3R - 231

REPORTS

DATE: 1997



Certified Mail: #Z 295 387 297; #Z 295 387 296

February 27, 1998

RECEIVED

MAR 0 2 1998

Environmental Bureau Oil Conservation Division

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

Re: 1997 Groundwater Annual Report

Dear Mr. Olson:

In accordance with reporting requirements, El Paso Field Services (EPFS) has enclosed annual updates for 57 groundwater impacted locations that were identified during our pit closure project of 1994/1995.

Of the 57 reports, EPFS hereby requests your approval for closure of 11 of these locations. The 11 reports for which EPFS requests closure, are in 2 separate binders entitled "Request for Closure".

After you have had an opportunity to review these updates, EPFS would like to schedule a meeting with you to discuss issues related to closure criteria for some of the more complex locations that are currently being addressed.

If you have any questions regarding this information, please call me at 505/599-2141. I will contact you within the next quarter to schedule a meeting.

Sincerely,

Semale & Milles

Såndra D. Miller Environmental Manager

xc: Mr. Bill Liesse, BLM w/o enclosures
 Mr. Denny Foust, NMOCD - Aztec w/enclosures; Certified Mail #Z 295 387 298; #Z 295 387 299
 Ms. Charmaine Tso, Navajo EPA w/enclosures; Certified Mail #Z 295 387 292

SAN JUAN BASIN PIT CLOSURES San Juan Basin, New Mexico

El Paso Field Services Pit Project Groundwater Report Annual Report

March 1998

Prepared For

El Paso Field Services Farmington, New Mexico

Project 17520



EPFS GROUNDWATER PITS ¹ 1997 ANNUAL GROUNDWATER REPORT

RAMENTA ET AL #1 Meter/Line ID - 75155

SITE DETAILS

Sec: 13

Legals - Twn: 27N Rng: 9W NMOCD Hazard Ranking: 30 Operator: BURLINGTON RESOURCES Unit: J Land Type: NAVAJO

PREVIOUS ACTIVITIES

Site Assessment: Jun-96 Soil Boring: May-97 Excavation: Oct-96 (432 cy) Monitor Well: May-97 Geoprobe: Feb-97

1997 ACTIVITIES

Geoprobe - Collected groundwater samples and determined groundwater flow direction from temporary piezometers.

Monitor Well Installation - One groundwater monitor well was installed in the center of the former pit.

Quarterly Groundwater Monitoring - Quarterly groundwater monitoring was initiated on 6/12/97. Groundwater analytical data are presented in Table 1.

CONCLUSIONS

Based on groundwater levels collected from Geoprobe data, the groundwater flow trends to the northwest on this site, as presented in Figure 1.

Groundwater samples collected from MW-1 were over standards for benzene, and total xylenes on the initial quarterly sampling event. Benzene concentrations have dropped below standards since quarterly sampling was initiated. Groundwater samples collected up-gradient and cross-gradient of MW-1 were below standards for BTEX. One groundwater sample collected from PH-2 downgradient of MW-1, was in excess of standards for benzene only at 388 ppb.

RECOMMENDATIONS

- Quarterly sampling will continue at MW-1 until 4 consecutive clean quarters are achieved.
- Following OCD approval for closure, MW-1 will be abandoned following OCD approved abandonment procedures.







. 1

1

E

Total BTE ⁵	5283	4990	4193	3176
		3	1	_!
Total Xylene- (PPB)	4370	4240	3800	2860
	li		11	11
Ethyl Benzene (PPB)	420	423	359	296
		a	It	1
Teluene (PPB)	408	283	27.6	19.6
	Ш	4	h	_ #
Beazene (PPB)	85.1	42.3	6.09	-
	ß	11		
Project	Phase II Drilling - Initial	Sample 4 - 1st Qtr	Sample 4 - 2nd Qtr	Sample 4 - 3rd Qtr
MW#	-	-	-	-
Sample Date	5/22/97	6/12/97	26/61/6	12/5/97
Site Name	Ramenta ET AL #1	Ramenta ET AL #1	Ramenta ET AL #1	Ramenta ET AL #1
Meter' Line #	75155	75155	75155	75155
Sample #	970484	970559	971005	971273

I

I

| | |

J.'\J 7520Veport97\1997mw

RECORD OF SUBSURFACE EXPLORATION

PHILIP ENVIRONMENTAL SERVICES INC. 4000 Monroe Road

Farmington, New Mexico 87401 (505) 326-2262 FAX (505) 326-2388

Sample

Number

Depth

(Feet)

0

5

10

15

Elevation	
Borehole Location	TA7-R9-SD-Ltr J
GWL Depth	
Logged By	CM CHANCE
Drilled By	K Padilla
Date/Time Started	5/6/97-0850
Date/Time Comple	ted 5/6/97-0910

Sample

Interval

Sample

Type &

Recovery (inches)

Sample Description

Classification System: USCS

BACKFILL TO 12'

Gry saturated SAND, F-med, tr coarse, to clay

				Boreholi Well # Page	BH-1 MW-1 1 of			
Project Na	ame	EPFS G		S				
Project N	umber .	1752	20	Phas	se 6001			
Project Lo	cation	Rem	enta	ETAL	#1 7515S			
Well Logg Personnel Contracto Client Per	jed By On-Site ors On-Site sonnel On-S	 		ANCE				
Drilling Method b 1/4 ID HSA Air Monitoring Method PID								
	Depth							
USCS	Chaose	Air Un	ivionitor	ing M	Drilling Conditions			
Symbol	(feet)	BZ	BH	s	a blow counts			

	20		TOBI8'			
	25					
	30					
	35					
:						
	40					
	Comments:	Alesample	collected Back Fill to 12'.	6W (<u>рь.ч'</u>	BC2
			· · ·			

