

3R - 167

REPORTS

DATE:

1998



Certified Mail: #Z 211 324 121

March 31, 1999

Mr. William C. Olson
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87504

RECEIVED

APR 05 1999

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

RE: 1998 Pit Project Annual Groundwater Report

Dear Mr. Olson:

In accordance with reporting requirements, El Paso Field Services (EPFS) has enclosed annual updates for the 49 remaining groundwater impacted locations that were identified during our pit closure project of 1994 / 1995.

Of the 49 reports, EPFS hereby requests closure of 18 of these locations. The 18 sites EPFS is requesting closure on are presented in 4 separate binders entitled "Final Closure Report for Groundwater Sites with Four Consecutive Quarters Below Standards".

The Jaquez Com. C #1 and Jaquez Com. E #1 site is included in a separate report which is entitled "Jaquez Com. C #1 and Jaquez Com. E #1 Annual Report for Soil and Groundwater Remediation".

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

Sincerely,

A handwritten signature in dark ink, appearing to read 'Scott T. Pope'.

Scott T. Pope P.G.
Senior Environmental Scientist

xc: Mr. Denny Foust, NMOCD, Aztec - w / enclosures; **Certified Mail # Z 211 324 122**
Mr. Bill Liesse, BLM - w / enclosures; **Certified Mail # Z 211 324 123**
Ms. Charmaine Tso, Navajo EPA - w / enclosures; **Certified Mail # Z 211 324 120**

SAN JUAN BASIN PIT CLOSURES
San Juan Basin, New Mexico

El Paso Field Services
Final Closure Report For Groundwater Sites With Four
Consecutive Quarters Below Standards

RECEIVED

APR 05 1999

December 1998

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Prepared For

El Paso Field Services
Farmington, New Mexico

Project 17520
Book 1



EPFS GROUNDWATER PITS 1998 CLOSURE REPORT

RECEIVED

DE NA HAZ ZA #1
Meter/Line ID - 74439

APR 05 1999

SITE DETAILS

Legals - Twn: 26N Rng: 8W
NMOCD Hazard Ranking: 40
Operator: BURLINGTON RESOURCES

Sec: 18 Unit: D
Land Type: NAVAJO

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

PREVIOUS ACTIVITIES

Site Assessment: Jun-94
Re-Excavation: Mar-97 (226 cy)

Excavation: Aug-94 (40 cy)
Monitor Well: May-97

Soil Boring: Feb-97

The pit was excavated to 12 feet beneath ground surface (bgs) and a composite soil sample was collected from the excavation bottom and four walls. Approximately 40 cubic yards of impacted soil were removed during excavation. The headspace soil reading from the excavation bottom was 225 ppm. Soil analytical was as follows; benzene - <0.25 mg/kg, total BTEX - 3.0 mg/kg, and TPH (418.1) 390 mg/kg.

The pit was re-excavated to 18 feet bgs where groundwater was encountered. One composite soil sample was collected from the excavation. Approximately 226 additional cubic yards of contaminated soil were removed from the excavation. The final headspace reading from the excavation bottom was 63 ppm. Soil analytical was as follows; benzene - <0.25 mg/kg, total BTEX - 3.0 mg/kg, and TPH (418.1) ND mg/kg.

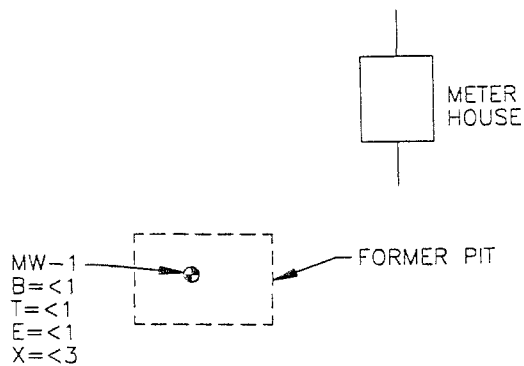
One soil boring was drilled in the center of the former pit and a monitoring well was installed. No soil sample was collected. Quarterly groundwater monitoring was initiated on 5/22/97 and continued through 3/26/98. Groundwater analytical data are presented in Table 1. Groundwater analytical data prior to 1998 has been previously submitted in the 1997 Annual Report, along with well logs and well diagrams.

