

EPFS GROUNDWATER PITS 1997 ANNUAL GROUNDWATER REPORT

Denny E. Foust
DEPUTY OIL & GAS INSPECTOR

JOHN CHARLES #8
Meter/Line ID - 93126

JUL 21 1998

SITE DETAILS

Legals - Twn: 27N Rng: 9W
NMOCD Hazard Ranking: 40
Operator: TEXACO

Sec: 13 Unit: B
Land Type: NAVAJO

PREVIOUS ACTIVITIES

Site Assessment: Jun-94
Soil Boring: Feb-97

Excavation: Aug-94 (110 cy)
Monitor Well: Feb-97

Re-Excavation: Nov-95 (272 cy)

The pit was excavated to 12 feet below ground surface (bgs) and a soil sample was collected from the excavation bottom. The soil headspace reading from the excavation bottom was 422 ppm. Soil analytical were as follows: benzene - <0.25 mg/kg, total BTEX - 33 mg/kg, TPH - 1.680 mg/kg.

The pit was re-excavated to approximately 19 feet bgs, and a soil sample was collected from the excavation bottom. The soil headspace reading from the excavation bottom was 251 ppm. Soil analytical were as follows: benzene - <0.5 mg/kg, total BTEX - 129 mg/kg, TPH - 2.840 mg/kg.

A soil boring was drilled in the center of the former pit, and a monitoring well was installed. Groundwater monitoring was initiated at MW-1, and samples were collected on a quarterly basis.

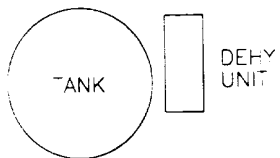
CONCLUSIONS

Groundwater samples have been below standards since quarterly sampling was initiated. Minimal impact to groundwater has occurred at this site.

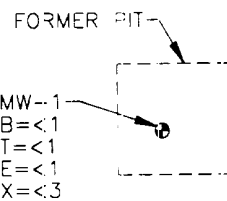
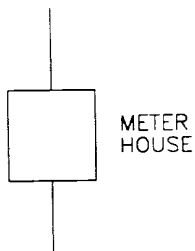
RECOMMENDATIONS

- EPFS requests closure at this site.
- Following OCD approval for closure, MW-1 will be abandoned following OCD approved abandonment procedures.

WASH



WELL-HEAD



LEGEND

● MW-1 APPROXIMATE MONITORING WELL LOCATION AND NUMBER

B BENZENE (ug\L)
T TOLUENE (ug\L)
E ETHYL BENZENE (ug\L)
X XYLENE (ug\L)

ug\L MICROGRAMS PER LITER

NOT TO SCALE



COL. 17520AM-001



TITLE:

JOHN CHARLES #8
93126

DWN: DES: CC

CHKD: APPD: CC

DATE: 1/14/98

REV: 0

PROJECT NO.: 17520

EPFS GW PIT'S

FIGURE 1

FIELD PIT SITE ASSESSMENT FORM

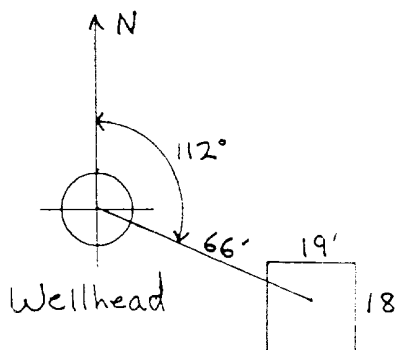
3

GENERAL	Meter: <u>93.26</u> Location: <u>John Charles #8</u> Operator #: <u>0263</u> Operator Name: <u>Texaco</u> P/L District: <u>Ballard</u> Coordinates: Letter: <u>B</u> Section <u>13</u> Township: <u>27N</u> Range: <u>9W</u> O- Latitude _____ Longitude _____ Pit Type: Dehydrator ☒ Location Drip: _____ Line Drip: _____ Other: _____ Site Assessment Date: <u>6-17-94</u> Area: <u>11</u> Run: <u>62</u>
SITE ASSESSMENT	NMOCD Zone: (From NMOCD Maps) Inside ☒ (1) Outside ☐ (2) Land Type: BLM ☐ (1) State ☐ (2) Fee ☐ (3) Indian <u>Eastern Navajo Agency</u> Depth to Groundwater Less Than 50 Feet (20 points) ☒ (1) 50 Ft to 99 Ft (10 points) ☐ (2) Greater Than 100 Ft (0 points) ☐ (3) Wellhead Protection Area : Is it less than 1000 ft from wells, springs, or other sources of fresh water extraction? , or ; Is it less than 200 ft from a private domestic water source? ☐ (1) YES (20 points) ☐ (2) NO (0 points) Horizontal Distance to Surface Water Body Less Than 200 Ft (20 points) ☒ (1) 200 Ft to 1000 Ft (10 points) ☐ (2) Greater Than 1000 Ft (0 points) ☐ (3) Name of Surface Water Body <u>Blanco Wash</u> (Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds) Distance to Nearest Ephemeral Stream ☒ (1) ^{KGW 6-1-94} < 100 (Navajo Pits Only) ☒ (2) > 100 TOTAL HAZARD RANKING SCORE: <u>40</u> POINTS
REMARKS	Remarks : <u>Two pits - one with tank. Dehy pit is dry</u> <u>Inside V.Z. on Redline & Topo</u>