Geologist Signature

C 10/07/00/11 00 1/10

hilip Environmental Services, Inc.						VVell # Page _1	
000 Manrae Rd.							
armington, NM 87401			Project Na	ame	EPFS GW	· · · · · · · · · · · · · · · · · · ·	
605) 326-2262 FAX (505) 326-2388			Project Nu	umber	17520		Phase 600
			Site Locat	tion	Rementa E	TAL#1	25/55
levation			On-Site G	eologist			
Vell Location TADSIA R	9 1705		Personnel	On-Site	<u> </u>	CHARLEY	
WL Depth 6. y' 86.	+		Contracto	rs On-S	ite		
nstalled By K Padilla			Client Per	sonnel (Dn-Site		
Date/Time Started/6/9 Date/Time Completed/6/9	7-0910 7-1000	<u> </u>					·
Depths in Reference to Gr	ound Surface		F		Top of Protectiv Top of Riser	e Casing	+3,1'
ltem	Material	Depth (feet)			Ground Surface		
Top of Protective Casing	8" steel well vault	tJ.1			-		
Bottom of Protective Casing	· .	J .9					
Permanent Borehole Casing Bottom of		N/A					
Permanent Borehole Casing		N/A					
Top of Concrete		NA					
Bottom of Concrete	Type I/II Portland	<u>Nn</u>					
Top of Grout	Cement Powder Bentonite	VX					
Bottom of Grout		Nn					
Top of Well Riser	4" SCH 40 PVC	+3'					
Bottom of Well Riser	FLUSH THREAD	2					
Top of Well Screen		2'	x x	x x	Top of Seal		, <u>0'</u>
Bottom of Well Screen	FLUSH THREAD	17	x x x x	x x x x			
Top of Peltonite Seal		0'	x x x x	x x x x	Top of Gravel P	ack	ı <u> </u>
Bottom of Peltonite Seal	10-20 SILICA				Top of Screen		_a´_
Pottom of Gravel Pack	ISANU	17'					
Top of Natural Cave-In		17					
Bottom of Natural Cave-In		18'					
Top of Groundwater		6.4']	Bottom of Scre	en /-	7 <u>)7'</u>
Total Depth of Borehole		18'			Bottom of Bore	hole	18'
Comments: Coll I	$M_{\rm M}/C_{\rm I}$	4.4.4	la suter	Lock	in wall	Sad Jou	Alack

7

GEOPROBE

SITE ACTIVITIES

21-Feb-97

Meter/Line #: 75155

Location/Line #: Rementa ET AL #1

MW#:

Depth to GW:

Depth to Product:

Product Thickness:

Date: 2/19/97

Activity: Geoprobe

Comments: Installed PZ1 in center of pit. Entire site not spotted. Called operator and they said they would spot site tommorrow.

SITE ACTIVITIES

21-Feb-97

_

Meter/Line #: 75155

Location/Line #: Rementa ET AL #1

MW#:

Depth to GW:

Depth to Product:

Product Thickness:

Date: 2/20/97

Activity: Geoprobe.

Comments: Site has been spotted. Install 2 piezos and 2 probeholes.





FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab iD
SAMPLE NUMBER:	СМС304	970133
MTR CODE SITE NAME:	75155	Ramenta #1
SAMPLE DATE TIME (Hrs):	2/21/97	930
PROJECT:	Geo	probe
DATE OF BTEX EXT. ANAL.:	2/21/97	2/21/97
TYPE DESCRIPTION:	PZ1	Water

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q		
BENZENE	335	РРВ	25	D		
TOLUENE	1250	РРВ	25	D		
ETHYL BENZENE	256	РРВ	25	ņ		
TOTAL XYLENES	4000	РРВ	25	D		
TOTAL BTEX	5840	РРВ				

-BTEX is by EPA Method 8020 --

91.6 % for this sample All QA/QC was acceptable. The Surrogate Recovery was at DF = Dilution Factor Used

The "D" qualifier indiciates that the analyte calculated is based on a secondary dilution factor.

Narrative:

Approved By: _	John Sourden	970133.XLS,2/26/97	Date:	2-27-97

Natural Ga	S Compan	£			우	IAIN O	F CUST	rody r	ECORD	-				Page of	
PROJECT NUMBER # 24324	PROJECT NAME Pit Clos	ure Pro	oject		BER ERS			REQUEST	ED ANALYS	SIS	CON	TRACT LABORA	ATORY P. O. I	NUMBER	
SAMPLERS: (Signature)	int			DATE:	AL NUME ONTAIN		418.1 EX	8020 PID		ENCE					
LAB	DATE	IME M	ATRIX	FIELD ID	TOT. CF C		EPA BT	LAB		SEQU	#			REMARKS	
)/19/97 O	Mar	ATER	CMCJ04	رو	9/	\times	````			P	6	Real	11, ++ +1 7515	2
			1	CMCJOS	2	6	X				2	a			
		_/													
						<u> </u>									
							A	K	0						
											1			78	
											+ /			321	
	alure)	,		ME RECEIVED BY: (Si	ignature)		HEL	NOUISHED	BY: (Signatur	e)			, IIME	RECEIVED BY: (Signature)	4
- And	Land	r	1 7 19 1	500 Mau	11.74	ar.	$\left\{ \right.$								
RELINQUISH56 BY: (Sign	nature)	1		ME RECEIVED BY: (S	lignature)		HEL	INQUISHED	BY: (Signatu	 ,	,)
												111/	11. %	11/1012 JULY	I.K.
	SH			SAMPLE RECEIPT	r Remarks					RESULTS	INVOICES	FIELD :	SERVI	CES LABORATORY	2
CARRIER CO.				CHARGE CODE								P. O. B	NGTON	90 90 9, NEW MEXICO 874	661
White - Testing Laborat	ory Canary	EPNG Lat	Pink - /	Field vampler				Ī		505-599-2	144			FAX: 599-226	51 ;5 A (Rev. 05-94)
White - Testing Laborat	ory Canary -	EPNG Lat	Pink - /	Field Campler										FM-08-056	55 A (Rev. 05-94)

ELD SERVICES FIELD SERVICES LABORATORY

ANALYTICAL REPORT

EL PASO

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC305	970138
MTR CODE SITE NAME:	75155	Ramenta #1
SAMPLE DATE TIME (Hrs):	2/20/97	1045
PROJECT:	Geor	probe
DATE OF BTEX EXT. ANAL.:	2/24/97	2/24/97
TYPE DESCRIPTION:	PZ2	Water

Field Remarks:

		RESULTS				
PARAMETER	RESULT	UNITS	DF	QUALIF	IERS	
BENZENE	<1	РРВ	10	D		
TOLUENE	<1	РРВ	10	D		
ETHYL BENZENE	<1	РРВ	10	D		
TOTAL XYLENES	< 3	РРВ	10	D		
TOTAL BTEX	< 6	РРВ				

--BTEX is by EPA Method 8020 --

86.1 % for this sample All QA/QC was acceptable. The Surrogate Recovery was at

DF = Dilution Factor Used

The "D" qualifier indiciates that the analyte calculated is based on a secondary dilution factor.

