District I
1625 N. 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



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

(Revised 3/9/94)

DIT	REMEDIATION	ANDOL	OCHDE	DEDODT
ГП	VEINIEDIA HON	AND CL	JOSUKE	REPURI

A Company of Sales

		0117	
Operator: Bannon Energy Incorporated		Cann.	
Address:30-	039-21959 500	100 E	
Facility Or: Tonkin #3, Meter 90582 Well Name	- C.	3 ON THE	
Location: Unit or Qtr/Qtr Sec_M_Sec_	17 T 24 R 3 County	Rio Arriba	
Pit Type: Separator Dehydrator	Other <u>Drip</u>		
Land Type: BLM, State, I	Fee X Other		
Pit Location: Pit dimensions: length 25' (Attach diagram)		_	
Reference: wellhead X	_, other	_	
Footage from reference:	165'		
Direction from reference:1	67 Degrees X East North		
		of South	
D. d. T. C I.W.			
Depth To Ground Water (Vertical distance from	Less than 50 feet	(20 points)	
contaminants to seasonal	50 feet to 99 feet	(10 points)	
high water elevation of	Greater than 100 feet	(0 points) <u>20</u>	_
ground water.)			
Wellhead Protection Area:		Yes (20 points)	
(Less than 200 feet from a private		No (0 points) <u>0</u>	ı
domestic water source, or; less than		1.0 (0 points)	-
1000 feet from all other water sources.)			
Distance To Surface Water:	Less than 200 feet	(20 points)	
(Horizontal distance to perennial	200 feet to 1000 feet	(10 points)	
lakes, ponds, rivers, streams, creeks, irrigation canals and ditches.)	Greater than 1000 feet	(0 points) <u>0</u>	-
1			

Date Remediation Started:	10/25/94 Date completed: 10/25/94						
Remediation Method: Ex	xcavation X Approx. cubic yards 20						
	andfarmed Insitu Bioremediation ther						
Remediation Location: O (i.e. landfarmed onsite, name and location of offsite facility)	Onsite Offsite _Envirotech						
General Description of Re	medial Action:Some line markers. Pit has some oil and water in it. Had to solidify pit with						
one truck. Dug out two loa	ads so that it wouldn't seep up through the cap. Closed pit.						
Ground Water Encountere	d: No <u>X</u> 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 depth 12'						
locations and depths)	Sample Date Sample time14:10						
	Sample Results						
	Benzene(ppm) Not reported						
Total BTEX(ppm) Not reported							
Field headspace(ppm) 49							
	TPH <u>81900</u>						
Ground Water Sample:	Yes No X (If yes, attach sample results)						
I hereby certify that the inf	formation above is true and complete to the best of my knowledge and belief.						
Date 1/8/03 Signature	Printed Name Scott T. Pope and Title Senior Env. Scientist						



Tonkin #3 Meter/Line ID 90582

SITE DETAILS

Legals - Twn: 24N Rng: 3W

Operator: Bannon Energy Incorporated

NMOCD Hazard Ranking: 20

Sec: 17

Land Type: Fee

Pit Closure Date: 10/25/94

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 12 feet (ft) below ground surface (bgs) where 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 49 ppm; laboratory analysis indicated a TPH concentration of 81,900 mg/kg. The TPH measurement exceeded recommended remediation levels for the Hazard Ranking Score of 20.

Approximately 20 cubic yards of soil were excavated and hauled to Envirotech, a commercial landfarm, for treatment and disposal. The pit was backfilled with clean soil and graded in a manner to direct surface runoff away from the pit area.

A Phase II boring was completed to refusal at 32 ft bgs. No groundwater was encountered in the soil boring. One laboratory sample was collected at 30-32 ft bgs. Headspace analysis indicated an organic vapor content of 0 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, TPH and BTEX 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.
- Backfilling the pit with clean soil eliminated the potential for direct contact with hazardous constituents by livestock or the public; i.e., direct contact exposure pathways are incomplete.
- Groundwater was not encountered in the soil boring to 32 ft bgs.
- There are no water supply wells or other sources of fresh water extraction within 1,000 feet of the
- Benzene, total BTEX, and TPH concentrations in the soil sample collected at the base of the Phase II soil boring at 32 ft bgs were non-detect, indicating that no significant downward constituent migration is occurring.