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 112 Footage from Wellhead 66
b) Length : 19 Width : 18 Depth : 3



REMARKS

Remarks :

Photos 1118

Completed By:

Signature

6-17-94

Date

TABLE 1

Sample #	Meter/ Line #	Site Name	Sample Date	MW #	Project	Benzene (PPB)	Toluene (PPB)	Ethyl Benzene (PPB)	Total Aromatics (PPB)	Total BTEX
970212	93126	John Charles #8	3/13/97	1	Phase II Drilling - Initial	1	133	28	543	71
970560	93126	John Charles #8	6/12/97	1	Sample 4 - 1st Qtr	1	1	1	401	4
971006	93126	John Charles #8	9/19/97	1	Sample 4 - 2nd Qtr	1	1	1	59	6
971274	93126	John Charles #8	12/5/97	1	Sample 4 - 3rd Qtr	1	1	1	3	6

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	Meter: <u>93126</u> Location: <u>John Charles #8</u> Coordinates: Letter: <u>B</u> Section <u>13</u> Township: <u>27</u> Range: <u>9</u> Or Latitude _____ Longitude _____ Date Started : <u>8-4-94</u> Run: <u>11</u> <u>62</u>
FIELD OBSERVATIONS	Sample Number(s): <u>KP 168</u> Sample Depth: <u>12'</u> Feet Final PID Reading <u>422</u> PID Reading Depth <u>12'</u> Feet Yes No Groundwater Encountered ☐ ☒ Approximate Depth _____ Feet
CLOSURE	Remediation Method : Excavation ☒ Approx. Cubic Yards <u>110</u> Onsite Bioremediation ☐ Backfill Pit Without Excavation ☐ Soil Disposition: Envirotech ☒ ☐ Tierra Other Facility ☐ Name: _____ Pit Closure Date: <u>8-4-94</u> Pit Closed By: <u>BET</u>
REMARKS	Remarks : <u>Some Lime markers started Remediating to 12'</u> <u>Soil turned DARK gray with A smell At 12' soil still the</u> <u>same DARK gray with BAD smell. closed pit.</u>
Signature of Specialist: <u>Kelly Padilla</u>	



CHAIN OF CUSTODY RECORD

PROJECT NAME				PROJECT NUMBER				PROJECT NAME				PROJECT NUMBER			
Pit Closure Project # 24324				11951				Pit Closure Project # 24324				11951			
DATE: 8-4-94				DATE: 8-4-94				DATE: 8-4-94				DATE: 8-4-94			
SAMPLERS: (Signature) Kelly Padilla				SAMPLERS: (Signature) Kelly Padilla				SAMPLERS: (Signature) Kelly Padilla				SAMPLERS: (Signature) Kelly Padilla			
AB ID	DATE	TIME	MATRIX	SAMPLE NUMBER	TOTAL NUMBER OF CONTAINERS	SAMPLE TYPE	TPH EPA 418.1	BTEX EPA 8020	502	REMARKS					
844	8-4-94		soil	KP 151	1	VC	X	X	150	RP 8-4-94					
825	8-4-94	1120	soil	KP 167	1	VC	X	X	151						
336	8-4-94	1525	soil	KP 168	1	VC	X	X	152						

UNQUISHED BY: (Signature) Kelly Padilla

DATE/TIME 844 1710

RECEIVED BY: (Signature) Brenda Furse

DATE/TIME 844 1710

RECEIVED BY: (Signature) Kim B. J.

DATE/TIME 844 1710

UNQUISHED BY: (Signature) Kelly Padilla

DATE/TIME 844 1710

RECEIVED BY: (Signature) Brenda Furse

DATE/TIME 844 1710

RECEIVED BY: (Signature) Kim B. J.

DATE/TIME 844 1710

QUESTED TURNAROUND TIME:

ROUTINE ☐ RUSH

RIER CO.

SAMPLE RECEIPT REMARKS

FIELD SERVICES LABORATORY

EL PASO NATURAL GAS COMPANY

P. O. BOX 4990

FARMINGTON, NEW MEXICO 87499

RESULTS & INVOICES TO:

505-599-2144

FAX: 505-599-2261



FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP 168	945836
MTR CODE SITE NAME:	93126	N/A
SAMPLE DATE TIME (Hrs):	8-4-94	1525
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	8/9/94	8/9/94
DATE OF BTEX EXT. ANAL.:	8/11/94	8/11/94
TYPE DESCRIPTION:	VC	Brown Grey Sand

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	0.25	MG/KG	10			
TOLUENE	0.25	MG/KG	10			
ETHYL BENZENE	1.2	MG/KG	10			
TOTAL XYLENES	31	MG/KG	10			
TOTAL BTEX	33	MG/KG				
TPH (418.1)	1680	MG/KG			2.05	28
HEADSPACE PID	422	PPM				
PERCENT SOLIDS	93.1	%				

— TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 —

The Surrogate Recovery was at 112 % for this sample All QA/QC was acceptable.
N tative: ATI results attached.