Narrative:

Sample contained less than 5 mL of water.

Approved By: Jun Hallen

Date: <u>3-4-97</u>





ANALYTICAL REPORT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC306	970139
MTR CODE SITE NAME:	75155	Ramenta #1
SAMPLE DATE TIME (Hrs):	2/20/97	1100
PROJECT:	Geo	probe
DATE OF BTEX EXT. ANAL.:	2/24/97	2/24/97
TYPE DESCRIPTION:	PZ3	Water

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS		QUALIFI	ERS
			DF	Q	
BENZENE	<1	PPB	10	D	
TOLUENE	<1	РРВ	10	D	
ETHYL BENZENE	<1	PPB	10	D	
TOTAL XYLENES	< 3	PPB	10	D	
TOTAL BTEX	< 6	РРВ			

--BTEX is by EPA Method 8020 --

85.8 % for this sample All QA/QC was acceptable. The Surrogate Recovery was at DF = Dilution Factor Used

The "D" qualifier indiciates that the analyte calculated is based on a secondary dilution factor.

Narrative:

Sample contained less than 5 mL of water.

Approved By: John Falle

Date: <u>3-4-97</u>

970139.XLS,3/3/97



ANALYTICAL REPORT



SAMPLE IDENTIFICATION

	Field ID	Lab iD
SAMPLE NUMBER:	CMC307	970140
MTR CODE SITE NAME:	75155	Ramenta #1
SAMPLE DATE TIME (Hrs):	2/20/97	1130
PROJECT:	Geor	probe
DATE OF BTEX EXT. ANAL.:	2/24/97	2/24/97
TYPE DESCRIPTION:	PH1	Water

Field Remarks:

RESULTS PARAMETER RESULT UNITS QUALIFIERS DF Q BENZENE PPB <1 5 D TOLUENE <1 PPB 5 D **ETHYL BENZENE** PPB <1 5 D TOTAL XYLENES <3 PPB 5 D TOTAL BTEX <6 PPB

-BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 85.8 % for this sample All QA/QC was acceptable. DF = Dilution Factor Used

The "D" qualifier indiciates that the analyte calculated is based on a secondary dilution factor.

Narrative:

Sample contained less than 5 mL of water.

Approved By: John Linh Date: 3-4-97 970140.XLS,3/3/97



ANALYTICAL REPORT



SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC308	970141
MTR CODE SITE NAME:	75155	Ramenta #1
SAMPLE DATE TIME (Hrs):	2/20/97	1205
PROJECT:	Geor	probe
DATE OF BTEX EXT. ANAL.:	2/24/97	2/24/97
TYPE DESCRIPTION:	PH2	Water

Field Remarks:

John Lolch

Ö		RESULTS				
PARAMETER	RESULT	UNITS		QUALIFIE	RS	
			DF	Q		
BENZENE	388	РРВ	2	D,D1		
TOLUENE	55.7	РРВ	2	D		
ETHYL BENZENE	1.69	РРВ	2	D		
TOTAL XYLENES	48.1	PPB	2	D		
TOTAL BTEX	493	PPB	<u> </u>			

-BTEX is by EPA Method 8020 -

The Surrogate Recovery was at 92.5 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

The "D" qualifier indiciates that the analyte calculated is based on a secondary dilution factor.

The "D1" qualifier indicates that the analyte concentration exceeded the calibration curve limit. Narrative:

Approved By:

Date: 3-4-97

970141.XLS,3/3/97

	S Compa	hu			Ū	HAIN C	oF CU	STODY	RECOR	Q			Page of	
) () و	uprob	<i>d</i> 2									}			Г
PROJECT NUMBER # 24324	PROJECT NAI Pit Clos	ME sure F	roject		รษ3 ษาย			REQUE	STED ANA	-YSIS	CON	TRACT LABORATORY P. O. N	UMBER	
SAMP ERS: (Signature)	ß	n		$\frac{\text{DATE}}{2} (31) g 7$	BMUN JA JNIATNO:	TYPE SAMPLE	1.814 M	8020 FX		ENCE	 #			
	DATE	TIME	MATRIX	FIELD ID	101 0F0	- 2	-¥d∃	49∃ 18	מאיז	SEON	ŧ		REMARKS	-
970138	1 upacic	CHS	VA ICK	CMC JUS	Ą	اتكل	$\mathbf{\lambda}$	\mathbf{x}			<u> </u>	ZJ KG	Emerth # 1 75155	T
		1	_	TRIP BLANK		1G		\times				RIP 01 A.VK		
970/39		1100		CMC306-	<u>,</u>	VĆ	_ <u>×</u>	×			<u> </u>	Z) Sutt	21 75155	
				Child and										
970140		11.30		CMC307	ć	いい		×			<u> </u>	HI EoF	FZI Rementa#1	}
1410141	P	305	>	CMC 3PS	7	11	X	ــــــــــــــــــــــــــــــــــــــ			£	42 N KY	PZ1 Romenta#1	<u> </u>
									 		<u>.</u>	>		
		$\left \right $												
					\mathbb{V}	† <i>†</i>	1Ĵ	F	1/9					
							÷				$\left \right $		NACT	
RELINGUISHED BY: (Sig	nature)		DATE	TIME RECEIVED BY: (Sign	ature)		<u> </u>	ELINOUISHI	ED BY: (Sign	ature)	┤┤	DATE/TIME	RECEIVED BY: (Signature)	
5	- and	ۍ ۲	1 Judy	mort (1.15)	·	lea	-+}-							+
RELINDUISHED AY: (Sig	nature)		DATE	TIME RECEIVED BY: (Sign	ature)			n D	ED BY: (Sigo	ature)			RECEIVED OF LABORATORY BY: (Signature)	
							5	La Va	رنىلد	Jean	$\overline{\lambda}$	1147 1180	1/1/21/2, ElNew	- N
REQUESTED TURNARC DROUTINE DRL	UND TIME: SH			SAMPLE RECEIPT R	EMARKS			•		RESULTS	INVOICE:	FIELD SERVIC	ES LABORATORY	
CARRIER CO.												EL PASO NAT P. O. BOX 499	URAL GAS COMPANY 0	
BILL NO.:				CHARGE CODE						505-599-2	144	FARMINGTON	I, NEW MEXICO 87499 FAX: 505-599-2261	
Marine Tradition	Canan	. ELNG	ah pint	. قامانا معيداما									EM DO DECE A IDA - DG	