CONCLUSIONS

Groundwater analytical data has been below standards for 4 consecutive quarters since quarterly sampling was initiated indicating minimal impact to groundwater.

RECOMMENDATIONS

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



WASH

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 17520AN-001 PSC PHILIP SERVICES CORP.	TITLE:	DWN:	DES.:	PROJECT NO.:
	DE-NA-HAZ-ZA #1	TMM	CC	17520
	74439	CHKD:	APPD:	EPFS GW PITTS
		CC		
	DATE:	REV.:	FIGURE 1	
	12/8/97	0		

FIELD PIT SITE ASSESSMENT FORM

3

GENERAL

Meter: 74439 Location: De-Na-Haz-Za No. 1
 Operator #: 2999 Operator Name: Meridian P/L District: Ballard
 Coordinates: Letter: D Section 18 Township: 26N Range: 8W
 Or Latitude _____ Longitude _____
 Pit Type: Dehydrator _____ Location Drip: X Line Drip: _____ Other: _____
 Site Assessment Date: 6-23-94 Area: 11 Run: 91

SITE ASSESSMENT

NMOCD Zone: (From NMOCD Maps) Inside ☒ (1) Outside ☐ (2)

Land Type: BLM ☐ (1) State ☐ (2) Fee ☐ (3) Indian Eastern Navajo Agency

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 Blanco Wash
 (Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)
 Distance to Nearest Ephemeral Stream ☐ (1) < 100' (Navajo Pits Only)
☒ (2) > 100'

TOTAL HAZARD RANKING SCORE: 40 POINTS

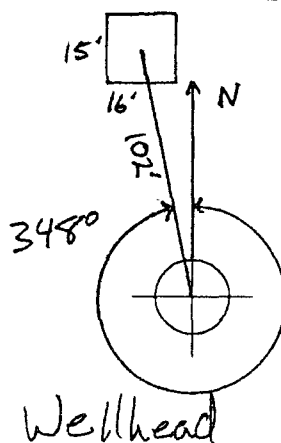
REMARKS

Remarks : One pit. Dry

Inside V.Z. on Redline & Topo

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 348° Footage from Wellhead 102
 b) Length : 16 . Width : 15 Depth : 3



Remarks :

Photos- 0946

End dump

Completed By:

[Signature]

Signature

6-23-94

Date

PHASE I EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	Meter: <u>74439</u> Location: <u>De-NA-HAZ-ZA #1</u> Coordinates: Letter: <u>D</u> Section <u>18</u> Township: <u>26 N</u> Range: <u>8W</u> Or Latitude _____ Longitude _____ Date Started : <u>8/8/94</u> Run: <u>11</u> <u>91</u>
FIELD OBSERVATIONS	Sample Number(s): <u>KD 196</u> Sample Depth: <u>12'</u> Feet Final PID Reading <u>225 ppm</u> PID Reading Depth <u>12'</u> Feet Yes No Groundwater Encountered ☐ ☒ Approximate Depth _____ Feet
CLOSURE	Remediation Method : Excavation ☒ Approx. Cubic Yards <u>40</u> Onsite Bioremediation ☐ Backfill Pit Without Excavation ☐ Soil Disposition: Envirotech ☒ ☐ Tierra Other Facility ☐ Name: _____ Pit Closure Date: <u>8/8/94</u> Pit Closed By: <u>BET</u>
REMARKS	Remarks : <u>Excavated pit to 12', took PID sample, closed pit.</u> Signature of Specialist: <u>[Signature]</u>



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

SAMPLE NUMBER:

Field ID

Lab ID

MTR CODE | SITE NAME:

SAMPLE DATE | TIME (Hrs):

SAMPLED BY:

N/A

DATE OF TPH EXT. | ANAL.:

DATE OF BTEX EXT. | ANAL.:

TYPE | DESCRIPTION:

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	40.25	MG/KG	10			
TOLUENE	40.25	MG/KG	10			
ETHYL BENZENE	40.25	MG/KG	10			
TOTAL XYLENES	2.2	MG/KG	10			
TOTAL BTEX	3.0	MG/KG				
TPH (418.1)	390	MG/KG			2.17	28
HEADSPACE PID	225	PPM				
PERCENT SOLIDS	90.4	%				

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

Spigate Recovery was at 109 % for this sample All QA/QC was acceptable.

rative:

ATI results attached.

