10/96, American Environmental Network (NM), Inc., ADHS License No. AZ0015) received a request to analyze **aqueous** sample(s). The sample(s) 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.

All analyses were performed by American Environmental Network (FL) Inc., 11 East East Olive Road, Pensacola, FL.

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

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph.D.
General Manager

MR:ft

Enclosure

American Environmental Network, Inc.

CLIENT : EL PASO FIELD SERVICES DATE RECEIVED : 09/10/96
PROJECT # : (NONE)
PROJECT NAME : CHACO PLT MW-8 REPORT DATE : 09/20/96

AEN ID: 609310

	AEN ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	609310-01	960742 - MW #8	AQUEOUS	09/09/96

---TOTALS---

<u>MATRIX</u>	<u>#SAMPLE(S)</u>
AQUEOUS	1

AEN STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

American Environmental Network, Inc.

"FINAL REPORT FORMAT - SINGLE"

Accession: 609220
Client: AMERICAN ENVIRONMENTAL NETWORK OF NEW MEXICO
Project Number: 609310
Project Name: CHACO
Project Location: N/S
Test: POLYNUCLEAR AROMATICS BY 8310
Analysis Method: 8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
Extraction Method: 8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
Matrix: WATER
QC Level: II

Lab Id: 601 Sample Date/Time: 09-SEP-86 1048
Client Sample Id: 609310-01 Received Date: 11-SEP-86

Batch: PAW172 Extraction Date: 11-SEP-86
Blank: A Dry Weight %: N/A Analysis Date: 17-SEP-86

Parameter:	Units:	Results:	Rpt Lmts:	1:
ACENAPHTHENE	UG/L	ND	1	
ACENAPHTHYLENE	UG/L	ND	1	
ANTHRACENE	UG/L	ND	1	
BENZO(a)ANTHRACENE	UG/L	ND	1	
BENZO(a)PYRENE	UG/L	ND	1	
BENZO(b)FLUORANTHENE	UG/L	ND	1	
BENZO(g,h,i)PERYLENE	UG/L	ND	1	
BENZO(k)FLUORANTHENE	UG/L	ND	1	
CHRYSENE	UG/L	ND	1	
DIBENZO(a,h)ANTHRACENE	UG/L	ND	1	
FLUORANTHENE	UG/L	ND	1	
FLUORENE	UG/L	ND	1	
INDENO(1,2,3-cd)PYRENE	UG/L	ND	1	
NAPHTHALENE	UG/L	ND	1	
PHENANTHRENE	UG/L	ND	1	
PYRENE	UG/L	ND	1	
1-METHYLNAPHTHALENE	UG/L	ND	1	
2-METHYLNAPHTHALENE	UG/L	ND	1	
2-CHLOROANTHRACENE	PREC/SURR	85	28-136	
ANALYST	INITIALS	JBT		

Comments:

American Environmental Network, Inc.

"QC Report"

Title: Water Blank
Batch: FAW172
Analysis Method: 8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
Extraction Method: 8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.

Blank Id: A Date Analyzed: 12-SEP-96 Date Extracted: 11-SEP-96

Parameters:	Units:	Results:	Reporting Limits:
ACENAPHTHENE	UG/L	ND	1
ACENAPHTHYLENE	UG/L	ND	1
ANTHRACENE	UG/L	ND	1
BENZO (a) ANTHRACENE	UG/L	ND	1
BENZO (a) PYRENE	UG/L	ND	1
BENZO (b) FLUORANTHENE	UG/L	ND	1
BENZO (g, h, i) PERYLENE	UG/L	ND	1
BENZO (k) FLUORANTHENE	UG/L	ND	1
CHRYSENE	UG/L	ND	1
DIBENZO (a, h) ANTHRACENE	UG/L	ND	1
FLUORANTHENE	UG/L	ND	1
FLUORENE	UG/L	ND	1
INDENO (1, 2, 3-cd) PYRENE	UG/L	ND	1
NAPHTHALENE	UG/L	ND	1
PHENANTHRENE	UG/L	ND	1
PYRENE	UG/L	ND	1
1-METHYLNAPHTHALENE	UG/L	ND	1
2-METHYLNAPHTHALENE	UG/L	ND	1
2-CHLOROANTHRACENE	%REC/SURR	87	29-138
ANALYST	INITIALS	EV	

Comments:

9/14/96

American Environmental Network, Inc.

"QC Report"

Title: Water Reagent
 Batch: PAW172
 Analysis Method: 8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
 Extraction Method: 3510/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.

RS Date Analyzed: 12-SEP-96
 RSD Date Analyzed: 12-SEP-96

RS Date Extracted: 11-SEP-96
 RSD Date Extracted: 11-SEP-96

Parameters:	Spike Added	Sample Conc	RS Conc	RS %Rec	RSD Conc	RSD %Rec	RPD	Rec Lmts
ACENAPHTHYLENE	10.0	<1	8.0	80	7.6	76	3	48-110
BENZO(k) FLUORANTHENE	10.0	<1	9.5	95	9.2	92	3	58-128
CHRYSENE	10.0	<1	9.6	96	9.4	94	3	62-129
PHENANTHRENE	10.0	<1	9.2	92	8.9	89	3	71-116
PYRENE	10.0	<1	8.8	88	8.6	86	3	81-120

Surrogates:
 2-CHLOROANTHRACENE 94 94 13-138

Comments:

Notes:

N/S = NOT SUBMITTED N/A = NOT APPLICABLE D = DILUTED BUT
 UG/L = PARTS PER BILLION. < = LESS THAN REPORTING LIMIT.
 * = VALUES OUTSIDE OF QUALITY CONTROL LIMITS.
 SOURCES FOR CONTROL LIMITS ARE INTERNAL LABORATORY QUALITY ASSURANCE
 PROGRAM AND REFERENCED METHOD.

JS
 9/21/96

American Environmental Network, Inc.

"QC Report"

Title: Water Matrix
 Batch: PAW172
 Analysis Method: 8310/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.
 Extraction Method: 3510/Test Methods for Evaluating Solid and Haz Waste, SW-846, 3rd Ed.