DF = Dilution Factor Used

Approved By: J.P.

Date: 9/2/94



Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 408339
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	945835	NON-AQ	08/04/94	08/11/94	08/11/94	10
02	945836	NON-AQ	08/04/94	08/11/94	08/11/94	10
03	945837	NON-AQ	08/04/94	08/11/94	08/11/94	10
PARAMETER			UNITS	01	02	03
BENZENE			MG/KG	0.33	<0.25	<0.25
TOLUENE			MG/KG	26	<0.25	<0.25
ETHYLBENZENE			MG/KG	<0.25	1.2	<0.25
TOTAL XYLENES			MG/KG	4.7	31	270

SURROGATE:

BROMOFLUOROBENZENE (%)

71 112 425*

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE



Analytical **Technologies**, Inc.

2709-D Pan American Freeway NE Albuquerque, NM 87107
Phone (505) 344-3777 FAX (505) 344-4413



ATI I.D. 408339

August 25, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 08/10/94, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-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.

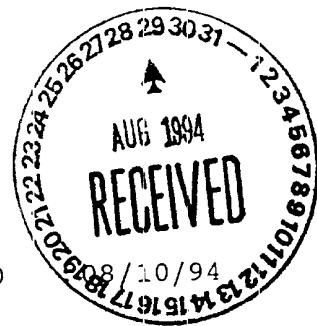
H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure



Analytica Technologies, Inc.



CLIENT : EL PASO NATURAL GAS CO.
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

DATE RECEIVED

REPORT DATE : 08/25/94

ATI ID: 408339

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	945835	NON-AQ	08/04/94
02	945836	NON-AQ	08/04/94
03	945837	NON-AQ	08/04/94
04	945838	NON-AQ	08/04/94
05	945839	NON-AQ	08/04/94
06	945840	NON-AQ	08/04/94
07	945850	NON-AQ	08/05/94
08	945851	NON-AQ	08/05/94
09	945852	NON-AQ	08/05/94
10	945853	NON-AQ	08/05/94
11	945854	NON-AQ	08/05/94
12	945855	NON-AQ	08/05/94
13	945856	NON-AQ	08/05/94
4	945862	NON-AQ	08/08/94
15	945863	NON-AQ	08/08/94
16	945864	NON-AQ	08/08/94
17	945865	NON-AQ	08/08/94
18	945866	NON-AQ	08/08/94

---TOTALS---

<u>MATRIX</u>	<u>#SAMPLES</u>
NON-AQ	18

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.



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H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure

ATI LAB I.D. 1150339

DATE: 8/9/94 PAGE 1 OF 2

ANALYSIS REQUEST

[illegible]

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJ. NO.:	24324	NO. CONTAINERS	9
PROJ. NAME:	PIT CLOSURE	CUSTODY SEALS	YIN/NA
P.O. NO.:	38822	RECEIVED INTACT	Y
SHIPPED VIA: FEDERAL EXPRESS		RECEIVED COLD	Y 202

QA/QC ON PROJECT SAMPLES

SAMPLED & RELINQUISHED BY: 1.		RELINQUISHED BY: 2.		RELINQUISHED BY: 3.	
Signature:	Time:	Signature:	Time:	Signature:	Time:
Printed Name:	Date:	Printed Name:	Date:	Printed Name:	Date:
Company:	Phone:	Company:		Company:	
RECEIVED BY: 1.		RECEIVED BY: 2.		RECEIVED BY: (LAB) 3.	
Signature:	Time:	Signature:	Time:	Signature:	Time:
Printed Name:	Date:	Printed Name:	Date:	Printed Name:	Date:
Company:		Company:		Company:	

(903) 474-1001 • Portland (503) 584-7447 • Albuquerque (505) 344-3777 DISTRIBUTION: White - Casper - AT • Pink - ORIGINATOR



Analytical Technologies, Inc., Albuquerque, NM
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CHAIN OF CUSTODY

DATE: 8/19/94 PAGE 2 OF 2

ATILAB I.D. 408339

PROJECT MANAGER: JOHN LAMBDIN

COMPANY: EL PASO NATURAL GAS

ADDRESS: P.O. BOX 4990

FARMINGTON, NM 87499

PHONE: (505) 599-2144

FAX: (505) 599-2261

BILL TO: SAME AS ABOVE

COMPANY:

ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Petroleum Hydrocarbons (418.1)	Diesel/Gasoline/BTXE/MTBE (MOD 8015/8020)	BTX/MTBE (8020)	BTEX (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)	NUMBER OF CONTAINERS
9458 53	8/15/94	1230	Soil	10				X																1
9458 54	↑	1340	↑	11				X																1
9458 55	↓	1023	↓	12				X																1
9458 56	8/15/94	1233	↑	13				X																1
9458 62	8/18/94	0930	↑	14				X																1
9458 63	↑	1423	↑	15				X																1
9458 64	↓	0905	↓	16				X																1
9458 65	↓	1140	↓	17				X																1
9458 66	8/18/94	1510	Soil	18				X																1

PROJECT INFORMATION

PROJ. NO. 24324 NO. CONTAINERS 4
PROJ. NAME PIT CLOSURE CUSTODY SEALS 01/1/NA
P.O. NO. 38822 RECEIVED INTACT Y
SHIPPED VIA: FEDERAL EXPRESS RECEIVED COLD Y 22°C

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☒ 72hr ☐ 1 WEEK (NORMAL) ☐ 2 WEEK
Comments: CHARGE CODE: 50% 108-51570-24-(XX)1-0012-31-2010
50% 108-52452-24-(XX)1-0012-31-2010
7210

QA/QC ON PROJECT SAMPLES

SAMPLED & RELINQUISHED BY: 1. RELINQUISHED BY: 2. RELINQUISHED BY: 3.

