District I 1625.M. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Risk bedrack defined extent of plune

Submit 1 copy to appropriate District Office and 1 copy to the Santa Fe Office

(Revised 3/9/94)

PIT REMEDIATION AND CLOSURE REPORT

	0 II	11112737
Operator: Amoco Production Company	Telephone	EC 20112
Address: 30-045-232	258	CEIVED III
Facility Or Bolack #3, Meter 90916 Well Name	C1 Di	2129252
Location: Unit or Qtr/Qtr Sec M Sec 20	T 28 R 8 County San J	uan
Pit Type: Separator Dehydrator X	Other	
Land Type: BLM X, State , Fee	Other	
Pit Location: Pit dimensions: length 21', w (Attach diagram) Reference: wellhead X, Footage from reference: 144'	other	
Direction from reference: 150	Degrees X Fast North	
Direction from reference:150	Degrees	
Depth To Ground Water (Vertical distance from contaminants to seasonal high water elevation of ground water.)	of	
Depth To Ground Water (Vertical distance from contaminants to seasonal high water elevation of	Less than 50 feet 50 feet to 99 feet Greater than 100 feet	(20 points) (10 points) (0 points) _10_
Depth To Ground Water (Vertical distance from contaminants to seasonal high water elevation of ground water.) Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or; less than	Less than 50 feet 50 feet to 99 feet Greater than 100 feet Yes	(20 points) (10 points) (0 points) _10_

Date Remediation Starte	ed:08/09/94 Date completed:08/09/94
	Excavation Approx. cubic yards
(Check all appropriate sections.)	Landfarmed Insitu Bioremediation
	Other Backfill pit without excavation
Remediation Location: (i.e. landfarmed onsite, name and location of offsite facility)	Onsite N/A Offsite N/A
General Description of F	Remedial Action:EPNG lines not marked. Soil gray, strong hydrocarbon odor. Hit sandstone
4'.	
Ground Water Encounte	ered: No X Yes Depth
Final Pit: Closure Sampling: (if multiple samples,	Sample location _ Four walls and center of pit composite
attach sample results and diagram of sample	Sample depth4'
locations and depths)	Sample Date08/09/94 Sample time15:43
	Sample Results
	Benzene(ppm) Not reported.
	Total BTEX(ppm) Not reported
·	Field headspace(ppm) 805
	TPH1350
Ground Water Sample:	Yes NoX (If yes, attach sample results)
I hereby certify that the	information above is true and complete to the best of my knowledge and belief.
Date 1/8/03/	ρ
Signature June	Printed Name Scott T. Pope and Title Senior ENV. Scientist



Bolack #3 Meter/Line ID 90916

SITE DETAILS

Legals - Twn: 28N

Rng: 8W

Sec: 20

NMOCD Hazard Ranking: 10 Operator: Amoco Production Company Land Type: BLM

Pit Closure Date: 8/09/9

RATIONALE FOR RISK-BASED CLOSURE

The pit noted above was assessed and ranked according to the criteria in the New Mexico Oil Conservation Division's (NMOCD) Unlined Surface Impoundment Closure Guidelines.

A test pit was excavated to 4 feet (ft) below ground surface (bgs) where sandstone was encountered and a soil sample was collected for field headspace analysis and laboratory analysis for TPH. Groundwater was not encountered in the test pit. Headspace analysis indicated an organic vapor content of 805 ppm; laboratory analysis indicated a TPH concentration 1,350 mg/kg. The headspace analysis and TPH measurement exceeded recommended remediation levels for the Hazard Ranking Score of 10.

No soil was disposed of offsite. The pit was backfilled with site soil, topped with clean soil from the surrounding berms, and graded in a manner to direct surface runoff away from the pit area.

A Phase II boring was completed to refusal at 17 ft bgs. No groundwater was encountered in the soil boring. One laboratory sample was collected at 15-16 ft bgs. Headspace analysis indicated an organic vapor content of 112 ppm; laboratory analysis indicated a benzene concentration of <0.5 mg/kg, a total BTEX concentration of <3 mg/kg, and a TPH concentration of <20 mg/kg. The benzene, BTEX and TPH concentrations were below recommended remediation levels for the Hazard Ranking Score.