Dry Weight %: N/A MS Date Analyzed: 12-SEP-96 MS Date Extracted: 11-SEP-96
 Sample Spiked: 609210-1 MSD Date Analyzed: 12-SEP-96 MSD Date Extracted: 11-SEP-96

Parameters:	Spike Added	Sample Conc	MS Conc	MS Rec	MSD Conc	MSD Rec	RPD	RPD Limits	Rec Limits
ACENAPHTHYLENE	10.0	3.5	5.5	30	7.5	40	13	42	14-135
BENZO(k) FLUORANTHENE	10.0	<1	5.9	59	7.0	70	1	58	15-142
CHRYSENE	10.0	1.6	7.8	62	8.0	64	1	61	3-176
PHENANTHRENE	10.0	33.8	40.3	65	37.7	62	50	53	17-146
PYRENE	10.0	3.1	11.1	50	10.8	51	4	47	15-157

Surrogates:
 1-CHLOROANTHRACENE 46 74 13-128

Comments:

Notes:

N/S = NOT SUBMITTED N/A = NOT APPLICABLE D = DILUTED OUT
 UG/L = PARTS PER BILLION. < = LESS THAN REPORTING LIMIT.
 * = VALUES OUTSIDE OF QUALITY CONTROL LIMITS.
 SOURCES FOR CONTROL LIMITS ARE INTERNAL LABORATORY QUALITY ASSURANCE PROGRAM AND REFERENCED METHOD.

5/1
 9/10/96

American Environmental Network, Inc.

Common notation for Organic reporting

N/S = NOT SUBMITTED
N/A = NOT APPLICABLE
D = DILUTED OUT
UG = MICROGRAMS
UG/L = PARTS PER BILLION.
UG/KG = PARTS PER BILLION.
MG/M3 = MILLIGRAM PER CUBIC METER.
PPMV = PART PER MILLION BY VOLUME.
MG/KG = PARTS PER MILLION.
MG/L = PARTS PER MILLION.
< = LESS THAN DETECTION LIMIT.
* = VALUES OUTSIDE OF QUALITY CONTROL LIMITS

SOURCES FOR CONTROL LIMITS ARE INTERNAL LABORATORY QUALITY ASSURANCE PROGRAM AND REFERENCED METHOD.

ORGANIC SOILS ARE REPORTED ON A DRYWEIGHT BASIS.

ND = NOT DETECTED ABOVE REPORTING LIMIT.

RPT LIMIT = REPORTING LIMITS BASED ON METHOD DETECTION LIMIT STUDIES.

RPD = RELATIVE PERCENT DIFFERENCE (OR DEVIATION)

AEN/GC/FID

AEN GAS CHROMATOGRAPHIC METHOD EMPLOYING DIRECT INJECTION ON COLUMN WITH FLAME IONIZATION DETECTOR (FID).

AEN/GC/FIX

AEN GAS CHROMATOGRAPHIC METHOD FOR ANALYSIS OF FIXED GASES EMPLOYING DIRECT INJECTION ON COLUMN WITH THERMAL CONDUCTIVITY DETECTOR (TCD) AND FLAME IONIZATION DETECTOR (FID).

AEN/GC/FPD

AEN GAS CHROMATOGRAPHIC METHOD EMPLOYING DIRECT INJECTION ON COLUMN WITH FLAME PHOTOMETRIC DETECTOR (FPD) IN SULFUR-SPECIFIC MODE.

AEN/GC/PID

AEN GAS CHROMATOGRAPHIC METHOD EMPLOYING DIRECT INJECTION ON COLUMN WITH PHOTOIONIZATION DETECTOR (PID).

AEN/GC/TCD

AEN GAS CHROMATOGRAPHIC METHOD EMPLOYING DIRECT INJECTION ON COLUMN WITH THERMAL CONDUCTIVITY DETECTOR (TCD).

SW = STEVE WILHITE
PL = PAUL LESCHENSKY
RW = ROBERT WOLFE
BV = BEN VAUGHN
BC = BETH COLEMAN
KS = KENDALL SMITH
KK = KERRY LEMONT
DWB = DAVID W. BOWERS
RP = ROB PEREZ
JBT = JENNIFER TORRANCE

Well Number 1-MC

Site Name *CHACO PLANT*

Meter Code

Development Criteria

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

Methods of Development

- | | Pump | Bailer |
|-----------------|------|---------------------------|
| () Centrifugal | | X Bottom Valve |
| () Submersible | | Double Check Valve |
| () Peristaltic | | Stainless-steel Kenmermer |

Water Volume Calculation

Initial Depth of Well (feet) 25.15
Initial Depth to Water (feet) 24.99
Height of Water Column in Well (feet) .16

Diameter (inches): Well 4 Gravel Pack _____Diameter (inches): Well 46 Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing			
Gravel Pack			
Drilling Fluids			
Total			

Water Disposal

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other _____

Water Removal Data

[illegible]

Comments	INSUFFICIENT WATER TO SAMPLE.
----------	-------------------------------

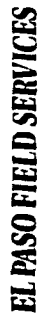
Developer's Signature *Dennis Bial*

Date 9-9-96

Figure 1

Date _____

9/20/96



Well Number MW-8
Meter Code _____

Site Name CHACO

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) 26.8'
Initial Depth to Water (feet) 11.75'
Height of Water Column in Well (feet) 10.05'

Diameter (inches): Well 4 Gravel Pack 4

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		6.6	19.9
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other DO.C

Water Disposal

SOUTH CONTACT ROAD

Water Removal Data

[illegible]

Comments

Developer's Signature _____

Donna E. Bishop

Date 9-9-96

Reviewer

John C. Calkins

Date _____

9/20/96



A 2262

CHAIN OF CUSTODY RECORD

San Juan repro Form 71-58 A



A 2262

CHAIN OF CUSTODY RECORD

[illegible]



CHIEF OF CUSTODY

ATI LAB I.D.

DATE: 9-7-96 PAGE: 1 OF 1

[illegible]

10/30/95 ATI Labs: San Diego (619) 458-9141 • Phoenix (602) 228-8335 • Pensacola (904) 474-1001 • Portland (503) 684-0447 • Albuquerque (505) 344-3777 DISTRIBUTION: White, Canary - ATI
Pink & ORIGINATI

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DATE: 9/12 PAGE: 1 OF 1

NETWORK PROJECT MANAGER: KIMBERLY D. McNEILL COMPANY: American Environmental Network ADDRESS: 2709-D Pan American Freeway, NE Albuquerque, NM 87107				CLIENT PROJECT MANAGER: Kim McNeill			
SAMPLE ID 609520		DATE 9/16/96		TIME 1048 AQ			
SAMPLE ID 609310-01		DATE 9/16/96		TIME 1048 AQ			
SAMPLE ID 609310-01		DATE 9/16/96		TIME 1048 AQ			
SAMPLE ID 609310-01		DATE 9/16/96		TIME 1048 AQ			
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SAMPLE ID 609310-01		DATE 9/16/96		TIME 1048 AQ			
SAMPLE ID 609310-01		DATE 9/16/96		TIME 1048 AQ			
SAMPLE ID 609310-01		DATE					



Analytical Technologies of New Mexico, Inc., Albuquerque, NM
San Diego • Phoenix • Seattle • Pensacola • Ft. Collins • Portland • Albuquerque • Anchorage

CHAIN OF CUSTODY

DATE: 9-9-96 PAGE: 1 OF 1

ATI LAB I.D.: 607310

PROJECT MANAGER: JOHN GAMBON
COMPANY: EC PAO FIELD SERVICES
ADDRESS: P.O. BOX 4990
PHONE: (505) 599-2144
FAX: (505) 599-2267
BILL TO: SAME AS ABOVE
COMPANY:
ADDRESS:

DATE TIME MATRIX LAB I.D.