= Dilution Factor Used

proved Rev

Date: 9/30/11



Page _____ of _____

White - Testing Laboratory Canary - EPNG Lab Pink - Field Sampler



Analytical Technologies, Inc.



ATI I.D. 408339

August 31, 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.

This report is being reissued in part to correct the sample I.D. for 408339-18 on the results page.

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



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
16	945864	NON-AQ	08/08/94	08/11/94	08/12/94	1
17	945865	NON-AQ	08/08/94	08/11/94	08/12/94	1
18	945866	NON-AQ	08/08/94	08/11/94	08/12/94	10

PARAMETER	UNITS	16	17	18
BENZENE	MG/KG	<0.025	<0.025	<0.25
TOLUENE	MG/KG	0.028	0.20	<0.25
ETHYLBENZENE	MG/KG	<0.025	0.78	<0.25
TOTAL XYLENES	MG/KG	0.043	9.8	2.2

SURROGATE:

BROMOFLUOROBENZENE (%)	84	89	109
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PHASE II SOIL BORING

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 DE-NA-HAZ-ZA #1 - 74439

Elevation: _____
 Borehole Location T26 R 8 - S18 - Ltr D
 GWL Depth 14'
 Logged By D CESARK
 Drilled By M DONDHUE
 Date/Time Started 2/20/97-1300
 Date/Time Completed ir - 1400

Well Logged By D CESARK
 Personnel On-Site D CHARLEY
 Contractors On-Site _____
 Client Personnel On-Site _____

Drilling Method 4 1/4" ID HSA
 Air Monitoring Method PID, CGI

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: PPM			Drilling Conditions & Blow Counts
							BZ	BH	S	
0				BACKFILL					9/HS	
5				TO						
10				12'						
15	1	13'-15'	18"	SILTY-SAND TO CLAYEY SAND. STRONG HC STAIN (OLIVE GRAY) + GDR.	SM/SC				147/698	1330
20				TD = 15'						
25										
30										
35										
40										

Comments:

TD = 15'. HIGHLY CONTAMINATED SOIL FROM 13'-15', SO NO SAMPLE WAS SUBMITTED TO LAB. GW ENCOUNTERED @ 14' BGS. SINCE < 20', NO WELL WAS COMPLETED. BORING GROUTED TO SURFACE.

Geologist Signature

[Signature]

PHASE III RE-EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM/PHASE II

GENERAL

Meter: 74439 Location: DE-NA-HA2-2A #1

Coordinates: Letter: D Section 18 Township: 26 Range: 8

Or Latitude _____ Longitude _____

Date Started : 3-27-97 Area: 11 Run: 91

FIELD OBSERVATIONS

Sample Number(s): MK5-84

Sample Depth: 18' Feet

Final PID Reading 63PPM PID Reading Depth 18' Feet
Yes No

Groundwater Encountered ☒ (1) ☐ (2) Approximate Depth 18 Feet

Final Dimensions: Length 35 Width 25 Depth 18

CLOSURE

Remediation Method :

Excavation ☒ (1) Approx. Cubic Yards 226

Onsite Bioremediation ☐ (2)

Backfill Pit Without Excavation ☐ (3)

Overburden Cubic Yards 342 Yd

Soil Disposition:

Envirotech ☒ (1) ☐ (3) Tierra

Other Facility ☐ (2) Name: _____

Pit Closure Date: 3-28-97

Pit Closed By: Philip Ennio Kacopis

REMARKS

Remarks : arrived started digging overburden hit contaminated soil at
12' Dug to 18' hit water pit appeared to be clean at water level
Final pid Reading were N-wall 68 PPM S-wall 37 PPM E-wall 0 PPM
W-wall 0 PPM Bottom 0 PPM Very wet Sample
didn't use and Hydrogen Peroxide because wall kept coming in Not very much water in pit