No Phase III activities were conducted.

El Paso Field Services requests closure of the above mentioned production pit location for the following reasons:

- The primary source, discharge to the pit, has been removed for over eight years.
- The test pit was backfilled and the former pit area graded to direct surface runoff away from the former pit.
- The clean soil from the berms placed on top of the excavation would limit the potential for direct contact with hazardous constituents by livestock or the public; i.e., current direct contact exposure pathways are unlikely to be completed.
- Groundwater was not encountered in the soil boring at 17 ft bgs; local geologic features indicate the depth to groundwater is greater than 50 ft bgs.
- There are no water supply wells or other sources of fresh water extraction within 1,000 feet of the site.



PIT CLOSURE REQUEST

- Benzene, total BTEX, and TPH concentrations in the soil sample collected at the base of the Phase II soil boring at 15 ft bgs were non-detect, indicating that no significant downward constituent migration is occurring.
- Bedrock refusal was met at 4 feet below ground surface making additional excavation impractical and further downward migration of residual hydrocarbons unlikely.

ATTACHMENTS

Field Pit Assessment Form Revised Field Pit Assessment Form Field Pit Remediation/Closure Form Phase II Soil Boring Log Laboratory Analytical Results

REVISEDFIELD PIT SITE ASSESSMENT FORM

GENERA	Meter: 90 916 Location: Bolack #3 Operator #: Operator Name: P/L District: Coordinates: Letter: M Section Documents Sect
	NMOCD Zone: (From NMOCD Maps) Inside Outside Land Type: BLM State (2) Fee (3) Indian
	Depth to Groundwater Less Than 50 Feet (20 points) 50 Ft to 99 Ft (10 points) Greater Than 100 Ft (0 points) (1) (2) (3)
SSME	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?
SITE ASSESSME	(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
	(Surface Water Body: Perennial Rivers, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds) Distance to Nearest Ephemeral Stream (1) < 100' (Navajo Pits Only) (2) > 100'
	TOTAL HAZARD RANKING SCORE: POINTS
REN KS	Remarks: Site has been re-assessed, due to initial assessment including washes as a Surface Water Body. Site is < 100' vertical From Center of Large Canyon

FIELD PIT SITE ASSESSMENT FORM

GENERAL	Meter: 90916 Location: Bolack #3 Operator #: 0203 Operator Name: Amics P/L District: Blanco Coordinates: Letter: M Section 2D Township: 28 Range: 8 Or Latitude Longitude Pit Type: Dehydrator \(\sum \) Location Drip: Line Drip: Other: Site Assessment Date: \(\sum \) 17/94 Area: \(\sum \) Run: \(\sum \) Run: \(\sum \)
	NMOCD Zone: Land Type: BLM ☒ (1) (From NMOCD State ☐ (2)
	Maps) Inside (1) Fee (3) Outside (2) Indian
	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)
ASSESSMENT	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)
SITE ASS	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 Large Canyon (closest)
	(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)
	Distance to Nearest Ephemeral Stream (1) < 100'(Navajo Pits Only)
	TOTAL HAZARD RANKING SCORE: POINTS
REMARKS	Remarks: Redline-Vuln-Ourside 3 pits. Will close 1. Pit Dry
EM,	
14	1 (SP3190) 04/08/94

FIELD PIT REMEDIATION/CLOSURE FORM

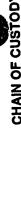
CENERAL.	JENERA	Meter: 90916 Location: Bolack #3 Coordinates: Letter: M Section 20 Township: 28 Range: 8 Or Latitude Longitude ——— Date Started: 8-9-94 Run: 63 82
1	VATI	Sample Number(s): MK243 Sample Depth: 4' Feet Final PID Reading 805 Yes No Groundwater Encountered \(\Boxed{\omega} \) Approximate Depth Feet
		Remediation Method : Excavation
	CLOSURE	Backfill Pit Without Excavation Soil Disposition: Envirotech
	REMARKS	Remarks: IfNG lives Not Marked Soil Gray Strong Hyprocerbox
		Signature of Specialist: Mwyan Killion