960743 9-9-96 1048 WABER -01

Petroleum Hydrocarbons (4+3.1) TPH	
(MCL 3015) Diesel/Direct Inject	
(M8015) Gas/Purge & Trap	
Gasoline/BTEX & MTBE (M8015/8020)	
BTEX/MTBE (8020)	
BTEX & Chlorinated Aromatics (602/8020)	
BTEX/MTBE/EDC & EDB (6020/8010/Short)	
Chlorinated Hydrocarbons (601/8010)	
504 EDB / DBCP	X
Polynuclear Aromatics (610/8310)	
Volatile Organics (624/8240) GC/MS	
Volatile Organics (8260) GC/MS	
Pesticides/PCB (608/8080)	
Herbicides (615/8150)	
Base/Neutral/Acid Compounds GC/MS (625/8270)	
General Chemistry	
Priority Pollutant Metals (13)	
Target Analyte List Metals (23)	
ACPA Metals (8)	
ACPA Metals by TCLP (Method 1311)	

PROJECT INFORMATION	
PROJ NO:	
PROJ NAME:	CHACO PET MWS
P.O. NO:	
SHIPPED VIA:	FED. EX
NO. CONTAINERS: 2	
CUSTOMER SIGNATURE:	YIN (NA)
RECEIVED BY:	YIN
DATE:	9/9/96

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS	
(RUSH) 12hr	(1-72hr) 1 WEEK
(NORMAL) 1-2 WEEK	
CERTIFICATION REQUIRED 1 HM 1 OTHER	
METHANOL PRESERVATION 11	
COMMENTS CHARGE: 6000 - 6115 - 515	
SEND RESULTS TO JOHN GAMBON	
AT THE ABOVE ADDRESS,	
LOW LEVEL BENZO(A)PYRENE 107 PPB	

RELINQUISHED BY:	
Signature:	Time: 1303
Printed Name:	Date: 9-9-96
Company:	DEAN'S BIRD
RECEIVED BY: (LAB)	
Signature:	Time: 1:00
Printed Name:	Date: 9/9/96
Company:	Analytical Technologies of New Mexico

PLEASE FILL THIS FORM IN COMPLETELY.



Analytical Technologies of New Mexico, Inc., Albuquerque, NM
San Diego • Phoenix • Seattle • Pensacola • Ft. Collins • Portland • Albuquerque • Anchorage

CHAIN OF CUSTODY

ATI LAB I.D.

607310

DATE: 9-9-96 PAGE: 1 OF 1

PROJECT MANAGER: JOHN LAMBORN
COMPANY: EL PASO FIELD SERVICES
ADDRESS: P.O. BOX 4990

PHONE: (505) 599-2144
FAX: (505) 599-2267

BILL TO: SRMS AS ABOVE
COMPANY:
ADDRESS:

SAMPLE ID DATE TIME MATRIX LAB I.D.

960743 9-9-96 1048 WATER -01

ANALYSIS REQUEST

Petroleum Hydrocarbons (43.1) TPH	
(MOD, 6015) Diesel/Direct/Indirect	
(M8015) Gas/Purge & Trap	
Gasoline/BTEX & MTBE (M8015/8020)	
BTEX/MTBE (8020)	
BTEX & Chlorinated Aromatics (602/8020)	
BTEX/MTBE/EDC & EDB (6020/8010/Short)	
Chlorinated Hydrocarbons (601/8010)	
EDB - DBCP -	
Polynuclear Aromatics (610/6310)	X
Volatile Organics (624/8240) GC/MS	
Volatile Organics (8260) GC/MS	
Pesticides/PCB (608/8080)	
Herbicides (615/8150)	
Base/Neutral/Acid Compounds GC/MS (625/8270)	
General Chemistry	
Priority Pollutant Metals (13)	
Target Analyte List Metals (23)	
RCRA Metals (8)	
RCRA Metals by TCLP (Method 1311)	
NUMBER OF CONTAINERS	2

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) 12hr 14hr 17hr 1 WEEK (NORMAL) 12 WEEK

CERTIFICATION REQUIRED: 1 NM 1 OTHER

METHANOL PRESERVATION: 1

COMMENTS: CHARGE: 6000 - 6115 - 515

SEND RESULTS TO JOHN LAMBORN

AT THE ABOVE ADDRESS,

LOW LEVEL BENZ(A) PYRENE < 0.7 PPB

PROJECT INFORMATION

PROJ. NO.:

PROJ. NAME: CHARGO PET MIN-8

P.O. NO.:

SHIPPED VIA: FEDEX

SAMPLE RECEIPT

NO. CONTAINERS: 2

CUSTODY SEALS: Y/N (NA)

RECEIVED INTACT: Y

BLUE ID: SP

RELINQUISHED BY:

Signature: Dennis Bland

Printed Name: DENNIS BLAND

Company: EL PASO FIELD SERVICE

RELINQUISHED BY:

Signature: [Signature]

Printed Name: [Name]

Company: [Company]

RELINQUISHED BY:

Signature: [Signature]

Printed Name: [Name]

Company: [Company]

RELINQUISHED BY:

Signature: [Signature]

Printed Name: [Name]

Company: [Company]

RELINQUISHED BY:

Signature: [Signature]

Printed Name: [Name]

Company: [Company]

RELINQUISHED BY:

Signature: [Signature]

Printed Name: [Name]

Company: [Company]

Analytical Technologies of New Mexico

El Paso Field Services Co.