Signature: Time: Signature: Time: Signature: Time:
Printed Name: Date: Printed Name: Date: Printed Name: Date:
Company: Phone: Company: EI, PASO NATURAL GAS 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: Analytical Technologies, Inc.

PLEASE FILL THIS FORM IN COMPLETELY. SHADED AREAS ARE FOR LAB USE ONLY.

FIELD PIT REMEDIATION/CLOSURE FORM/PHASE II

GENERAL

Meter: 93126 Location: John Charles #8
 Coordinates: Letter: B Section 13 Township: 27N Range: 9E1
 Or Latitude _____ Longitude _____
 Date Started : 11/14/95 Area: 11 Run: 62

FIELD OBSERVATIONS

Sample Number(s): JK 133
 Sample Depth: 19' Feet
 Final PID Reading 251.0 PID Reading Depth 19' Feet
 Yes No
 Groundwater Encountered ☐ (1) ☒ (2) Approximate Depth _____ Feet
 Final Dimensions: Length 20' Width 20' Depth 19'

CLOSURE

Remediation Method :
 Excavation ☒ (1) Approx. Cubic Yards 272 cu ^{yd}/₉₅
 Onsite Bioremediation ☐ (2)
 Backfill Pit Without Excavation ☐ (3)
 Overburden Cubic Yards 90 yds
 Soil Disposition:
 Envirotech ☒ (1) ☐ (3) Tierra
 Other Facility ☐ (2) Name: _____
 Pit Closure Date: 11-18-95 Pit Closed By: Phil P

REMARKS

Remarks : Pit PID Readings (N-10.3) (S-3.2) (E-26.0) (W-2.5)
Less Than 100' From Ephemeral stream
No fence No EPN6 on site

Signature of Specialist: James K. Kirby



Navajo Dits

CHAIN OF CUSTODY RECORD

Page 1 of 1

PROJECT NUMBER		PROJECT NAME		CONTRACT LABORATORY P. O. NUMBER																																																													
# 24324		Pit Closure Project																																																															
SAMPLES (Signature)		DATE	FIELD ID																																																														
LAB ID	DATE	TIME	MATRIX	TOTAL NUMBERS OF CONTAINERS	SAMPLE TYPE																																																												
947776	11/14/95	09:13	Soil	1	G																																																												
947777	11/14/95	11:14	Soil	1	G																																																												
947778	11/14/95	11:30	Water	1	G																																																												
REQUESTED ANALYSIS <table border="1"><thead><tr><th>TPH</th><th>EPA 418.1</th><th>BTEX</th><th>EPA 8020</th><th>LAB PID</th><th>SEQUENCE #</th></tr></thead><tbody><tr><td>X</td><td>X</td><td>X</td><td>X</td><td>251</td><td></td></tr><tr><td>X</td><td>X</td><td>X</td><td>X</td><td>12.8</td><td></td></tr><tr><td>X</td><td>X</td><td>X</td><td>X</td><td>NW</td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></tbody></table> REMARKS JOHN CHARLES 28 meter 93/26 CHARLEY PAH 4 meter 715-31 CHARLEY PAH 4 meter 715-31						TPH	EPA 418.1	BTEX	EPA 8020	LAB PID	SEQUENCE #	X	X	X	X	251		X	X	X	X	12.8		X	X	X	X	NW																																					
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						X	X	X	X	NW																																																							
RELINQUISHED BY: (Signature)		DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)																																																												
<i>James K. Kelly</i>		11/14/95 16:00	<i>Julia D. Dittler</i>	11/15/95 8:45	<i>Julia D. Dittler</i>																																																												
RELINQUISHED BY: (Signature)		DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)																																																												
					<i>Julia D. Dittler</i>																																																												
REQUESTED TURNAROUND TIME: ☐ ROUTINE ☐ RUSH																																																																	
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FAX: 505-599-2261																																																																	



FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JK133	947776
MTR CODE SITE NAME:	93126	John Charles #8
SAMPLE DATE TIME (Hrs):	11-14-95	0913
PROJECT:	Phase I Navajo	
DATE OF TPH EXT. ANAL.:	11/15/95	
DATE OF BTEX EXT. ANAL.:	11/15/95	11/15/95
TYPE DESCRIPTION:	VG	Dark gray sand & clay

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< 0.5	MG/KG				
TOLUENE	4.8	MG/KG				
ETHYL BENZENE	13.6	MG/KG				
TOTAL XYLENES	111	MG/KG	5	D		
TOTAL BTEX	129	MG/KG				
TPH (418.1)	2840	MG/KG			2.05	28
HEADSPACE PID	251	PPM				
PERCENT SOLIDS	91.7	%				

-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at
arrative:

107%/949

for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Approved By:

Date:

11/15/95

RECORD OF SUBSURFACE EXPLORATION

PHILIP ENVIRONMENTAL SERVICES INC.