White - Testing Laboration Canary - EPNG Lab

FM ስጸ ስፍሰና አ (Pov. 05 04)

ł i T

MONITORING WELL INSTA	LLATION REC	CORD			P <u>P</u> Borenote Well #	# <u>PZI</u>
Philip Environmental Services, Inc.					Page	of
1000 Monroe Rd.			Project Name	EPES	GW	PITS
Sofi 326-2262 FAX (505) 326-2388			Project Numb	per 175	0000	Phase IA
5057 520-2202 TAX 16657 520-2000			Site Location	Remen	ta ETAL	. #1 7565
Elevation			On-Site Geol	ogist (mch	4000
Well Location Center of	Pit		Personnel On	-Site	MARZ	
GWL Depth IP. 25 BGS	7.75B6	5	Contractors (On-Site		
Installed By K Padilla			Client Person	nel On-Site		
Date/Time Started <u>D&YS</u> /A Date/Time Completed	119197	·····				
Depths in Reference to Gro	und Surface		[Top of Pro	ective Casing	
ltem	Material	Denth		Ground Su	rface	
	matonai	(feet)				
Top of Protective Coning	· • · · ·					
Top of Protective Casing						
Bottom of Protective Casing						
Permanent Borehole Casing		N/A				
Bottom of	· · · · · · · · · · · · · · · · · · ·					
Permanent Borehole Casing		N/A				
Top of Concrete						
Bottom of Concrete						
Top of Grout						
Bottom of Grout						
Top of Well Riser	<u></u>					
Bottom of Well Riser						
Top of Well Screen	······			Top of Sea	al	
Bottom of Well Screen						
Top of Peltonite Seal				(X) X Top of Gr	avel Pack	
Bottom of Peltonite Seal				Top of So	(PPD)	
Top of Gravel Pack						
Bottom of Gravel Pack						
Top of Natural Cave-In						
Bottom of Natural Cave-In						
Top of Groundwater				Bottom of	Screen	12'
				888 0 - • • • •	Recebel-	

MWINSTAL.wk1

Geologist Signature

Philip Environmental Services. Inc.					Well # Page	of
1000 Monroe Rd.				- 0-	<u> </u>	·
armington, NM 87401 605) 326-2262 FAX (605) 326-2388			Project Name Project Number Site Location	EPFS 1752D Reninte	<u>667</u> #17	Phase <u>60</u> 75155
Elevation Well Location GWL Depth nstalled By L. P. Dill Date/Time Started Date/Time Completed	<u>s</u>		On-Site Geologi Personnel On-Si Contractors On- Client Personnel	st <u>(</u> / te <u>C</u> / Site On-Site	M Chan Muez	
Depths in Reference to Gro	und Surface Material	Depth		Top of Protecti Top of Riser Ground Surfac	ive Casing e	
		(feet)				
Top of Protective Casing						
Bottom of Protective Casing						
Top of						
Bottom of						
Permanent Borehole Casing		N/A				
Top of Concrete	<u></u>					
Bottom of Concrete						
Top of Grout						
Bottom of Grout						
Top of Well Riser						
Bottom of Well Riser						
Top of Well Screen				Top of Seal		
Bottom of Well Screen			X X X X X X X X X X			
Top of Peltonite Seal			X X X X X X X X X X X X X X X X X X X			
Bottom of Peltonite Seal			X X X X	Top of Gravel F	Pack	
Top of Gravel Pack				Top of Screen		<u>3.9</u>
Bottom of Gravel Pack						
Top of Natural Cave-In						
Bottom of Natural Cave-In						
Top of Groundwater				Bottom of Scre	en	8.9
			•			

L

MWINSTAL.wk1

Geologist Signature

•

MONITORING WELL INSTAL Philip Environmental Services, Inc. 1000 Monroe Rd. Fermington, NM 87401	LATION REC	ORD	Project Na	ame	EFFS	Borehole Well # Page	# <u>PZ3</u> i of <u>_</u> fits
505) 326-2262 FAX (505) 326-2388			Project Nu Site Locat	imber ion	1752D Remente	Ħ/	Phase <u>60</u> 75155
Elevation Well Location $\underline{S_0FPZ}$ GWL Depth $\underline{S.Y'BGS}$ Installed By $\underline{K.Fallila}$ Date/Time Started \underline{AID} Date/Time Completed \underline{AID}	97 17		On-Site G Personnel Contracto Client Pers	eologist On-Site rs On-S sonnel	t // e // Site // On-Site //	Mar	2 2
Depths in Reference to Grou	nd Surface				Top of Protecti Top of Riser	ve Casing	
ltem	Material	Depth (feet)			Ground Surface	9	
Top of Protective Casing							
Bottom of Protective Casing							
Permanent Borehole Casing		N/A					
Bottom of Permanent Borehole Casing		N/A					
Top of Concrete							
Bottom of Concrete							
Top of Grout							
Bottom of Grout							
Top of Well Riser							
Bottom of Well Riser							
Top of Well Screen					Top of Seal		
Bottom of Well Screen			x x x x	X X X X			
Top of Peltonite Seal			x x x x	X X X X			
Bottom of Peltonite Seal			XX	XX	Top of Gravel F	ack 🛛	
Top of Gravel Pack		 			lop of Screen		3.0
Bottom of Gravel Pack							
Top of Natural Cave-In							
Bottom of Natural Cave-in							
Top of Groundwater]	Bottom of Scre	en	3.8
Total Depth of Borehole					Bottom of Bore	hole	