PIT CLOSURE REQUEST

• A majority of the impacted soil has been removed and residual hydrocarbons in the soil will likely degrade by natural attenuation with minimal risk to human health and the environment.

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

GENER	Meter: 90582 Location: Tonkin #3 Operator #: Operator Name: P/L District: Coordinates: Letter: M Section 17 Township: 24 Range: 3 Or Latitude Longitude Pit Type: Dehydrator Location Drip: Line Drip: Other: Site Assessment Date: 4/14/98 Area: Run:					
	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)					
	Wellhead Protection Area					
SM	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?					
ASSESSM	(1) YES (20 points) (2) NO (0 points)					
SSV	Horizontal Distance to Surface Water Body					
Ē	Less Than 200 Ft (20 points) (1)					
SIT	200 Ft to 1000 Ft (10 points) (2)					
S	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: 20 POINTS					
SS						
RKS	Remarks: Site has been re-assessed, due to initial assessment including washes as a Surface Water Body. Site has been re-assessed, due to initial assessment including washes					
RIF	center of Medio Canyon					

12/16/97

FIELD PIT SITE ASSESSMENT FORM

GENERAL	Meter: 90-582 Location: Tonkin #3 Operator #: 0430 Operator Name: Berry P/L District: Qiito Coordinates: Letter: M Section 17 Township: 24 Range: 3 Or Latitude Longitude Pit Type: Dehydrator Location Drip: X Line Drip: Other: Site Assessment Date: 10/25/94 Area: 08 Run: 83
	NMOCD Zone: Land Type: BLM □ (1) (From NMOCD State □ (2) Maps) Inside □ (1) Fee □ (3) Outside □ (2) Indian □ Depth to Groundwater □ (2) □ (2) Less Than 50 Feet (20 points) □ (2) Greater Than 100 Ft (0 points) □ (3)
R SITE 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) 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 Medio Canyon (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: ☐ POINTS Remarks: Redling Book: Laside, Hulmerable Zone Tago: Outside
REMAR	Two pits, location drip pit has liquid in it, Will close one pit. PUSHIN



FIELD SERVICES LABORATORY ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Outside the GWV Zone

	SAMPLE	IDENTIFICAT	ION		÷	
	Field	I ID		Lab ID		
SAMPLE NUMBER:	KP 33*	, KOK 10/31/94	946	154		
MTR CODE SITE NAME:	905	& 2		N/A		
SAMPLE DATE TIME (Hrs):	10.25.9	٤ ا	141	0		
SAMPLED BY:		N/A	4			
DATE OF TPH EXT. ANAL.:	10.28.	Q4	10-2	8-64		
ATE OF BTEX EXT. ANAL.:	12 A		N)			
TYPE DESCRIPTION:	VG		Dark brow	t bonas nu	- char	
•						
REMARKS:		· · · · · · · · · · · · · · · · · · ·				
		RESULTS				
PARAMETER	RESULT	UNITS		QUALIF	ERS	
			DF	Q	M(g)	V(ml)
TPH (418.1)	8/900	MG/KG			.100	28
HEADSPACE PID	49	PPM				4.7%
PERCENT SOLIDS	89.4	%				
		TPH is by EPA Method	418.1			
· · · · · · · · · · · · · · · · · · ·						
rative:						
Diller Francisco						
= Dilution Factor Used					٠.	