4000 Monroe Road

Farmington, New Mexico 87401

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

Borehole # BH-1

Well # 1

Page 1 of 1

Project Name EPFS GW PITS

Project Number 17520 Phase 6001.77

Project Location JOHN CHARLES #8-93/26

Well Logged By D. Cesark

Personnel On-Site D. Chavley

Contractors On-Site

Client Personnel On-Site

Drilling Method 4 1/4" ID HSA

Air Monitoring Method PID, CGI

Elevation

Borehole Location Ltr B-S13-T27 R 9

GWL Depth 31' BGS

Logged By D. Cesark

Drilled By M. Donohue

Date/Time Started 2-12-97 / 1400 1230

Date/Time Completed 2-12-97 / 1400

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (Inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Leads PPM BZ SH S	Drilling Conditions & Blow Counts < TIME >
0				BACKFILL				
5				TO				
10				19'				
15								
20				SILTY SAND, SAND-SILT MIX, HC STAINING (DARK GRAY), STRONG HC ODOR. MED. DENSE.	SM		726/1147	2130S
25	1	23'-25'	24"					
30	2	28'-30'	18"	CLAYEY SAND, SAND-CLAY MIX HC STAINING (DARK GRAY), STRONG HC ODOR.	SC		330/1117	2131S
35				OVER-DRILLED 10' TO COMPLETE WELL.				
40				TD = 41'				

Comments:

GW ENCOUNTERED @ 31' BGS. LAST SAMPLE COLLECTED @ 28'-30' BGS WAS HIGHLY CONTAMINATED. THEREFORE, NO LAB SAMPLE WAS SUBMITTED. BOREHOLE OVER-DRILLED 10' TO COMPLETE WELL TO SPECS. PLEASE REFER TO M.W. INSTALL. RECORD.

Geologist Signature

[Signature]

MONITORING WELL INSTALLATION RECORD

Philip Environmental Services, Inc.

4000 Monroe Rd.

Farmington, NM 87401

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

Borehole # 1

Well # 1

Page 1 of 1

Project Name

EPES GW PITS

Project Number

17520

Phase 0002-17

Site Location

JOHN CHARLES #8

93126

On-Site Geologist

D. GASK

Personnel On-Site

D. CHARLEY

Contractors On-Site

Client Personnel On-Site

Elevation

Well Location

CTR B/S13/T27/R9

GWL Depth

31' BGS

Installed By

M. DONOHUE

Date/Time Started

2-12-97 / +2301400

Date/Time Completed

1700

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing		
Bottom of Protective Casing		
Top of Permanent Borehole Casing		N/A
Bottom of Permanent Borehole Casing		N/A
Top of Concrete		
Bottom of Concrete		
Top of Grout		-0-
Bottom of Grout	Grout	-20'
Top of Well Riser	PVC	+3'
Bottom of Well Riser	PVC	-25'
Top of Well Screen	PVC	-25'
Bottom of Well Screen	PVC	-40'
Top of Peltonite Seal	BENTONITE	-20'
Bottom of Peltonite Seal	BENTONITE	-22'
Top of Gravel Pack	SAND	-22'
Bottom of Gravel Pack	SAND	-41'
Top of Natural Cave-In	SAND	-40'
Bottom of Natural Cave-In	SAND	-41'
Top of Groundwater		-31'
Total Depth of Borehole		-41'

Top of Protective Casing

Top of Riser

+3'

Ground Surface

-0-

Top of Seal

-20'

Top of Gravel Pack

-22'

Top of Screen

-25'

Bottom of Screen

-40'

Bottom of Borehole

-41'

Comments:

Geologist Signature

[Signature]

PHILIP

Chain of Custody Record

4000 Monroe Road
Farmington, NM 87401

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

COC Serial No. C 3059

Project Name <i>EPFS GWPITS</i>		Project Number <i>17520</i>		Phase Task <i>Leach</i>		Date <i>77</i>	
Sampler <i>J. Long</i>		Name <i>EPH</i>		Location <i>Farmington NM</i>		Total Number of Bottles	
Laboratory		Sample Number (and depth)		Date	Time	Matrix	Type of Analysis and Bottle
<i>GPS</i>	<i>970201</i>	<i>JAL T.P. BLANK</i>	<i>3-10-97</i>	<i>1115</i>		<i>WATER</i>	<i>X</i>
<i>LAB</i>	<i>970202</i>	<i>JAL 14046 01</i>	<i>3-10-97</i>	<i>1245</i>		<i>WATER</i>	<i>X</i>
<i>ED</i>	<i>970203</i>	<i>JAL 04506 01</i>	<i>3-10-97</i>	<i>1610</i>		<i>WATER</i>	<i>X</i>
	<i>970204</i>	<i>JAL T.P. BLANK</i>	<i>3-11-97</i>	<i>1000</i>		<i>WATER</i>	<i>X</i>
	<i>970205</i>	<i>JAL 60153 01</i>	<i>3-11-97</i>	<i>1045</i>		<i>WATER</i>	<i>X</i>
	<i>970206</i>	<i>JAL 95210 01</i>	<i>3-11-97</i>	<i>1325</i>		<i>WATER</i>	<i>X</i>
	<i>970207</i>	<i>JAL 75220 01</i>	<i>3-11-97</i>	<i>1530</i>		<i>WATER</i>	<i>X</i>
	<i>970208</i>	<i>JAL T.P. BLANK</i>	<i>3-12-97</i>	<i>1150</i>		<i>WATER</i>	<i>X</i>
	<i>970209</i>	<i>JAL 71676 01</i>	<i>3-12-97</i>	<i>1155</i>		<i>WATER</i>	<i>X</i>
	<i>970210</i>	<i>JAL T.P. BLANK</i>	<i>3-13-97</i>	<i>1000</i>		<i>WATER</i>	<i>X</i>
	<i>970211</i>	<i>JAL 74016 01</i>	<i>3-13-97</i>	<i>1010</i>		<i>WATER</i>	<i>X</i>