Signature of Specialist: Morgan Killian



EL PASO FIELD SERVICES



4-15-97

FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	Field ID MK584	Lab ID 970229
MTR CODE SITE NAME:	74439	DE-NA-HAZ-20 #1 <i>4-15-97</i>
SAMPLE DATE TIME (Hrs):	3/27/97	1330
PROJECT:	PHASE III - Excavation	
DATE OF TPH EXT. ANAL.:	3/31/97	3/31/97
DATE OF BTEX EXT. ANAL.:	4/7/97	4/7/97
TYPE DESCRIPTION:	VC	Brown sand w/clay

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.5	MG/KG				
TOLUENE	<0.5	MG/KG				
ETHYL BENZENE	<0.5	MG/KG				
TOTAL XYLENES	<1.5	MG/KG				
TOTAL BTEX	<3	MG/KG				
TPH (418.1)	<10	MG/KG			2.26	28
HEADSPACE PID	63	PPM				
PERCENT SOLIDS	90.0	%				

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

The Surrogate Recovery was at 99.4 for this sample All QA/QC was acceptable.
Negative:

DF = Dilution Factor Used

Approved By:

[Signature]

INGVZPIT.XLS

Date:

4/9/97



Natural Gas Company

CHAIN OF CUSTODY RECORD

Page _____ of _____

[illegible]

White - Tesi. Laboratory Canary - EPNG Lab Pink - Field Sampler

Canary - EPNG Lab

Pink - Field Sampler

er

1

07-07-2008 10:00:00 AM

PHASE IV MONITORING WELL INSTALLATION

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 # MW-1
Page 1 of

Project Name EPFS GW PITS
Project Number 17520 Phase 6001
Project Location De-Na-Haz-Za # 1 74429

Elevation
Borehole Location T26-R8-S18-Ltr D
GWL Depth 12.8' BGS
Logged By CM CHANCE
Drilled By K Padilla
Date/Time Started 5/6/97-1055
Date/Time Completed 5/6/97-1200

Well Logged By CM CHANCE
Personnel On-Site D CHARLEY
Contractors On-Site
Client Personnel On-Site
Drilling Method 6 1/4 ID HSA
Air Monitoring Method PID

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: PPM			Drilling Conditions & Blow Counts
							BZ	BH	S	
0										
5										
10										
15				Backfill to 18'						
20				Gry clayey SAND, vF-F sand saturated						
25										
30										
35										
40										

Comments: No sample collected. Backfill to 18'. GW @ ~14'. GW rose to 12.8' after 20 min.

Geologist Signature Corey Chance

MONITORING WELL INSTALLATION RECORD

Philip Environmental Services, Inc.
4000 Monroe Rd.
Farmington, NM 87401
(505) 326-2262 FAX (505) 326-2388