Chaco Plant

Monitoring Wells 1 and 8

Sampled November 1, 1996



FIELD SERVICES LABORATORY
ANALYTICAL REPORT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	960916
MTR CODE SITE NAME:	N/A	Chaco Plant MW-8
SAMPLE DATE TIME (Hrs):	11/1/96	1224
PROJECT:	Chaco Plant Pond Closure	
DATE OF BTEX EXT. ANAL.:	11/4/96	11/4/96
TYPE DESCRIPTION:	Monitor Well	Water

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	< 1	PPB				
TOLUENE	< 1	PPB				
ETHYL BENZENE	< 1	PPB				
TOTAL XYLENES	< 3	PPB				
TOTAL BTEX	< 6	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 100 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

Approved By:

John F. Smith

Date:

11/1/96

EPFS

EL PASO FIELD SERVICES

QUALITY CONTROL REPORT EPA METHOD 8020 - BTEX

Samples: 960916

QA/QC for 11/04/96 Sample Set

LABORATORY CALIBRATION CHECKS / LABORATORY CONTROL SAMPLES:

SAMPLE NUMBER ICV LA-52589 50 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
					RANGE	
Benzene	Standard	50.0	49.8	100	75 - 125 %	X
Toluene	Standard	50.0	49.3	98.6	75 - 125 %	X
Ethylbenzene	Standard	50.0	49.1	98.2	75 - 125 %	X
m & p - Xylene	Standard	100	98.0	98.0	75 - 125 %	X
o - Xylene	Standard	50.0	48.7	97.4	75 - 125 %	X
SAMPLE NUMBER LCS LA-45476 25 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
					RANGE	
Benzene	Standard	25.0	24.2	96.8	39 - 150	X
Toluene	Standard	25.0	24.3	97.2	46 - 148	X
Ethylbenzene	Standard	25.0	24.5	98.0	32 - 160	X
m & p - Xylene	Standard	50.0	49.1	98.2	Not Given	X
o - Xylene	Standard	25.0	24.3	97.2	Not Given	X
SAMPLE NUMBER CCV LA-52589 50 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
					RANGE	
Benzene	Standard	50.0	47.7	95.4	75 - 125 %	X
Toluene	Standard	50.0	47.4	94.8	75 - 125 %	X
Ethylbenzene	Standard	50.0	47.4	94.8	75 - 125 %	X
m & p - Xylene	Standard	100	94.6	94.6	75 - 125 %	X
o - Xylene	Standard	50.0	47.1	94.2	75 - 125 %	X
SAMPLE NUMBER CCV LA-52589 50 PPB	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
					RANGE	
Benzene	Standard	50.0		0.00	75 - 125 %	
Toluene	Standard	50.0		0.00	75 - 125 %	
Ethylbenzene	Standard	50.0		0.00	75 - 125 %	
m & p - Xylene	Standard	100		0.00	75 - 125 %	
o - Xylene	Standard	50.0		0.00	75 - 125 %	

Narrative: Acceptable.

**EL PASO FIELD SERVICES LAB
QUALITY CONTROL REPORT
EPA METHOD 8020 - BTEX**

Samples: 960916

LABORATORY DUPLICATES:

SAMPLE ID	TYPE	SAMPLE RESULT PPB	DUPLICATE RESULT PPB	RPD	ACCEPTABLE	
					YES	NO
960916					RANGE	
Benzene	Matrix Duplicate	<1.0	<1.0	0.00	+/- 20 %	X
Toluene	Matrix Duplicate	<1.0	<1.0	0.00	+/- 20 %	X
Ethylbenzene	Matrix Duplicate	<1.0	<1.0	0.00	+/- 20 %	X
m & p - Xylene	Matrix Duplicate	<2.0	<2.0	0.00	+/- 20 %	X
o - Xylene	Matrix Duplicate	<1.0	<1.0	0.00	+/- 20 %	X

Narrative: Acceptable.

LABORATORY SPIKES:

SAMPLE ID	SPIKE ADDED PPB	SAMPLE RESULT PPB	SPIKE SAMPLE RESULT PPB	%R	ACCEPTABLE	
					YES	NO
2nd Analysis 960916					RANGE	
Benzene	50	<1.0	48.0	96.0	75 - 125 %	X
Toluene	50	<1.0	47.7	95.4	75 - 125 %	X
Ethylbenzene	50	<1.0	47.8	95.6	75 - 125 %	X
m & p - Xylene	100	<2.0	95.4	95.4	75 - 125 %	X
o - Xylene	50	<1.0	47.6	95.2	75 - 125 %	X

Narrative: Acceptable

ADDITIONAL ANALYTICAL BLANKS:

AUTO BLANK	SOURCE	PPB	STATUS
Benzene	Boiled Water	<1.0	ACCEPTABLE
Toluene	Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

SOIL VIAL BLANK	SOURCE Lot MB1461	PPB (Analyzed with this set)	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

CONTAMINATION CARRYOVER CHECK	SOURCE	PPB (None analyzed with this set)	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

Reported By: inda

Approved By: John-Lara

Date: 11/1/90



A 2664

CHAIN OF CUSTODY RECORD

Project No.		Project Name		Requested Analysis		Remarks									
Samplers: (Signature)		Date: 11-1-96		Preservation Technique		Type and No. of Sample Containers									
Date	Time	Comp.	GRAB	Sample Number											
11-1-96	12:04		X	950715		MONITOR WELLS MW-8									
11-1-96	—		X	—		TRIP BLANK									
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time									
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time									
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time									
Carrier Co.		Carrier Phone No.		Date Results Reported / by: (Signature)											



Well Development and Purging Data

Well Number MW-8

Meter Code

Site Name CHACO PLANT

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 |

Water Volume Calculation

Initial Depth of Well (feet) 21.80'
Initial Depth to Water (feet) 11.26
Height of Water Column in Well (feet) 10.54'

Diameter (inches): Well 4 Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		7.0	20.9
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. C.

Water Disposal

NORTH CONTRACT ROAD

Water Removal Data

[illegible]

Comments

Developer's Signature Dennis Bred Date 11-1-96 Reviewer W. J. F. L. L. Date 11/11/96



Well Number MW-1
Meter Code

Site Name CHACO PLANT

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 |

Water Volume Calculation

Initial Depth of Well (feet) 25.15
Initial Depth to Water (feet) 25.02
Height of Water Column in Well (feet) .13

4 Diameter (inches): Well Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing			
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- | | |
|--------------------------|--------------------|
| ☐ | pH Meter |
| ☐ | DO Monitor |
| ☐ | Conductivity Meter |
| ☐ | Temperature Meter |
| ☐ | Other |

Water Disposal

Water Removal Data

[illegible]

Comments INSUFFICIENT WATER TO SAMPLE.

Developer's Signature *Kevin B. Bickel*

Date 11-1-96

Reviewer

John Ford

Date 11/11/90

El Paso Field Services Co.