Comments:
ONE VOA TOO OLD
HANDSPACE PRESENT
ONE VOA TOO OLD
HANDSPACE PRESENT
AIR BUBBLE

Relinquished by:

Received By:

Signature	Date	Time	Signature	Date	Time
<i>[Signature]</i>	<i>3-13-97</i>	<i>1430</i>	<i>[Signature]</i>	<i>3/13/97</i>	<i>1435</i>

Samples iced: ☒ Yes ☐ No		Carrier:	Airbill No.
Preservatives (ONLY for Water Samples)		Shipping and Lab Notes:	
☐ Cyanide Sodium hydroxide (NaOH)		<i>Hard Delivered</i> <i>Rec'd - Cool and in-tret</i>	
☒ Volatile Organic Analysis Hydrochloric acid (HCl)			
☐ Metals Nitric acid (HNO3)			
☐ TPH (418.1) Sulfuric acid (H2SO4)			
☐ Other (Specify)			
☐ Other (Specify)			



Chain of Custody Record

4000 Monroe Road
Farmington, NM 87401

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

COC Serial No. C 3060

Project Name		Phase		Task		Type of Analysis and Bottle		Comments
Project Number	17520	Phase	Task	Task	Task	Task	Task	
Samplers		Name		Location		Matrix		Total Number of Bottles
Laboratory	Sample Number (and depth)	Date	Time	Matrix	Matrix	Matrix	Matrix	
970212	SAL 9312601	3-13-97	1220	Water				2
[Signature]								

EPH
LAB IN
970212

Relinquished by:

Signature

Date

Time

Received By:

Signature

Date

Time

Samples Iced: ☒ Yes ☐ No

Preservatives (ONLY for Water Samples)

☐ Cyanide ☐ Sodium hydroxide (NaOH)

☒ Volatile Organic Analysis ☐ Hydrochloric acid (HCl)

☐ Metals ☐ Nitric acid (HNO₃)

☐ TPH (418.1) ☐ Sulfuric acid (H₂SO₄)

☐ Other (Specify) _____

☐ Other (Specify) _____

Carrier:

Shipping and Lab Notes:

Hand Delivered
acid - Cool and in TAET

Airbill No.



EL PASO FIELD SERVICES



5-22-97

FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JAL 93126-01	970212
MTR CODE SITE NAME:	93126	John Charles #8
SAMPLE DATE TIME (Hrs):	3/13/97	1220
PROJECT:	Phase II Drilling - Initial	
DATE OF BTEX EXT. ANAL.:	3/15/97	3/15/97
TYPE DESCRIPTION:	Monitor Well	Water

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	13.3	PPB				
ETHYL BENZENE	2.80	PPB				
TOTAL XYLENES	54.3	PPB				
TOTAL BTEX	70.4	PPB				

The Surrogate Recovery was at 98.7 for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

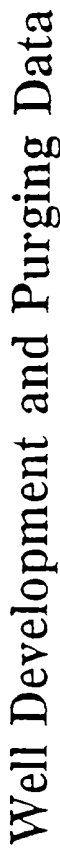
Narrative:

Approved By:

Date:

4/5/97

970212,4/4/97



☒ Development
☐ Purging

Well Number MW01

Page _____ of _____

Project Name EPFS & WQITS

Project Manager Copy chance

Project No. 17520

Client Company EL Paso

Phase.Task No. 6003 77

Site Name Sow Charles #8 121-121 6326 172259

Site Address

Development Criteria

Water Volume Calculation

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

Instruments
Serial No. (if applicable)

pH Meter *1457*

☐ DO Monitor

Methods of Development

Pump

☐ Centrifugal ☒ Bottom Valve

☐ Submersible ☐ Double Check Valve

☐ Peristaltic ☐ Stainless-steel Kenmerer

☐ Other

Water Disposal

Water Removal Data

[illegible]

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

Comments

Developer's Signature(s)

Date 3.13.97

Reviewer	Date
----------	------



Water Sampling Data

Location No. MW101Serial No. WSD-Group List Number Sample Type: ☒ Groundwater ☐ Surface Water ☐ Other Date 3-13-97Project Name RFB Gw PITS Project No. 17520Project Manager Cort Chance Phase/Task No. 0003 21Site Name John Charles #8 (93216)