FIELD SERVICES LABORATORY ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Outside the GWV Zone

	SAMPLE I	DENTIFICA	TION			
	Field I	D		Lab ID		
SAMPLE NUMBER:	mu 24	3	945	885		
MTR CODE SITE NAME:	90916			N/A		,
SAMPLE DATE TIME (Hrs):	8-9.94		10	:43		\
SAMPLED BY:			/A	1 1 2 /		
DATE OF TPH EXT. ANAL.:	8 11 9	4	8	11/94	:	
DATE OF BTEX EXT. ANAL.:	٦) هـ		ν,			
TYPE DESCRIPTION:	۷ (ح		light "	jant of	Clay	
REMARKS:						
	F	RESULTS				
PARAMETER	RESULT	UNITS	DF	QUALIFI	ERS M(g)	V(ml)
TPH (418.1)	1350	MG/KG			2.06	28
HEADSPACE PID	805	PPM				
PERCENT SOLIDS	92.7	%				
		- TPH is by EPA Metho	od 418.1			
arrative:						
F = Dilution Factor Used						
F = Dilution Factor Oseu						



Electron Son Natural Gas Company



Page...

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<u> </u>	PROJECT NUMBER	UMBER	PROJECT N	JAME	PROJECT NAME DIE CICETTO DE DESIGNET # 24324	#3 FS			REQUESTED ANALYSIS	ALYSIS	CONT. ACT DASORATION 1. C. CONT.	
	AMPLERS:	SAMPLERS: (Signature)	Killie		DATE:	BMUN JA BNIATNO(SAMPLE BAYT	Hq 1.814	8020 8020			
71	N O O	DATE	TIME	MATRIX	SAMPLE	TOT 0 =0	·		78 Aq3		REMARKS	
1 - 9	94 002	8-54 11:25		7,8	OHTYW		7/	×		3/6	bray soil strong Hamacampon	Dolor
	200	M. 20 22 8 550 11:29	i	1,08	14741		16	×		×	217 Brown Soil Slight Hyprocerbow Oc	0000
-	700,	13-5-6	13:44 Soil	501	AKIUL		16	×	`	2	218 Grey Soil strong HADrocarbow	000
- 3	2004	1568	JCBC 844 15-43 51	18	mKz43	_	VG	×		219	9 Gray Soil Strong Hydroceibon adar	od oder
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	Ph	(.	MON 10,11, 1000	S. S	73	3	Benels	Alle	Slopey og 45	
	RELINGE	PELINCHISHED BY: (Signature)		22	DATE/TIME RECEIVED BY: (Signature)	(Signature)			RELINQUISHED BY: (Signature	Signature)	DATE/TIME RECEIVED OF LABORATORY BY: (Signature)	Y: (Signature)
	}										1 4-5	
	REQUEST	TED TURNA!	REQUESTED TURNAROUND TIME:		SAMPLE RECEIPT REMARKS	PT REMAR	XS XS			RESULTS	RESULTS & INVOICES TO: FIELD SERVICES LABORATORY	≿
	C) ROUTINE	- 1	O RUSH							· · · · · · · · · · · · · · · · · · ·	EL PASO NATURAL GAS COMPANY	PANY
		j								T	F.O. BOX 4990 FARMINGTON, NEW MEXICO 87	37499
					CHARGE CODE	•••				_	CO COL AGA TITE	

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

BILL NO.:

FM-08-0565A (Rev. 03-94)

FAX: 505-599-2261

RECORD OF SUBSURFACE EXPLORATION

PHILIP SERVICES CORP.