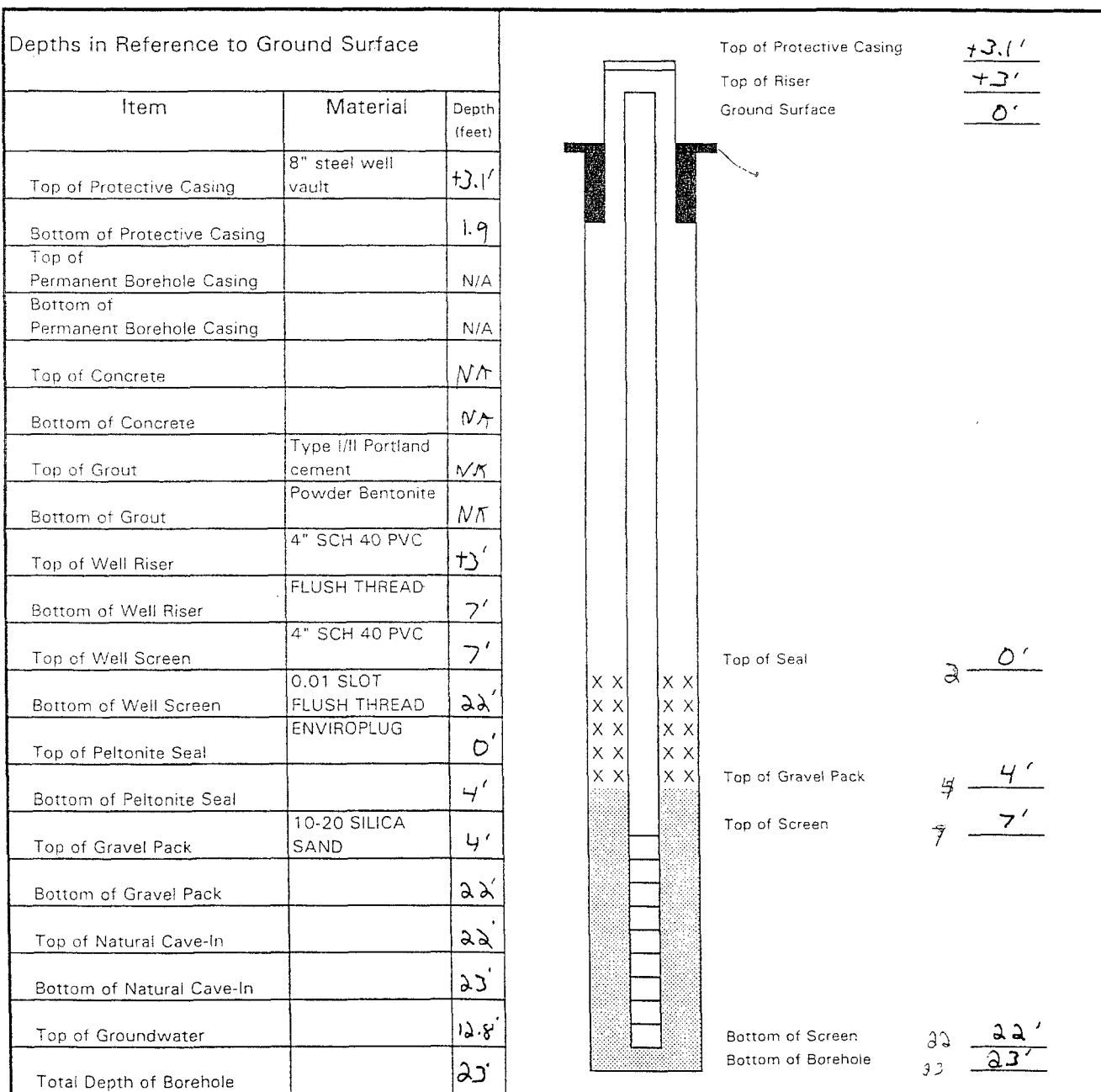
Borehole # BH-1
Well # MW-1
Page 1 of 1

Project Name EPFS GW
Project Number 17520 Phase 6002
Site Location De Na Haz Za #1 74429

Elevation _____
Well Location T26S18R8LTRD
GWL Depth 12.8' BGS
Installed By K Padilla

On-Site Geologist CM CHANCE
Personnel On-Site D CHARLEY
Contractors On-Site _____
Client Personnel On-Site _____

Date/Time Started 5/6/97-1200
Date/Time Completed 5/6/97-1330



Comments: Seal hydrated w/ 10 gal potable water. Locking Well cap & padlock placed on well

Corey Chance

PHILIP

ENVIRONMENTAL

Well Number MW 1

Serial No. WDPD-

WELL DEVELOPMENT AND PURGING DATA

☒ Development
☐ Purging

Page 1 of 1

Project Name EPFS GW Pits

Project Manager Cory Chances

Project No. 17520

Client Company EPASO Field Services

Phase/Task No. 6003.77

Site Name DE-NA-HAZ-2A #1

Site Address SAN JUAN CO., NM

Development Criteria

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

Water Volume Calculation

Initial Depth of Well (feet) 25.57 Top
Initial Depth to Water (feet) 16.21 Top
Height of Water Column in Well (feet) 9.36
Diameter (inches): Well 4 Gravel Pack _____