Sampling Specifications

Requested Sampling
Depth Interval (feet) 0-3'
Requested Wait Following
Development/Purging (hours)

Initial Measurements

Time Elapsed From Final Development/Purging (hours) 10
Initial Water Depth (feet) 31.65
Nonaqueous Liquids Present (Describe)

Water Quality/Water Collection

DO = Dissolved Oxygen; Cond. = Conductivity

Date	Time	Sampler Initials	Water Quality Readings				Water Collection Data					Notes (Explain in Comments Below)
			Temp. (°C)	pH	DO (mg/L)	Cond. (µmhos/ cm)	Volume Removed (gallons)	Removal Rate (gal/min)	Pump Intake Depth (feet)	Bail	Final Water Depth (feet)	
See	well	Purgen	+ Development				Sheet					

Container Type: G = Clear Glass; A = Amber Glass; P = Plastic; V = VOA Vial (Glass); O = Other (Specify)

Sample Containers

Preservatives: H = HCl; N = HNO₃; S = H₂SO₄; A = NaOH; O = Other (Specify); - = None

Analytical Parameter List	Container			Field Filtered		Preserved	Cooled During Collection		Comments
	Number	Type	Volume (mL)	Yes	No		Yes	No	
BTEX	2	G	40			H	X		JAL 93121601 T1220

Filter Type Chain-of-Custody Form Number C 30610Comments Signature [Signature] Date 3-13-97 Reviewer Date



A 2011

CHAIN OF CUSTODY RECORD

[illegible]



EL PASO FIELD SERVICES



6-23-97

FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970560
MTR CODE SITE NAME:	93126	John Charles #8 MW-1
SAMPLE DATE TIME (Hrs):	6/12/97	1324
PROJECT:	Sample 4 - 1st Quarter	
DATE OF BTEX EXT. ANAL.:	6/13/97	6/13/97
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	4.01	PPB				
TOTAL BTEX	4.01	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 93.0 for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

Approved By:

John Charles

Date:

6-23-97

970560,6/20/97



EL PASO FIELD SERVICES



6-23-97

Field Services Laboratory Analytical Report

SAMPLE IDENTIFICATION

EPFS LAB ID:	970560
DATE SAMPLED:	06/12/97
TIME SAMPLED (Hrs):	1324
SAMPLED BY:	N/A
MATRIX:	Water
METER CODE:	93126
SAMPLE SITE NAME:	John Charles #8
SAMPLE POINT:	MW-1

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Laboratory pH	7.8	Units	06/13/97
Alkalinity as CO ₃	0.0	PPM	06/13/97
Alkalinity as HCO ₃	372	PPM	06/13/97
Calcium as Ca	255	PPM	06/13/97
Magnesium as Mg	20	PPM	06/13/97
Total Hardness as CaCO ₃	718	PPM	06/13/97
Chloride as Cl	50	PPM	06/13/97
Sulfate as SO ₄	1,660	PPM	06/13/97
Fluoride as F	1.5	PPM	06/13/97
Nitrate as NO ₃ -N	<0.3	PPM	06/13/97
Nitrite as NO ₂ -N	<0.3	PPM	06/13/97
Ammonium as NH ₄ ⁺	<0.1	PPM	06/13/97
Phosphate as PO ₄	<0.3	PPM	06/13/97
Potassium as K	1.9	PPM	06/13/97
Sodium as Na	658	PPM	06/13/97
Total Dissolved Solids	2,920	PPM	06/13/97
Conductivity	3,520	umhos/cm	06/13/97
Anion/Cation %	1.0%	%, < 5.0 Accepted	06/20/97

Lab Remarks:

Reported By:

Inda

Approved By:

John Larch

Date: 6-23-97



7-21-97

**FIELD SERVICES LABORATORY
ANALYTICAL REPORT****SAMPLE IDENTIFICATION**

SAMPLE NUMBER:	970560
SAMPLE DATE:	06/12/97
SAMPLE TIME (Hrs):	1324
SAMPLED BY:	N/A
MATRIX:	Water
METER CODE:	93126
SAMPLE SITE NAME:	John Charles #8
SAMPLE POINT:	MW-1

REMARKS: _____

RESULTS

PARAMETER	TOTAL RESULT (mg/L)	N. M. WQCC LIMIT (mg/L)
ARSENIC	<.029	0.100
BARIUM	0.18	1.00
CADMIUM	<.0002	0.010
CHROMIUM	0.011	0.050
LEAD	0.003	0.050
MERCURY	<0.0002	0.002
SELENIUM	<.005	0.050
SILVER	0.0011	0.050

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 7061A, Arsenic (Atomic Absorption, Gaseous Hydride), Test Methods for Evaluating Solid Waste, SW-846, USEPA, July, 1992.
Method 7081, Barium (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, July, 1992.
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. EPA 600/4-91/010, 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: mdsApproved By: John F. L. L. L.Date: 7/17/97



Well Number 94-1
Meter Code 93/26

Site Name JOHN CHARLES #2

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

Initial Depth of Well (feet) 42.80
Initial Depth to Water (feet) 31.87
Height of Water Column in Well (feet) 10.99