1000 Monroe	Road	ı		
	New N	dexico	87401	
5 2	52 F/	4X (505	5) 326-23	388

Borehole#	BH-)
Well#	NA
Page 1	of j

 Project Number
 19643
 Phase
 1001.77

 Project Name
 EPFS PITS >10

 Project Location
 Bolack #3
 90916

Elevation

Borehole Location LTR: M S: 25 T: 28 R: 8

GWL Depth
Drilled By
Well Logged By
Date Started
Date Completed

K. PADILLA
H. BRADBURY

10/22/98

[5/22/98]

Drilling Method 4 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)	-,	Monitor nits: PP BH	•	Drilling Conditions & Blow Counts
E	0				EXCAVATION SAMPLE COLLECTED At 4'						BZ≖Breathing Zone BH=Borehole S/HS≔Sample/Headspace
	10		15-11	17	LT BR Silty SAND, FINE SAND	SM		0	,	901	1536 hos
	15	7	(5-16	12	LT BR SIHY SAND, FINE SAND loose, dry LT BR SILTSTONE, Mod CEMENHED, dry			0	153	1027	1536 hrs VERY hARD LEST ARS
	20				TOB 17'					112	
	. 25										ė
	. 30	,									
	_ 35	5									
E	_ 40										

nents: HAB50 15-16 SENT to lab for TPH, BTEX. GW NOT ENCOUNTERED. BH GROTEL TO SURFACE

AUGER REFUSAL OF 17'

Geologist Signature H. BEACHWY

13.1-98 that, 13.3.98 Page.

<u> </u>			_	-		REQUE	REQUESTED ANALYSIS	ALYSIS		CONTRACT LABORATORY P. O. NUMBER
# 24324 Pit Closure Project	Project		738 273 373	_						
SAMPLERS: ESGRAPHO) BALLIN	D-	DATE: 12/98	MUN JA NIATNO:	SAMPLE 39YT		8050 EX	Old !	ar.	# ENCE	
LABID DATE TIME	MATRIX	FIELD ID	TOT 0 =0		AGE TR			197 38 319 319	SEGU	/O REMARKS
1551 \$1/2/01 452086). S	HAB 50	_	76	>		7	[]	99	BOLACK #3/90916 15-16"
					_				-	
			-	_						
					,	·		-		
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					/				7	
							/	/	<i>b</i>	
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RELINGUISHED BY: (Signatura) DATE/TIME DATE/TIME 10 77 100 1741 1.0	DATE/TIME 71/10	RECEIVE	matema	\$ 0	34°F	RELINQUISHED BY: (Signatura)	ED BY: (Si	gnature)		DATEITIME RECEIVED BY: (Signature)
IN HIGH SOUTHING TO I	0110	_	3	$\frac{2}{2}$						
RELINCUSHED BY: (Signatura)	DATE/TIME	TIME RECEIVED BY: (Signature)	gnature)		<u>æ</u>	RELINQUISHED BY: (Signature)	ED BY: (Si	gnature)		
					H					11955/9K 10805 Lother Caller
REQUESTED TURNAROUND TIME: C) ROUTINE C) RUSH		SAMPLE RECEIPT REMARKS COO + TATACT	REMARKS H277	Ļ		34°F	T.		ULTS & INV	FIELD SERVICES LABORATORY
CARRIER CO.										EL PASO NATURAL GAS COMPANY P. O. BOX 4990
BILL NO.:	,	CHARGE CODE						505	505-599-2144	FARMINGTON, NEW MEXICO 87499
										. 1.033°CC-UO00.1



FIELD SERVICES LABORATORY **ANALYTICAL REPORT** PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	HAB50	980754
MTR CODE SITE NAME:	90916	Bolack #3
SAMPLE DATE TIME (Hrs):	10/22/98	1557
PROJECT:	Phase II	Drilling
DATE OF TPH EXT. ANAL.:	10/30/98	10/30/98
DATE OF BTEX EXT. ANAL.:	10/26/98	10/26/98
TYPE DESCRIPTION:	VG	SOIL

Field Remarks: 15-16'

RESULTS

	RESULT	UNITS		QUAUFII	7.	
PARAMETER	M30051		DF .	11.00	000000000000000000000000000000000000000	Ymi
BENZENE	<0.5	MG/KG				
TOLUENE	<0.5	MG/KG				
ETHYL BENZENE	<0.5	MG/KG				:
TOTAL XYLENES	<1.5	MĢ/KG				
TOTAL BTEX	<3	MG/KG				
TPH (MOD.8015)	<20	MG/KG				
HEADSPACE PID	112	PPM				
PERCENT SOLIDS	91.3	%				

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

The Surrogate	Recovery was	at	
Nerrativa:			