Geologist Signature

1997 GROUNDWATER ANALYTICAL

C i		אניורב	-ING	() THEINE	いい	Y?	N PC	2						
	as Comp	hue			さ	HAIN OI	F CUSI	н Ар	ECORD	-		Page	Det -	
PROJECT NUMBER # 24324	PROJECT N	JSURE	Project	+	583 ଅସ	-		REQUEST	ED ANALYS	SIS	8	NTRACT LABORATORY P.O. NUMBER		
SAMPLERS: (Signature		×~~~	۲ ۲	рате: Š·22·97	BMUN JA BNIATNO:	TYPE TYPE HC	418.1	DID 0708		ENCE			-	
LABID	DATE	TIME	MATRIX	FIELD ID	101 0 1 0		A93 T8	<u>А</u> ЧЭ 8АЈ		TOES	#	REMARKS		
	5-22-91	1035	Hzo	R741	2		×					CEMENTA ET AL #1 -	JSISS	
	5.27.97	1258	H20	. RTS	N		×					- 1 # АZ - 2 А - А - ЭС	74439	
	5.22.97			TRIP BLANK										
	522.57	IsiS	H20	RT 6	2		\sim					DHIOC GOUSENMENT #3	72890	
							r			•				
													-	
										•				
				*										
				•										·
													1.	
RELINOUISHED BY.	Signature)		5.27.97	TIME RECEIVED BY: (Signal)	ature)		RELI	NQUISHED	BY: (Signatur	(0	1	DATE/TIME RECEIVED BY: (Sign	ature) **	· .
RELINQUISHED BY: (1	Signature)		DATE	ETIME RECEIVED BY: (Sign	lature)		REL	NOUISHED	BY: (Signatur	(a		DATE/TIME RECEIVED OF LABO	RATORY BY: (Signature)	
REQUESTED TURNAF D ROUTINE D I CARRIER CO.	ROUND TIME:			L SAMPLE RECEIPT RI	EMARKS	,				RESULTS		FIELD SERVICES LABOR EL PASO NATURAL GAS	ATORY COMPANY	
BILL NO.:				CHARGE CODE						505-599-;	144	FARMINGTON, NEW MEX	ICO 87499 :505-599-2261	
White - Testing Labo	ratory Can	ary - EPNG	i <i>Lab</i> Pink	t - Field Sampler									FM-08-0565 A (Rev. 05-94)	į,

ş

3-0565 A (Hev. 05-94)

EL PASO FIELD SERVICES

FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

Lab 1D Field ID RT4 SAMPLE NUMBER: 970484 MTR CODE | SITE NAME: 75155 Ramenta ET AL #1 SAMPLE DATE | TIME (Hrs): 5/22/97 1035 **PROJECT:** Phase II Drilling - Initial DATE OF BTEX EXT. | ANAL.: 5/23/97 5/23/97 TYPE | DESCRIPTION: **Monitor Well** Water

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS		OUALIFI	ERS -	
			DF	0	1	
BENZENE	85.1	РРВ	10	D		
TOLUENE	408	РРВ	10	D		
ETHYL BENZENE	420	PPB	10	D		
TOTAL XYLENES	4370	PPB	10	D		
TOTAL BTEX	5280	РРВ				

The Surrogate Recovery was at <u>93.1</u>% for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

The "D" qualifier indiciates that the analyte calculated is based on a secondary dilution factor.

Narrative:

Approved By:

Alu Telle

Date: <u>5/23/97</u>

970484,12/19/97

QUALITY CONTROL REPORT EPA METHOD 8020 - BTEX

FIELD SERVICES

EL PASO

Samples: 970464, 970466-970468,970473-970476,970478,970484,970486

QA/QC for 05/23/97 Sample S

LABORATORY CALIBRATION CHECKS / LABORATORY CONTROL SAMPLES:

SAMPLE		EXPECTED	ANALYTICAL		AC	CEPTABLE
NUMBER	TYPE	RESULT	RESULT	%R		
ICV LA-52589		PPB	PPB			YES NO
50 PPB					PANCE	
Benzene	Standard	50.0	51.8	104	75 - 125 %	X
Toluene	Standard	50.0	51.9	104	75 - 125 %	x
Ethylbenzene	Standard	50.0	52.1	104	75 - 125 %	x
m & p - Xylene	Standard	100	105	105	75 - 125 %	x
o - Xylene	Standard	50.0	51.9	104	75 - 125 %	<u> </u>
SAMPLE NUMBER	ТҮРЕ	EXPECTED RESULT	ANALYTICAL RESULT	%R	AC	CEPTABLE
LCS LA-45476 25 PPB		PPB	PPB		RANGE	YES NO
Benzene	Standard	25.0	26.0	104	39 - 150	Х
Toluene	Standard	25.0	25.3	101	46 - 148	x
Ethylbenzene	Standard	25.0	25.8	103	32 - 160	х
m & p - Xylene	Standard	50.0	51.8	104	Not Given	х
o - Xylene	Standard	25.0	25.8	103	Not Given	X
SAMPLE NUMBER	ТҮРЕ	EXPECTED RESULT	ANALYTICAL RESULT	%R	ACC	EPTABLE.
CCV LA-52589 50 PPB		PPB	РРВ		RANGE	YES NO
Benzene	Standard	50.0	51.6	103	75 - 125 %	Х
Toluene	Standard	50.0	51.2	102	75 - 125 %	x
Ethylenzene	Standard	50.0	51.6	103	75 - 125 %	х
m & p - Xylene	Standard	100	104	104	75 - 125 %	x
o - Xylene	Standard	50.0	51.4	103	75 - 125 %	<u> </u>
SAMPLE		EXPECTED	ANALYTICAL		ACC	EPTABLE
NUMBER	TYPE	RESULT	RESULT	%R		
CCV LA-52589		PPB	PPB			YES NO
50 PPB					RANGE	
Benzene	Standard	50.0	51.2	102	75 - 125 %	х
Toluene	Standard	50.0	50.7	101	75 - 125 %	х
Ethylbenzene	Standard	50.0	51.0	102	75 - 125 %	х
m & p - Xylene	Standard	100	103	103	75 - 125 %	х
a Vulana		500	50.0	102		V I

Narrative: Acceptable.

1

EL PASO FIELD SERVICES LAB QUALITY CONTROL REPORT EPA METHOD 8020 - BTEX Samples: 970464, 970466-970468,970473-970476,970478,970484,970486

LABORATORY DUPLICATES:

SAMPLE		SAMPLE	DUPLICATE		A	CCEPTABLE	
ID ID	TYPE	RESULT	RESULT	RPD			
		PPB	PPB			YES NO	·
970464					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 %	Х	
m & p - Xylene	Matrix Duplicate	6.52	6.45	1.08	+/- 20 %	Х	
o - Xylene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X	

Narrative: Acceptable.