Methods of Development

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

Instruments

- Serial No. (if applicable) _____
☒ pH Meter 0yster
☐ DO Monitor _____
☒ Conductivity Meter 0yster
☒ Temperature Meter 0yster
☐ Other _____

Water Disposal

ON Ground DN Site

Water Removal Data

Date	Time	Development Method	Removal Rate (gal/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (gallons)		Product Volume Removed (gallons)		Temperature (°C)	pH	Conductivity (mmhos/cm)	Dissolved Oxygen (mg/L)	Comments
						Increment	Cumulative	Increment	Cumulative					
5-22-97	1205	X				5	5			15.3	8.38	810		Brown
5-22-97	1210	X				5	10			14.7	8.53	720		Brown
5-22-97	1218	X				5	15			14.6	8.60	730		Light Brown
5-22-97	1226	X				5	20			14.8	8.59	730		Light Brown
5-22-97	1233	X				5	25			14.2	8.60	720		Light Brown
5-22-97	1240	X				5	30			14.3	8.62	760		Light Brown
5-22-97	1247	X				5	35			14.3	8.69	690		Light Brown

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

Comments

Developer's Signature(s) Robert Thompson Date 5-22-97 Reviewer _____ Date _____

Signature Kurt Christensen Date 5-22-97 Reviewer _____ Date _____



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	RT5	970485
MTR CODE SITE NAME:	74439	DE-NA-HAZ-ZA #1
SAMPLE DATE TIME (Hrs):	5/22/97	1258
PROJECT:	Phase II Drilling - Initial	
DATE OF BTEX EXT. ANAL.:	5/27/97	5/27/97
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	6.94	PPB				
TOTAL BTEX	6.94	PPB				

The Surrogate Recovery was at 97.2 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative: _____

Approved By: _____

Date: 5/27/97

970485,12/19/97

QUARTERLY MONITORING RESULTS

Sample #	Meter/ Line #	Site Name	Sample Date	Project	S1	Benzene (PPB)	S2	Toluene (PPB)	S3	Ethyl Benzene (PPB)	S4	Total Xylenes (PPB)	S7	Total BTEX PPB
970485 *	74439	DE-NA-HAZ-ZA #1	5/22/97	Phase II Drilling - Initial	<	1	<	1	<	1	=	6.94	=	7
970605 *	74439	DE-NA-HAZ-ZA #1	6/26/97	Sample 4 - 1st Qtr	<	1	<	1	<	1	<	3	<	6
970978 *	74439	DE-NA-HAZ-ZA #1	9/12/97	Sample 4 - 2nd Qtr	<	1	<	1	<	1	<	3	<	6
971271 *	74439	DE-NA-HAZ-ZA #1	12/4/97	Sample 4 - 3rd Qtr	<	1	<	1	<	1	<	3	<	6
980256	74439	DE-NA-HAZ-ZA #1	3/26/98	Sample 4 - 4th Qtr	<	1	<	1	<	1	<	3	<	6

* Analytical reports provided to NMOCD in prior annual report.



EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	980256
MTR CODE SITE NAME:	74439	DE-NA-HAZ-ZA #1
SAMPLE DATE TIME (Hrs):	3/26/98	1035
PROJECT:	Sample 4 4th Quarter	
DATE OF BTEX EXT. ANAL.:	3/27/98	3/27/98
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 98.5 % for this sample All QA/QC was acceptable.
DF = Dilution Factor Used

Narrative: _____

Approved By: _____

Date: 4/3/98

980256BTEXMW,3/31/98

● SAMPLE 4 4TH QTR



Natural Gas Company

4/30/98 Gas
4/30/98 Anal

A 2631

CHAIN OF CUSTODY RECORD

Project No.		Project Name		Requested Analysis		Remarks							
Samplers: (Signature)		Date: 3-26-98		Type and No. of Sample Containers		Preservation Technique							
Date	Time	Comp.	GRAB	Sample Number									
WATER 3-26-98	1035		X	980256		DE-NA-HA2-2A #1 MW-1							
WATER 3-26-98			X			TRIP BLANK							
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		Received by: (Signature)					
Dennis Eiad		3/26/98 1728											
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		Received by: (Signature)					
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)		Remarks:							
				Maurice Hopper		3/27/98 0900							
Carrier Co:		Carrier Phone No.		Date Results Reported / by: (Signature)									
Air Bill No.:													