Chaco Plant

Monitoring Wells 2, 3, 4, 5 ,6, and 7

Sampled June 24, 1996

EPFS

EL PASO FIELD SERVICES

**Field Services Laboratory
Analytical Report**

SAMPLE IDENTIFICATION

EPFS LAB ID:	960556
DATE SAMPLED:	06/24/96
TIME SAMPLED (Hrs):	1132
SAMPLED BY:	D. Bird
MATRIX:	Water
SAMPLE SITE NAME:	Chaco Plant
SAMPLE POINT:	Monitor Well MW-2

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Laboratory pH	7.7	Units	06/25/96
Alkalinity as CO ₃	0.0	PPM	06/25/96
Alkalinity as HCO ₃	426	PPM	06/25/96
Calcium as Ca	112	PPM	06/25/96
Magnesium as Mg	22.5	PPM	06/25/96
Total Hardness as CaCO ₃	372	PPM	06/25/96
Chloride as Cl	162.0	PPM	06/25/96
Sulfate as SO ₄	714	PPM	06/25/96
Fluoride as F	1.8	PPM	06/25/96
Nitrate as NO ₃ -N	<0.1	PPM	06/25/96
Phosphate as PO ₄	<0.1	PPM	06/25/96
Potassium as K	1.1	PPM	06/25/96
Sodium as Na	493	PPM	06/25/96
Total Dissolved Solids	1,772	PPM	06/27/96
Conductivity	2,500	umhos/cm	06/25/96
Anion/Cation %	4.3%	%, <5.0 Accepted	07/01/96

Lab Remarks:

Reported By: mh

Approved By: John Funder

Date: 7/9/96

EPFS

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	960556
LOCATION:	Chaco Plant
SAMPLE SITE:	Monitor Well MW-2
SAMPLE DATE:	06/24/96
SAMPLE TIME (Hrs):	1132
SAMPLED BY:	D. Bird

REMARKS: _____

RESULTS

PARAMETER	TOTAL RESULT (mg/L)	N.M. WQCC LIMIT (mg/L)
CADMIUM	0.0008	0.010
CHROMIUM	0.008	0.050
MERCURY	<0.00024	0.002

NOTE: The sample results have been corrected for volume adjustment associated with Method 3015.

References:

Method 3015, Microwave Assisted Acid Digestion of Aqueous Samples and Extracts, Test Methods for Evaluating Solid Waste, SW-846, Sept., 1994.
Method 7131, Cadmium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1986.
Method 7191, Chromium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1986.
Method 245.5, Mercury (Automated Cold Vapor Technique), Methods for the Determination of Metals in Environmental Samples, EPA 600/4-91/010, USEPA, June, 1991.

Reported By: mh

Approved By: John Ladd

Date: 7/2/96



Well Development and Purging Data

Well Number 7W-2

Meter Code

	Development	Purging
1. Identify the problem	☐	☒
2. Identify the cause	☐	☒
3. Identify the solution	☐	☒
4. Implement the solution	☐	☒
5. Evaluate the results	☐	☒

Site Name CHACO PLANT

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 |

Water Volume Calculation

Initial Depth of Well (feet) 77.6'
Initial Depth to Water (feet) 79.5'
Height of Water Column in Well (feet) 8.09'

Diameter (inches): Well **4** Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing			16.3
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. C

KLT

Water Disposal

ON SITE

Water Removal Data

[illegible]

Comments	SAMPLED @ 15.0 gph.
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Developer's Signature *Lenny Bird*

Date 6-24-96 Reviewer _____

Date 7/9/94

EPFS

EL PASO FIELD SERVICES

Field Services Laboratory Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	960557
DATE SAMPLED:	06/24/96
TIME SAMPLED (Hrs):	1222
SAMPLED BY:	D. Bird
MATRIX:	Water
SAMPLE SITE NAME:	Chaco Plant
SAMPLE POINT:	Monitor Well MW-3

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Laboratory pH	7.7	Units	06/25/96
Alkalinity as CO ₃	0.0	PPM	06/25/96
Alkalinity as HCO ₃	670	PPM	06/25/96
Calcium as Ca	85	PPM	06/25/96
Magnesium as Mg	20.2	PPM	06/25/96
Total Hardness as CaCO ₃	296	PPM	06/25/96
Chloride as Cl	41.6	PPM	06/25/96
Sulfate as SO ₄	532	PPM	06/25/96
Fluoride as F	1.0	PPM	06/25/96
Nitrate as NO ₃ -N	<0.5	PPM	06/25/96
Phosphate as PO ₄	<0.5	PPM	06/25/96
Potassium as K	0.9	PPM	06/25/96
Sodium as Na	443	PPM	06/25/96
Total Dissolved Solids	1,464	PPM	06/27/96
Conductivity	2,170	umhos/cm	06/25/96
Anion/Cation %	3.9%	%, <5.0 Accepted	07/01/96

Lab Remarks:

Reported By: mh

Approved By: John L. Landon

Date: 7/9/96

EPFS

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	960557
LOCATION:	Chaco Plant
SAMPLE SITE:	Monitor Well MW-3
SAMPLE DATE:	06/24/96
SAMPLE TIME (Hrs):	1222
SAMPLED BY:	D. Bird

REMARKS: _____

RESULTS

PARAMETER	TOTAL RESULT (mg/L)	N. M. WQCC LIMIT (mg/L)
CADMIUM	<0.0005	0.010
CHROMIUM	0.002	0.050
MERCURY	<0.00024	0.002

NOTE: The sample results have been corrected for volume adjustment associated with Method 3015.

References:

Method 3015, Microwave Assisted Acid Digestion of Aqueous Samples and Extracts, Test Methods for Evaluating Solid Waste, SW-846, Sept., 1994.
Method 7131, Cadmium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1986.
Method 7191, Chromium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1986.
Method 245.5, Mercury (Automated Cold Vapor Technique), Methods for the Determination of Metals in Environmental Samples, EPA 600/4-91/010, USEPA, June, 1991.

Reported By: mh

Approved By: John Larch

Date: 7/12/96



Well Development and Purging Data

Well Number MW-3

Site Name CHACO PLANT

☐	Development
☒	Purging

Meter Code

Development Criteria

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

Methods of Development

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

Water Volume Calculation

Initial Depth of Well (feet) 23.4'
Initial Depth to Water (feet) 17.48'
Height of Water Column in Well (feet) 4.92'

Diameter (inches): Well 4" Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing			9.9
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other 0.00

Water Disposal

ON SITE

Water Removal Data

[illegible]

Comments BAILED DRY @ 2.0 gals. WATER WAS RUSTY RED COLOR. UNABLE TO RUN Q. Q.