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

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

K072 SEP 1972

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		7.3	21.8
Gravel Pack			
Drilling Fluids			
Total			

[illegible]

Developer's Signature Dennis Bied Date 6-12-97 Reviewer J. H. Smith Date 6-23-97

SAMPLE 4 2nd QTR



Natural Gas Company

A 2087

CHAIN OF CUSTODY RECORD

Project No.	Project Name	Samplers: (Signature)						
Date	Time	Comp.	GRAB	Sample Number	Type and No. of Sample Containers	Preservation Technique	Requested Analysis	Remarks
9/18/97	1313	X		971006	G-1	4°C X		JOHN CHARLES #8 MW-1
9/18/97	1313	X		971007 FD	G-1	4°C X		JOHN CHARLES #8 MW-1
[Diagonal Line]								
Relinquished by: (Signature) <i>Bernie Bird</i> Date/Time 9/18/97 1536 Received by: (Signature) _____ Date/Time _____ Relinquished by: (Signature) _____ Date/Time _____ Received by: (Signature) _____								
Relinquished by: (Signature) _____ Date/Time _____ Received by: (Signature) _____ Date/Time _____ Relinquished by: (Signature) _____ Date/Time _____ Received by: (Signature) _____								
Relinquished by: (Signature) _____ Date/Time _____ Received by: (Signature) _____ Date/Time _____ Relinquished by: (Signature) _____ Date/Time _____ Received by: (Signature) _____								
Carrier Co. _____ Air Bill No. _____								



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	971006
MTR CODE SITE NAME:	93126	John Charles #8
SAMPLE DATE TIME (Hrs):	9/19/97	1313
PROJECT:	Sample 4 2nd Quarter	
DATE OF BTEX EXT. ANAL.:	9/24/97	9/24/97
TYPE DESCRIPTION:	MW-1	Water

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	<1	PPB				
TOLUENE	<1	PPB				
ETHYL BENZENE	<1	PPB				
TOTAL XYLENES	5.90	PPB				
TOTAL BTEX	6	PPB				

—BTEX is by EPA Method 8020 —

The Surrogate Recovery was at 91.5 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

Approved By:

John F. Smith

Date:

9/24/97

971006BTEXMW,9/25/97



Well Development and Purging Data

Well Number mw-1

Meter Code 93126

Site Name JOHN CHARLES #8

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) 42.80
Initial Depth to Water (feet) 31.82
Depth of Water Column in Well (feet) 11.18

4 Gravel pack

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well casing		7.4	22.3
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- | | |
|-------------------------------------|---------------------|
| ☒ | pH Meter |
| ☐ | DO Monitor |
| ☒ | Conductivity Meter |
| ☒ | Temperature Meter |
| ☒ | Other <u>0.0.0.</u> |

Temperature Master
0.0 CHEMETS KIT

Water Disposal

Water Disposal
K072 SEPARATOR

Water Removal Data

Date	Time	Development Method		Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gal)		Product Volume Removed (gallons)		Temperature °C	pH	Salinity units/cm	Oxygen mg/L	Comments
		Pump	Boiler				Increment	Cumulative	Increment	Cumulative					
7-19-97	1156										19.1	6.97	3280		
7-19-97	1203						5.0	5.0			18.5	7.16	3280		
7-19-97	1210						5.0	10.0			18.1	7.19	3310		
7-19-97	1218						5.0	15.0			18.1	7.21	3290		
7-19-97	1235						5.0	20.0			18.0	7.20	3300		
7-19-97	1333						5.0	25.0			17.9	7.24	3260	1.5	

Comments

Comments _____

Developer's Signature *Dennis Bird*

Date: 9-19-97 Revision:

John Stoller

Date 9/29/97

SAMPLE 4 30Q7P.



A 2155

CHAIN OF CUSTODY RECORD

[illegible]



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	971274
MTR CODE SITE NAME:	93126	John Charles #8
SAMPLE DATE TIME (Hrs):	12/5/97	1140
PROJECT:	Sample 4 3rd Quarter	
DATE OF BTEX EXT. ANAL.:	12/9/97	12/9/97
TYPE DESCRIPTION:	MW-1	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 92.7 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative:

Approved By:

John Fuller

Date:

12/18/97

971274BTEXMW, 12/10/97



Well Development and Purging Data

Site Name JOHN CHARLES #8

Well Number MW-1

Meter Code 93/26

Development ☐

Purging ☒

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) 43.80
Initial Depth to Water (feet) 31.66
Height of Water Column in Well (feet) 11.14

Diameter (inches): Well

Item	Water Volume In Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing		7.4	22.1
Gravel Pack			
Drilling Fluids			
Total			

Instruments

- | | |
|-------------------------------------|--------------------|
| ☒ | pH Meter |
| ☐ | DO Monitor |
| ☒ | Conductivity Meter |
| ☒ | Temperature Meter |
| ☒ | Other <u>DO, C</u> |

Water Disposal

KOTZ SEP 19 1970

Water Removal Data

[illegible]

Comments

Developer's Signature Lennie Bird

Date 12-5-97 Reviewer _____

John Ford

Date 12/18/21