QUALITY CONTROL REPORT
EPA METHOD 8020 - BTEX

Samples: 980247 to 980252, 980255 to 980259

QA/QC for 3/27/98 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	51.3	102.7	75 - 125 %	X
Toluene	Standard	50.0	52.4	105	75 - 125 %	X
Ethylbenzene	Standard	50.0	53.0	106	75 - 125 %	X
m & p - Xylene	Standard	100	107.7	107.7	75 - 125 %	X
o - Xylene	Standard	50.0	52.6	105	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	25.9	103.7	39 - 150	X
Toluene	Standard	25.0	26.4	106	46 - 148	X
Ethylbenzene	Standard	25.0	26.8	107	32 - 160	X
m & p - Xylene	Standard	50.0	54.6	109	Not Given	X
o - Xylene	Standard	25.0	26.4	106	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	51.4	102.8	75 - 125 %	X
Toluene	Standard	50.0	52.3	104.6	75 - 125 %	X
Ethylbenzene	Standard	50.0	53.0	105.9	75 - 125 %	X
m & p - Xylene	Standard	100	107.4	107.4	75 - 125 %	X
o - Xylene	Standard	50.0	52.8	106	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	50.4	100.9	75 - 125 %	X
Toluene	Standard	50.0	51.2	102.5	75 - 125 %	X
Ethylbenzene	Standard	50.0	51.4	102.9	75 - 125 %	X
m & p - Xylene	Standard	100	104.6	104.6	75 - 125 %	X
o - Xylene	Standard	50.0	51.5	102.9	75 - 125 %	X

Narrative: Acceptable.

SAMPLE NUMBER	TYPE	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACCEPTABLE	
					YES	NO
CCV LA-52589 50 PPB					RANGE	
Benzene	Standard	50.0	50.4	100.8	75 - 125 %	X
Toluene	Standard	50.0	51.1	102.1	75 - 125 %	X
Ethylbenzene	Standard	50.0	52.1	104.2	75 - 125 %	X
m & p - Xylene	Standard	100	105.7	105.7	75 - 125 %	X
o - Xylene	Standard	50.0	51.3	102.7	75 - 125 %	X

Narrative: Acceptable.

LABORATORY DUPLICATES:

SAMPLE ID	TYPE	SAMPLE RESULT PPB	DUPLICATE RESULT PPB	RPD	ACCEPTABLE	
					YES	NO
980247					RANGE	
Benzene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X
Toluene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X
Ethylbenzene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X
m & p - Xylene	Matrix Duplicate	<2	<2	0.00	+/- 20 %	X
o - Xylene	Matrix Duplicate	<1	<1	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 980247					RANGE	
Benzene	50	<1	51.9	103.8	75 - 125 %	X
Toluene	50	<1	52.0	104	75 - 125 %	X
Ethylbenzene	50	<1	52.3	105	75 - 125 %	X
m & p - Xylene	100	<2	106.2	106.2	75 - 125 %	X
o - Xylene	50	<1	52.0	104	75 - 125 %	X

Narrative: Acceptable

AUTO BLANK	SOURCE	PPB (2 analyzed with set)	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 (none analyzed with 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.

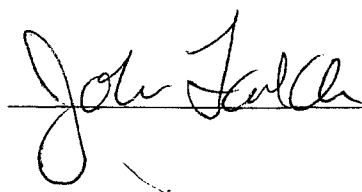
CONTAMINATION CARRYOVER CHECK	SOURCE	PPB (none analyzed with this set)	STATUS
Benzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Toluene	Vial + Boiled Water	<1.0	ACCEPTABLE
Ethylbenzene	Vial + Boiled Water	<1.0	ACCEPTABLE
Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Narrative: Acceptable.

TRIP BLANK	SOURCE	PPB (3 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: 

Approved By: 

Date: 4/3/98