Developer's Signature Dennis Biral

Date 6-24-96 Reviewer

Date 7/9/90

EPFS
EL PASO FIELD SERVICES

Field Services Laboratory
Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	960558
DATE SAMPLED:	06/24/96
TIME SAMPLED (Hrs):	1249
SAMPLED BY:	D. Bird
MATRIX:	Water
SAMPLE SITE NAME:	Chaco Plant
SAMPLE POINT:	Monitor Well MW-4

FIELD REMARKS: _____

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Laboratory pH	7.2	Units	06/25/96
Alkalinity as CO ₃	0.0	PPM	06/25/96
Alkalinity as HCO ₃	559	PPM	06/25/96
Calcium as Ca	458	PPM	06/25/96
Magnesium as Mg	79.7	PPM	06/25/96
Total Hardness as CaCO ₃	1,472	PPM	06/25/96
Chloride as Cl	464.0	PPM	06/25/96
Sulfate as SO ₄	2,654	PPM	06/25/96
Fluoride as F	1.7	PPM	06/25/96
Nitrate as NO ₃ -N	< 1.6	PPM	06/25/96
Phosphate as PO ₄	< 1.6	PPM	06/25/96
Potassium as K	8.3	PPM	06/25/96
Sodium as Na	1,249	PPM	06/25/96
Total Dissolved Solids	5,430	PPM	06/27/96
Conductivity	6,160	umhos/cm	06/25/96
Anion/Cation %	3.9%	%, < 5.0 Accepted	07/01/96

Lab Remarks:

Reported By: mh

Approved By: John Lankford

Date: 7/9/96

EPFS

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	960558
LOCATION:	Chaco Plant
SAMPLE SITE:	Monitor Well MW-4
SAMPLE DATE:	06/24/96
SAMPLE TIME (Hrs):	1249
SAMPLED BY:	D. Bird

REMARKS: _____

RESULTS

PARAMETER	TOTAL RESULT (mg/L)	N. M. WQCC LIMIT (mg/L)
CADMIUM	0.0011	0.010
CHROMIUM	0.003	0.050
MERCURY	<0.00024	0.002

NOTE: The sample results have been corrected for volume adjustment associated with Method 3015.

References:

Method 3015, Microwave Assisted Acid Digestion of Aqueous Samples and Extracts, Test Methods for Evaluating Solid Waste, SW-846, Sept., 1994.
Method 7131, Cadmium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1986.
Method 7191, Chromium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1986.
Method 245.5, Mercury (Automated Cold Vapor Technique), Methods for the Determination of Metals in Environmental Samples, EPA 600/4-91/010, USEPA, June, 1991.

Reported By: mh

Approved By: John Landa

Date: 7/12/96



Well Number MW-4

Site Name CHACO PLANT

Meter Code

☐	Development
☒	Purging

Development Criteria

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

Methods of Development

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

Water Volume Calculation

Initial Depth of Well (feet) 30.9'
Initial Depth to Water (feet) 30.47'
Height of Water Column in Well (feet) 19.43'

Diameter (inches): Well

Diameter (Inches):		Well		Gravel Pack		Gallons to be Removed
Item	Cubic Feet	Water Volume in Well	Gallons			
Well Casing						21.0
Gravel Pack						
Drilling Fluids						
Total						

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other Refractometer

Water Disposal

ON 5/7E

Water Removal Data

[illegible]

Comments 5 Applied @ 21.0 gals.

Developer's Signature *Dennis Bird*

Date 6/24/96 Reviewer _____

Date 7/9/94

EPFS

EL PASO FIELD SERVICES

Field Services Laboratory Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	960559
DATE SAMPLED:	06/24/96
TIME SAMPLED (Hrs):	1355
SAMPLED BY:	D. Bird
MATRIX:	Water
SAMPLE SITE NAME:	Chaco Plant
SAMPLE POINT:	Monitor Well MW-5

FIELD REMARKS: _____

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Laboratory pH	7.5	Units	06/25/96
Alkalinity as CO ₃	0.0	PPM	06/25/96
Alkalinity as HCO ₃	374	PPM	06/25/96
Calcium as Ca	216	PPM	06/25/96
Magnesium as Mg	33.2	PPM	06/25/96
Total Hardness as CaCO ₃	676	PPM	06/25/96
Chloride as Cl	18.9	PPM	06/25/96
Sulfate as SO ₄	670	PPM	06/25/96
Fluoride as F	0.7	PPM	06/25/96
Nitrate as NO ₃ -N	<0.1	PPM	06/25/96
Phosphate as PO ₄	<0.1	PPM	06/25/96
Potassium as K	1.1	PPM	06/25/96
Sodium as Na	173	PPM	06/25/96
Total Dissolved Solids	1,332	PPM	06/27/96
Conductivity	1,709	umhos/cm	06/25/96
Anion/Cation %	1.0%	%, < 5.0 Accepted	07/01/96

Lab Remarks:

Reported By: mh

Approved By: John Leubke

Date: 7/9/96

EPFS

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	960559
LOCATION:	Chaco Plant
SAMPLE SITE:	Monitor Well MW-5
SAMPLE DATE:	06/24/96
SAMPLE TIME (Hrs):	1355
SAMPLED BY:	D. Bird

REMARKS: _____

RESULTS

PARAMETER	TOTAL RESULT (mg/L)	N. M. WQCC LIMIT (mg/L)
CADMIUM	<0.0005	0.010
CHROMIUM	0.004	0.050
MERCURY	<0.00024	0.002

NOTE: The sample results have been corrected for volume adjustment associated with Method 3015.

References:

Method 3015, Microwave Assisted Acid Digestion of Aqueous Samples and Extracts, Test Methods for Evaluating Solid Waste, SW-846, Sept., 1994
Method 7131, Cadmium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1986.
Method 7191, Chromium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1986.
Method 245.5, Mercury (Automated Cold Vapor Technique), Methods for the Determination of Metals in Environmental Samples, EPA 600/4-91/010, USEPA, June, 1991.