LABORATORY SPIKES:

	SAMPLE	SPIKE	SAMPLE	SPIKE		AC	CEPTAB	E
:	Ð	ADDED	RESULT	SAMPLE	%R			· · ·
	2nd Analysis	PPB	PPB	RESULT			YES	NO
	970464			PPB		RANGE		
	Benzene	50	<1	53.2	106	75 - 125 %	Х	
	Toluene	50	<1	51.4	103	75 - 125 %	Х	
	Ethylbenzene	50	<1	52.8	106	75 - 125 %	Х	
	m & p - Xylene	100	6.52	111	104	75 - 125 %	Х	
	o - Xylene	50	<1	52.5	105	75 - 125 %	X	

ative: 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
l	Total Xylenes	Vial + Boiled Water	<3.0	ACCEPTABLE

Ative: Acceptable.

Donorrad Dur Mille

Annroved Rv

Alm Farch

Nate: 6/2/97



FIELD SERVICES LABORATORY ANALYTICAL REPORT

PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID		
SAMPLE NUMBER:	RT4	970484		
MTR CODE SITE NAME:	75155 Ramenta ET			
SAMPLE DATE TIME (Hrs):	5/22/97	1035		
PROJECT:	Phase II Drilling - Initial			
DATE OF BTEX EXT. ANAL.:	5/23/97	5/23/97		
TYPE DESCRIPTION:	Monitor Well	Water		

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS		QUALIFI	ERS
			DF	0	ingen stren indefinitien.
BENZENE	85.1	РРВ	10	D	
TOLUENE	408	РРВ	10	D	
ETHYL BENZENE	420	РРВ	10	D	
TOTAL XYLENES	4370	РРВ	10	D	
TOTAL BTEX	5280	РРВ			

The Surrogate Recovery was at 93.1 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

The "D" qualifier indiciates that the analyte calculated is based on a secondary dilution factor.

Narrative:

Approved By: _____

Date: <u>5/23/47</u>

970484,12/19/97

ELPASO FIELD SERVICES

EPA METHOD 8020 - BTEX

Samples: 970464, 970466-970468,970473-970476,970478,970484,970486

QA/QC for 05/23/97 Sample S

LABORATORY CALIBRATION CHECKS / LABORATORY CONTROL SAMPLES:

SAMPLE	TYPE	EXPECTED	ANALYTICAL	9/ D	AC	CEPTABLE
ICV LA-52589 50 PPB		PPB	PPB	%n	RANGE	YES NO
Benzene	Standard	50.0	51.8	104	75 - 125 %	х
Toluene	Standard	50.0	51.9	104	75 - 125 %	x
Ethylbenzene	Standard	50.0	52.1	104	75 - 125 %	x
m & p - Xylene	Standard	100	105	105	75 - 125 %	x
o - Xylene	Standard	50.0	51.9	104	75 - 125 %	X
SAMPLE NUMBER LCS LA-45476 25 PPB	ТҮРЕ	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACC BANGE	CEPTABLE YES NO
Benzene	Standard	25.0	26.0	104	39 - 150	X
Toluene	Standard	25.0	25.3	101	46 - 148	x
Ethylbenzene	Standard	25.0	25.8	103	32 - 160	х
m & p - Xylene	Standard	50.0	51.8	104	Not Given	х
o - Xylene	Standard	25.0	25.8	103	Not Given	x
SAMPLE NUMBER CCV LA-52589 50 PPB	ТҮРЕ	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACC RANGE	EPTABLE YES NO
Benzene	Standard	50.0	51.6	103	75 - 125 %	X
Toluene	Standard	50.0	51.2	102	75 - 125 %	x
Ethylenzene	Standard	50.0	51.6	103	75 - 125 %	x
m & p - Xylene	Standard	100	104	104	75 - 125 %	x
o - Xylene	Standard	50.0	51.4	103	75 - 125 %	X
SAMPLE NUMBER CCV LA-52589 50 PPB	түре	EXPECTED RESULT PPB	ANALYTICAL RESULT PPB	%R	ACC RANGE	EPTABLE YES NO
Benzene	Standard	50.0	51.2	102	75 - 125 %	Х
Toluene	Standard	50.0	50.7	101	75 - 125 %	x
Ethylbenzene	Standard	50.0	51.0	102	75 - 125 %	x
m & p - Xylene	Standard	100	103	103	75 - 125 %	x
o - Xylene	Standard	50.0	50.8	102	75 - 125 %	x

Narrative: Acceptable.

EL PASO FIELD SERVICES LAB QUALITY CONTROL REPORT EPA METHOD 8020 - BTEX Samples: 970464, 970466-970468,970473-970476,970478,970484,970486

LABORATORY DUPLICATES:

SAMPLE ID 970464	ТҮРЕ	SAMPLE RESULT PPB	DUPLICATE RESULT PPB	RPD	AC RANGE	CEPTABLE YES NO
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	6.52	6.45	1.08	+/- 20 %	x
o - Xylene	Matrix Duplicate	<1	<1	0.00	+/- 20 %	X

Narrative: Acceptable.

LABORATORY SPIKES:

SAMPLE ID 2nd Analysis	SPIKE ADDED PPB	SAMPLE RESULT PPB	SPIKE SAMPLE RESULT	%R	ACCEPTABLE YES NO
970464			РРВ		RANGE
Benzene	50	<1	53.2	106	75 - 125 % X
Toluene	50	<1	51.4	103	75 - 125 % X
Ethylbenzene	50	<1	52.8	106	75 - 125 % X
m & p - Xylene	100	6.52	111	104	75 - 125 % X
o - Xylene	50	<1	52.5	105	75 - 125 % X

N. kive: Acceptable

ADDITIONAL ANALYTICAL BLANKS:

AUTO BLANK	SOURCE	РРВ	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

Nanative: Acceptable.