% for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

John Tarelle

Date: 11/20/48





CLIENT PROJECT # PROJECT NAME	: EL PASO FIELD SERVICES : (none) : PHASE II DRILLING	PINNACLE ID DATE RECEIVED REPORT DATE	: 810097 : 10/27/98 : 11/5/98
AEN	. 111102 110110		DATE
ID. #	CLIENT DESCRIPTION	MATRIX	COLLECTED
01	980754	NON-AQ	10/22/98
	980753	NON-AQ	10/22/98
02	980751	NON-AQ	10/21/98
03 04	980752	NON-AQ	10/22/98





GAS CHROMOTOGRAPHY RESULTS

TEST

: EPA 8015 MODIFIED (DIRECT INJECT)

CLIENT

: EL PASO FIELD SERVICES

PINNACLE I.D.: 810097

PROJECT #

: (none)

: PHASE II DRILLING

PROJEC	[NAME	. PHASE II DIN	LLII4G					
SAMPLE				DATE	DATE	DATE	DIL.	
ID.#	CLIENT I.D.		MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR	
	980754		NON-AQ	10/22/98	10/30/98	10/30/98	1	
01	= - :		NON-AQ	10/22/98	10/30/98	10/30/98	1	
02	980753 980751		NON-AQ	10/21/98	10/30/98	10/30/98	11	
03 PARAME		DET. LIMIT		IITS	01	02	03	
	DROCARBONS, C6-C10	10	MG	/KG	< 10	< 10	16	
	DROCARBONS, C10-C22	5.0	MG	/KG	< 5.0	< 5.0	150	
	DROCARBONS, C22-C36	5.0	MG	S/KG	< 5.0	< 5.0	< 5.0	
	ATED SUM:			•			166.0	
SURROG O-TERPH	ATE: HENYL (%)				126	129	91	
SURROG	ATE LIMITS	(66 - 151)		•	•			

CHEMIST NOTES: N/A





GAS CHROMOTOGRAPHY RESULTS

TEST

: EPA 8015 MODIFIED (DIRECT INJECT)

CLIENT

: EL PASO FIELD SERVICES

PINNACLE I.D.: 810097

PROJECT#

: (none)

PROJECT NAM

: PHASE II DRILLING

PROJECT NAME	. PHASE II DRI	LLING		<u>_</u>		
SAMPLE			DATE	DATE	DATE	DIL.
ID. # CLIENT I.D.		MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
04 980752		NON-AQ	10/22/98	10/30/98	10/30/98	1
PARAMETER	DET. LIMIT	UN	IITS	04		
FUEL HYDROCARBONS, C6-C10	10	MG	KG	< 10	·	
FUEL HYDROCARBONS, C10-C22	5.0	MG	s/KG	< 5.0		
FUEL HYDROCARBONS, C22-C36		MG	s/KG	< 5.0		
CALCULATED SUM:						

RROGATE:
ERPHENYL (%)

114

SURROGATE LIMITS (66 - 151)

CHEMIST NOTES:

N/A

BTEX SOIL SAMPLE WORKSHEET

File		:	980754	Date Printed :	10/27/98	
Soil Mass	(g)	:	5.28	Multiplier (L/g) :	0.00095	
Extraction vol.	(mL)	:	10	CAL FACTOR (Analytical):	200	
Shot Volume	(uL)	: "	50	CAL FACTOR (Report):	0.18939	
				DILUTION FACTOR:	1	Det. Limit
Dannena /	// \		0 E	Panzona (ma/Ka):	#\/A E	0.473

0.473 Benzene (mg/Kg): #VALUE! Benzene (ug/L): <0.5 Toluene (ug/L): <0.5 Toluene (mg/Kg): #VALUE! 0.473 Ethylbenzene (mg/Kg): #VALUE! 0.473 Ethylbenzene (ug/L): <0.5 **p & m-xylene** (ug/L): 1.04 p & m-xylene (mg/Kg): 0.947 0.197 o-xylene (mg/Kg): #VALUE! 0.473 o-xylene (ug/L): <0.5 1.420 Total xylenes (mg/Kg): #VALUE! Total BTEX (mg/Kg): #VALUE!