Reported By: mh

Approved By: John Landon

Date: 7/12/96



Well Number 7W-5

Site Name CHACO PLANT

☐	Development
☒	Purging

Meter Code

Development Criteria

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

Water Volume Calculation ,

Initial Depth of Well (feet) 30.6
Initial Depth to Water (feet) 25.14'
Height of Water Column in Well (feet) 5.46'

Diameter (inches): Well

Methods of Development

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

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other DO C

Water Disposal

ON 5/7/8

Water Removal Data

[illegible]

Comments

Purple, dry @ 10.0 gals;

Developer's Signature _____

Date 6-24-96

Reviewer_



Date: _____

7/6/67

EPFS
EL PASO FIELD SERVICES

Field Services Laboratory
Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	960560
DATE SAMPLED:	06/24/96
TIME SAMPLED (Hrs):	1535
SAMPLED BY:	D. Bird
MATRIX:	Water
SAMPLE SITE NAME:	Chaco Plant
SAMPLE POINT:	Monitor Well MW-6

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Laboratory pH	8.2	Units	06/25/96
Alkalinity as CO ₃	0.0	PPM	06/25/96
Alkalinity as HCO ₃	399	PPM	06/25/96
Calcium as Ca	37	PPM	06/25/96
Magnesium as Mg	10.4	PPM	06/25/96
Total Hardness as CaCO ₃	135	PPM	06/25/96
Chloride as Cl	139.0	PPM	06/25/96
Sulfate as SO ₄	1,216	PPM	06/25/96
Fluoride as F	2.3	PPM	06/25/96
Nitrate as NO ₃ -N	< 1.0	PPM	06/25/96
Phosphate as PO ₄	< 1.0	PPM	06/25/96
Potassium as K	0.7	PPM	06/25/96
Sodium as Na	850	PPM	06/25/96
Total Dissolved Solids	2,440	PPM	06/27/96
Conductivity	3,550	umhos/cm	06/25/96
Anion/Cation %	5.0%	%, < 5.0 Accepted	07/01/96

Lab Remarks:

Reported By: mh

Approved By: John Lutz

Date: 7/9/96

EPFS

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	960560
LOCATION:	Chaco Plant
SAMPLE SITE:	Monitor Well MW-6
SAMPLE DATE:	06/24/96
SAMPLE TIME (Hrs):	1535
SAMPLED BY:	D. Bird

REMARKS: _____

RESULTS

PARAMETER	TOTAL RESULT (mg/L)	N. M. WQCC LIMIT (mg/L)
CADMIUM	0.0009	0.010
CHROMIUM	0.007	0.050
MERCURY	<0.00024	0.002

NOTE: The sample results have been corrected for volume adjustment associated with Method 3015.

References:

Method 3015, Microwave Assisted Acid Digestion of Aqueous Samples and Extracts, Test Methods for Evaluating Solid Waste, SW-846, Sept., 1994
Method 7131, Cadmium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1986.
Method 7191, Chromium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1986.
Method 245.5, Mercury (Automated Cold Vapor Technique), Methods for the Determination of Metals in Environmental Samples, EPA 600/4-91/010, USEPA, June, 1991.

Reported By: mh

Approved By: _____

John Lark

Date: 7/12/96



Well Development and Purging Data

Well Number 9-MU

Site Name CHACO PLANT

Meter Code

☐	Development
☒	Purging

Development Criteria

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

Methods of Development

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

Water Volume Calculation

Initial Depth of Well (feet) 24.6
Initial Depth to Water (feet) 10.28
Height of Water Column in Well (feet) 14.32

Diameter (inches): Well Gravel Pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing			28.78
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O. C

Water Disposal

NO 517E

Water Removal Data

[illegible]

Comments SAMPLED @ 25.0 gph.

Developer's Signature Devin Bird

Date 6-24-96



Date 7/9/94

EPFS

EL PASO FIELD SERVICES

Field Services Laboratory Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	960561
DATE SAMPLED:	06/24/96
TIME SAMPLED (Hrs):	1635
SAMPLED BY:	D. Bird
MATRIX:	Water
SAMPLE SITE NAME:	Chaco Plant
SAMPLE POINT:	Monitor Well MW-7

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Laboratory pH	7.4	Units	06/25/96
Alkalinity as CO ₃	0.0	PPM	06/25/96
Alkalinity as HCO ₃	329	PPM	06/25/96
Calcium as Ca	302	PPM	06/25/96
Magnesium as Mg	42.9	PPM	06/25/96
Total Hardness as CaCO ₃	931	PPM	06/25/96
Chloride as Cl	295	PPM	06/25/96
Sulfate as SO ₄	1,336	PPM	06/25/96
Fluoride as F	2.0	PPM	06/25/96
Nitrate as NO ₃ -N	<0.6	PPM	06/25/96
Phosphate as PO ₄	<0.6	PPM	06/25/96
Potassium as K	3.6	PPM	06/25/96
Sodium as Na	547	PPM	06/25/96
Total Dissolved Solids	2,860	PPM	06/27/96
Conductivity	3,550	umhos/cm	06/25/96
Anion/Cation %	1.0%	%, <5.0 Accepted	07/01/96

Lab Remarks:

Reported By: mh

Approved By: John L. Smith

Date: 7/9/96

EPFS

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	960561
LOCATION:	Chaco Plant
SAMPLE SITE:	Monitor Well MW-7
SAMPLE DATE:	06/24/96
SAMPLE TIME (Hrs):	1635
SAMPLED BY:	D. Bird

REMARKS: _____

RESULTS

PARAMETER	TOTAL RESULT (mg/L)	N. M. WQCC LIMIT (mg/L)
CADMIUM	0.0007	0.010
CHROMIUM	0.002	0.050
MERCURY	<0.00024	0.002

NOTE: The sample results have been corrected for volume adjustment associated with Method 3015.

References:

Method 3015, Microwave Assisted Acid Digestion of Aqueous Samples and Extracts, Test Methods for Evaluating Solid Waste, SW-846, Sept., 1994.
Method 7131, Cadmium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1986.
Method 7191, Chromium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1986.
Method 245.5, Mercury (Automated Cold Vapor Technique), Methods for the Determination of Metals in Environmental Samples, EPA 600/4-91/010, USEPA, June, 1991.

Reported By: mh

Approved By: John Fawcett

Date: 7/12/96

EPFS
EL PASO FIELD SERVICES

Field Services Laboratory
Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	960562
DATE SAMPLED:	06/24/96
TIME SAMPLED (Hrs):	1635
SAMPLED BY:	D. Bird
MATRIX:	Water
SAMPLE SITE NAME:	Chaco Plant
SAMPLE POINT:	Monitor Well MW-7

FIELD REMARKS: Field Duplicate

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Laboratory pH	7.5	Units	06/25/96
Alkalinity as CO ₃	0.0	PPM	06/25/96
Alkalinity as HCO ₃	325	PPM	06/25/96
Calcium as Ca	303	PPM	06/25/96
Magnesium as Mg	43.9	PPM	06/25/96
Total Hardness as CaCO ₃	937	PPM	06/25/96
Chloride as Cl	304	PPM	06/25/96
Sulfate as SO ₄	1,317	PPM	06/25/96
Fluoride as F	2.0	PPM	06/25/96
Nitrate as NO ₃ -N	<0.6	PPM	06/25/96
Phosphate as PO ₄	<0.6	PPM	06/25/96
Potassium as K	3.6	PPM	06/25/96
Sodium as Na	532	PPM	06/25/96
Total Dissolved Solids	2,836	PPM	06/27/96
Conductivity	3,530	umhos/cm	06/25/96
Anion/Cation %	0.6%	%, <5.0 Accepted	07/01/96