Reported By: Mdu

Approved By: _____

6/2/9-Date: 05

					CHAI			mpany RECC	RD B				2010	
Project No.	Project Name	405	EFFMS	1d	DEUNE	Type				Request Analys	pa s			
Samplers: (Signatur	- Sname	·19	E des	ă	10: Sult 27	Sample Sample		UCHUNER JOSE	J.	A CAN			Remarks	
And Date	Time Corr	np. GRA	8	Sample	Number	Contain- ers	*	r ?		A COL				
3.477 SI397	1131		5	705	6.2	200	200	×	XX	V V	RATENT	H. ET	10W/ VIC 475	5/55
No the		~				<u>.</u> ट	0,0	×			dist	BLAN	X	
/														
				/										
						/								
							/							
									/					
		-								/				
		-									/			
														/
Heilinguished by: (S	ignature)	X	Date/Time	12 B	celved by: (Signature)		Relinqu	ished by:	(Signature)			e/Time	Received by: (Signature)	
Relinquished by: (S	ignature)		Date/Time	å	ceived by: (Signature)		Relinqu	ished by:	(Signature)		Ö	e/Time	Received by: (Signature)	
Relinquished by: (Si	anature)		Data/Time		calved for Lahoratory by	(Ciccoture)								
	.				Mails F/		13		<u>م</u> ۲					
Carrier Co:					Carrier	Phope No.			Da C	le Results R	sported / by: (ignature)		
Air Bill No.:														





FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	970559
MTR CODE SITE NAME:	75155	Ramenta ET AL #1
SAMPLE DATE TIME (Hrs):	6/12/97	1121
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	DF	QUALIF	ERS
BENZENE	42.3	РРВ	5	D	
TOLUENE	283	РРВ	5	D	
ETHYL BENZENE	423	РРВ	5	D	
TOTAL XYLENES	4240	PPB	5	D,D1	
TOTAL BTEX	4990	PPB			

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 92.8 for this sample All QA/QC was acceptable. DF = Dilution Factor Used

The "D1" qualifier indicates that the analyte concentration exceeded the calibration curve limit.

The "D" qualifier indiciates that the analyte calculated is based on a secondary dilution factor.

Narrative:

Approved Du	\d	Luch	
Approved By:	John	Variable	

Date: 6-23-97

970559,6/20/97





FIELD SERVICES LABORATORY ANALYTICAL REPORT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	970559
SAMPLE DATE:	06/12/97
SAMPLE TIME (Hrs):	1121
SAMPLED BY:	N/A
MATRIX:	Water
METER CODE:	75155
SAMPLE SITE NAME:	Ramenta ET AL #1
SAMPLE POINT:	MW-1

REMARKS:

	RESULTS	
PARAMETER	TOTAL RESULT (mg/L)	N: M. WQCC LIMIT (mg/L)
ARSENIC	0.042	0.100
BARIUM	0.25	1.00
CADMIUM	<.0002	0.010
CHROMIUM	0.009	0.050
LEAD	<.002	0.050
MERCURY	<0.0002	0.002
SELENIUM	<.005	0.050
SILVER	<.0005	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.

hod 7741A, Selenium (Atomic Absorption, Gaseous Hydride), Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept., 1994. d 7761, Silver (Atomic Absorption, Furnace Technique), Test Methods for Evaluating Solid Waste, SW-846, USEPA, July, 1992.

Reported By: Inde

Approved By: John Farth.

Date: 7/17/97





Field Services Laboratory

Analytical Report

SAMPLE IDENTIFICATION

970559 EPFS LAB ID: 06/12/97 DATE SAMPLED: 1121 TIME SAMPLED (Hrs): N/A SAMPLED BY: Water **MATRIX:** 75155 METER CODE: Ramenta ET AL #1 SAMPLE SITE NAME: **MW-1** SAMPLE POINT:

FIELD REMARKS:

GENERAL CHEMISTRY WATER ANALYSIS RESULTS

PARAMETER	RESULT	UNITS	DATE ANALYZED
Laboratory pH	7.8	Units	06/13/97
Alkalinity as C0 ₃	0.0	PPM	06/13/97
Alkalinity as HC0 ₃	692	РРМ	06/13/97
Calcium as Ca	30	РРМ	06/13/97
Magnesium as Mg	2	РРМ	06/13/97
Total Hardness as CaC0 ₃	86	РРМ	06/13/97
Chloride as Cl	7	PPM	06/13/97
Sulfate as S0 ₄	10	РРМ	06/13/97
Fluoride as F	1.1	PPM	06/13/97
Nitrate as N0 ₃ -N	<0.1	PPM	06/13/97
Nitrite as N0 ₂ -N	<0.1	PPM	06/13/97
Ammonium as NH4 ⁺	<0.1	PPM	06/13/97
Phosphate as PO ₄	<0.1	PPM	06/13/97
Potassium as K	1.5	PPM	06/13/97
Sodium as Na	248	РРМ	06/13/97
Total Dissolved Solids	724	PPM	06/13/97
Conductivity	1,049	umhos/cm	06/13/97
Anion/Cation %	3.0%	%, <5.0 Accepted	06/20/97

Lab Remarks:

Reported By:_______

John Farde Approved By:

Date: <u>6-23-97</u>



QUALITY CONTROL REPORT

Sample ID: 970559 Date Reported: 07/16/97

LABORATORY CONTROL SAMPLE

Analyte	Found Result (mg/L)	Known Value (mg/L)	% Recovery
Arsenic	0.031	0.032	96.6%
Barium	0.062	0.065	95.7%
Cadmium	0.0025	0.0024	104%
Chromium	0.0049	0.0048	103%
Lead	0.033	0.030	111%
Mercury	0.0043	0.0046	93.2%
Selenium	0.038	0.041	94.3%
Silver	0.0051	0.0043	118%

DUPLICATE ANALYSIS (mg/L)

Analyte	Original Sample Result	Duplicate Sample Result	% RPD
Arsenic	ND	ND	NA
Barium	0.181	0.183	1.1%
Cadmium	ND	ND	NA
Chromium	0.0166	0.0153	8.2%
Lead	0.0065	0.0069	6.2%
Mercury	ND	ND	NA
Selenium	ND	ND	NA
Silver	0.0003	0.0004	8.7%

SPIKE ANALYSIS (mg/L)

Analyte	Original Sample Result	Spike Sample Result	Spike Added	Recovery Percent
Arsenic	0.001	0.126	0.100	118%
Barium	0.183	1.253	1.00	107%
Cadmium	ND	0.0103	0.010	103%
Chromium	0.017	0.065	0.050	97.0%
Lead	0.007	0.054	0.050	94.4%
Mercury	ND	0.0018	0.0020	90.0%
Selenium	ND	0.053	0.050	101%
Silver	0.0003	0.0539	0.050	107%

METHOD BLANK

Analyte	Found Result (mg/L)	Detection Level (mg/L)
Arsenic	ND	0.027
Barium	ND	0.019
Cadmium	ND	0.0002
Chromium	ND	0.004
Lead	ND	0.002
Mercury	ND	0.0002
Selenium	ND	0.011
Silver	ND	0.0005

Jan Jaldu

ND: Not Detected at stated detection level.

Approved By:____

Reported By: W

NA: Not Applicable.

Date: <u>7/17/97</u>

SH MPC	ひょ	Stowe			dSC fas Cor) npanų RECORI	_		-	A 2086	
Project No. Project Name	M	1+75155		Type			B	equested Analysis			
Samplera: (Signature)	le l	Elect Date:	6-19-97	and No. of Sample	- Bile	Supplieren Schuldus Surgilon	$\left \right\rangle$			Remarks	
At TTRUY Date Time Comp	p. GRAB	Sample Nun	lber	Contain-		Rest of the second seco					
WATER 7-1997 1122	×	0126	05	51	200	×		BANG	1774 87	1W /# 14.	/-/
MATER 21297	×			<u>S~/</u>	4.0	×		TPUL	BUAN	X	
				/							
					/	7					
						/					
								A			
										/	
Heimpulsing by: (signature)	<u>~~</u>	-19.97 1.572	ed by: (Signature)		Relinqui	shed by: (Sig	Inature)		Date/Time	Received by: (Signat	Ire)
Relinquisfied by: (Signature)	}	Date/Time Receiv	əd by: (Signature)		Relinqui	shed by: (Sig	nature)		Date/Time	Received by: (Signat	re)
Relinquished by: (Signature)		Date/Time Receive	ig for <u>J</u> aboratory by: (Si	gnature)		late/Time	Remark				
		10h	ever 1000		/sr/	7 072					
Carrier Co:			Carling Phot	ne No.	•		Date Re	sults Reported ,	by: (Signature)		
Air Bill No.:											



FIELD SERVICES LABORATORY ANALYTICAL REPORT

PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	N/A	971005
MTR CODE SITE NAME:	75155	Ramenta ET AL #1
SAMPLE DATE TIME (Hrs):	9/19/97	1122
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	DF.	OUALIF	IERS
BENZENE	6.09	РРВ	2	D	
TOLUENE	27.6	РРВ	2	D	
ETHYL BENZENE	359	PPB	2	D	
TOTAL XYLENES	3800	РРВ	10	D	
TOTAL BTEX	4193	PPB			

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 98.3 % for this sample All QA/QC was acceptable. DF = Dilution Factor Used

The "D" qualifier indiciates that the analyte calculated is based on a secondary dilution factor.

Narrative:

du Jala Approved By:

Date: ______9/29/97

971005BTEXMW,9/29/97

- ----

-

:

| |

A 2152	Remarks	RIP BURNIN ET AL #1 MW-1 RIP BURNIK			Date/Time Received by: (Signature) Date/Time Received by: (Signature)	oorted / by: (Signature) ean juen repro Form 71-66 A
N OF CUSTODY RECORD	Type Requester and No. No. Sample Arie Aralysis of Contain-	5/4°X × 12			Relinquished by: (Signature) Relinquished by: (Signature) Relinquished by: (Signature)	(Signature) /2/ Data/Time Remarks: ML /9/97 0835 Date Results Re-
3 ROGTA	H-75/55 Big Date: 12-5-97 Bampie Number	971273			Date/Time Received by: (Signature) 12-557 1612 Date/Time Received by: (Signature)	DeterTime Received for Laboratory by
Stample 4	Project No. Project Name Samplers: (Signature) CONNNO. K	11111125-97 (217 X			Relinguished by: (Signature) UDDAL (2) CDD Relinquished by: (Signature)	Relinquished 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	971273
MTR CODE SITE NAME:	75155	Ramenta et al #1
SAMPLE DATE TIME (Hrs):	12/5/97	1012
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		QUALIFI	ERS	
			DF	<u> </u>		
BENZENE	<1	РРВ	2	D		
TOLUENE	19.6	РРВ	2	D		
ETHYL BENZENE	296	PPB	2	D		
TOTAL XYLENES	2860	PPB	10	D		
TOTAL BTEX	3176	PPB				

--BTEX is by EPA Method 8020 --

The Surrogate Recovery was at _____% for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

The "D" qualifier indiciates that the analyte calculated is based on a secondary dilution factor.

Narrative:

Approved By:

Date: <u>12/18/97</u>

John Ferteli 971273BTEXMW, 12/18/97

	ERVICE	<u>9</u>			Well Dev	/elopm	ent and	Purgin	ıg Data					
Site Name <i>RM</i>	16N7A	ET 1	4 76		-		Development Purging	> 2	Vell Nun Aeter Co	nber	<u>111-1</u>			
Development Ci Stabilization Stabilization Other Methods of Dev Pump Centrifugal Centrifugal Devresibl	riteria ig Volumes of Wa of Indicator Para elopment e Double Cata Data	ater Removel imeters i Valve e Check Valve ess-steel Kem		Water Vol Initial Depth of \ Initial Depth to \ Height of Water Item Well Casing Gravel Pack Drilling Fluids Total	Iume Calc Well (feet) Water (feet) Column in We Water Volur Cubic Feet	C. 20 C. 20 C. 20 Cravel Pa Gallons Gallons	Sallori Remo	s s c c c c c c c c c c c c c c c c c c			ents PH Meter Do Monitor Conductivity Temperatur Other	y Meter e Meter D. CHC	saers Kit	
Date Time	Development Method	Removal Rate	Intake Depth	Ending Water Depth	Water / Remov	Volume ed (gal) T Computative	Product / Removed (Volume gallons)	emperature °C	Ŧ	Conductivity µmho/cm	Dissolved Oxygen	Comments	
12-5-97 0919	Pump Baller	(gal/min)	(reet)	(reet)				Cumulative	10.3	0/2	1074	mg/L		
12-5-97 0931					50	0.01			11.8	7.55	101			
12-597 0948					5.0	25.0			126	262	1119	25		
Comments	len.	110 (Lie				Jate 12-5	5.97 R	sviewer	John	tard		Date12/18/97	

ļ