Lab Remarks:

Reported By: mh

Approved By: John F. Linder

Date: 7/9/96

EPFS

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	960562
LOCATION:	Chaco Plant
SAMPLE SITE:	Monitor Well MW-7
SAMPLE DATE:	06/24/96
SAMPLE TIME (Hrs):	1635
SAMPLED BY:	D. Bird

REMARKS: Field Duplicate

RESULTS

PARAMETER	TOTAL RESULT (mg/L)	N. M. WQCC LIMIT (mg/L)
CADMIUM	0.0006	0.010
CHROMIUM	0.002	0.050
MERCURY	<0.00024	0.002

NOTE: The sample results have been corrected for volume adjustment associated with Method 3015.

References:

Method 3015, Microwave Assisted Acid Digestion of Aqueous Samples and Extracts, Test Methods for Evaluating Solid Waste, SW-846, Sept., 1994
Method 7131, Cadmium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1986.
Method 7191, Chromium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1986.
Method 245.5, Mercury (Automated Cold Vapor Technique), Methods for the Determination of Metals in Environmental Samples, EPA 600/4-91/010, USEPA, June, 1991.

Reported By: mh

Approved By: John Larch

Date: 7/12/96



Well Development and Purging Data

Well Number MW-7

Meter Code _____

☐ Development

☒ Purging

Site Name CHACO PLANT

Development Criteria

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

Methods of Development

- | Pump | Baller |
|--------------------------------------|---|
| ☐ Centrifugal | ☒ Bottom Valve |
| ☐ Submersible | ☐ Double Check Valve |
| ☐ Peristaltic | ☐ Stainless-steel Kemmerer |
| ☐ Other | |

Water Volume Calculation,

Initial Depth of Well (feet) 6.95
Initial Depth to Water (feet) 6.63
Height of Water Column in Well (feet) 13.88

Diameter (inches): Well 4" Gravel Pack _____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing			25.9
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- ☒ pH Meter
☐ DO Monitor
☒ Conductivity Meter
☒ Temperature Meter
☒ Other D.O.

Water Disposal

OK 5/7E

Water Removal Data

[illegible]

Comments

Developer's Signature Dennis Bird

Date 6-22-96 Reviewer _____

Date 7/9/96



A 2480

CHAIN OF CUSTODY RECORD

[illegible]

El Paso Field Services Co.

Chaco Plant

Non-Contact Wastewater Discharge

Sampled June 24, 1996

EPFS

EL PASO FIELD SERVICES

Field Services Laboratory

Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	960563
DATE SAMPLED:	06/24/96
TIME SAMPLED (Hrs):	1715
SAMPLED BY:	D. Bird
MATRIX:	Water
SAMPLE SITE NAME:	Chaco Plant
SAMPLE POINT:	20 Inch Waste Water Discharge

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Laboratory pH	8.2	Units	06/25/96
Alkalinity as CO ₃	0.0	PPM	06/25/96
Alkalinity as HCO ₃	118	PPM	06/25/96
Calcium as Ca	211	PPM	06/25/96
Magnesium as Mg	40.8	PPM	06/25/96
Total Hardness as CaCO ₃	695	PPM	06/25/96
Chloride as Cl	60	PPM	06/25/96
Sulfate as SO ₄	740	PPM	06/25/96
Fluoride as F	2.1	PPM	06/25/96
Nitrate as NO ₃ -N	0.5	PPM	06/25/96
Phosphate as PO ₄	4.0	PPM	06/25/96
Potassium as K	25.9	PPM	06/25/96
Sodium as Na	128	PPM	06/25/96
Total Dissolved Solids	1,454	PPM	06/27/96
Conductivity	1,744	umhos/cm	06/25/96
Anion/Cation %	2.3%	%, < 5.0 Accepted	07/01/96

Lab Remarks:

Reported By: nsh

Approved By: John L. Ladd

Date: 7/9/96

EPFS

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	960563
LOCATION:	Chaco Plant
SAMPLE SITE:	20" Wastewater Discharge
SAMPLE DATE:	06/24/96
SAMPLE TIME (Hrs):	1715
SAMPLED BY:	D. Bird

REMARKS: _____

RESULTS

PARAMETER	TOTAL RESULT (mg/L)	N. M. WQCC LIMIT (mg/L)
CADMIUM	<0.0005	0.010
CHROMIUM	0.132	0.050
MERCURY	<0.00024	0.002

NOTE: The sample results have been corrected for volume adjustment associated with Method 3015.

References:

Method 3015, Microwave Assisted Acid Digestion of Aqueous Samples and Extracts, Test Methods for Evaluating Solid Waste, SW-846, Sept., 1994.
Method 7131, Cadmium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1986.
Method 7191, Chromium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1986.
Method 245.5, Mercury (Automated Cold Vapor Technique), Methods for the Determination of Metals in Environmental Samples, EPA 600/4-91/010, USEPA, June, 1991.

Reported By: mh

Approved By: John L. Linder

Date: 7/2/96

EPFS

EL PASO FIELD SERVICES

QUALITY CONTROL REPORT

Sample ID: 960556 through 960563
Date Reported: 07/05/96

LABORATORY CONTROL SAMPLE

Analyte	Found Value (mg/L)	Known Value (mg/L)	% Recovery
Cadmium	0.0029	0.0029	101%
Chromium	0.0069	0.0067	104%
Mercury	0.0018	0.0018	103%

DUPLICATE ANALYSIS (mg/L)

Analyte	Original Sample Result	Duplicate Sample Result	% RPD
Cadmium	0.0010	0.0010	4.0%
Chromium	0.0031	0.0028	8.2%
Mercury	<0.00024	<0.00024	0.0%

SPIKE ANALYSIS (mg/L)

Analyte	Original Sample Result	Spike Sample Result	Spike Added (mg/L)	Recovery Percent
Cadmium	0.0010	0.0108	0.0100	103%
Chromium	0.0031	0.0522	0.0500	109%
Mercury	<0.00024	0.0018	0.0020	88%

METHOD BLANK

Analyte	Found Result (mg/L)	Detection Level (mg/L)
Cadmium	ND	0.0005
Chromium	ND	0.0004
Mercury	ND	0.00024

ND: Not Detected at stated detection level.
NA: Not Applicable.

Reported By: mh

Approved By: John L. Larkin

Date: 7/12/96