FIELDPIT REMEDIATION/CLOSUS FORM

GENERAL	Meter: 90582 Location: Tonkin T3 Coordinates: Letter: M Section 17 Township: 24 Range: 3 Or Latitude Longitude Date Started: 10-25-94 Area: 08 Run: 83
FIELD OBSERVATIONS	Sample Number(s): \$\forall 335 \\ Sample Depth: \(\frac{12'}{2'} \) Feet Final PID Reading \(\frac{049}{2'} \) Feet Yes No Groundwater Encountered \(\bigcup (1) \) \(\bigcup (2) \) Approximate Depth \(\frac{12'}{2} \) Feet
CLOSURE	Remediation Method: Excavation
REMARKS	Remarks: Some Like Markers. Pit Has some oil i water in it. Hadto solidisy Pit with one truck. dug out two Locals. so that it wouldn't sml up through the cap. Closed Pa
	Signature of Specialist: Killy Palille

(SP3191) 04/07/94

PROJECT NUMBER	Γ	PROJECT NAME	VAME					DECLISECTED ANALYSIS	9,	CONTACT LABORATORY P. O. NUMBER
		2 2	osure	Pit Closure Project # 24324	893 843			REGUESTED AIMETS	20	
SAMPLERS: (SIGN	Signature	0	11.	DATE:	MUM	34/ 34/)20		
- 'işlə	11.16	Tadil	100	10-25-99	NOC			80	-	
CABID	DATE	TIME	MATRIX	SAM	rot 9 40		T A93	ra Aq3	sea	REMARKS
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	0111 4885-01	9/11	So;l	KF 334		1/6	×		34	
1	3.2599	01/1	Soil	19 335		Vc	X		303	
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								/	/	
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RELINQUISHED BY: (Signature)	IED BY: (St	gnature)		DATE/TIME 3 40 RECEIVED BY: (Signature)	gnature)			RELINGUISHED BY: (Symeture)		DATE/TIME 30 RECEIVED BY: (Signatura)
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RELINOUISM	(ED BY: (Signature)	preture)		DATE/TIME RECEIVED BY: (Signature)	gnature)			RELINGUISHED BY: (<i>Signatu</i>	吏	DATEATIME RECEIVED OF LABORATORY BY: (Signature)
1										ートルルン
REQUESTED TURNAROUND TIME. GROUTINE GRUSH	D TURNAROUND	JUND TIME		SAMPLE RECEIPT REMARKS	REMARK				RESULTS (RESULTS & INVOICES TO: FIELD SERVICES LABORATORY
CARRIER CO.	o									P. O. BOX 4990 P. A. BOX 4990 P. A. BARINGTON NEW MEYICO 87499
BEL NO:		•		CHARGE CODE	·				505-599-2144	

Page

PROJECT NUMBER # 24324	PROJECT!	NAME DSUre	PROJECT NAME PIT Closure Project		89 89	<u> </u>	٠	REQUES	REQUESTED ANALASIS	1	0	CONTRACT LABORATORY P. O. NUMBER
SAMPLERS: (Signatur)	M Bradling	de		DATE: 8/6/18	BUN JA	SAMPLE BRYT	418.1	EX 8020	51081	P)	ENCE	
LABID	У рате	TIME	MATRIX	FIELD ID	TOT 0 40					E E		REMARKS
980560	8/4/18	8/4/18 14:3214 SOI	Soil	HAB1	_	16			>	0,	4	TONKIN #3 90582 30-32'
									_			
								-				
			:									
RELINGUISHED BY: (5/g)	Sale	Emp	Blo/88	Bloom PROCEIVED BY: (Signatura)	جر ا	3	BE .	RELINQUISHED BY: (Signature)	D BY: (Sg	neture)		S/10/98 073S RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature)	gnature)	>	DATE/TIME	RECEIVED BY	(Signeture)	1	<u>8</u>	RELINQUISKED BY: (Signature)	D BY: (Si	mature)		DATE/TIME RECEIVED OF LABORATORY BY: (Signature)
											,	8/0/kg orss / Mrctull
REQUESTED TURNAROUND TIME: C ROUTINE C RUSH	DUND TIME: USH				H o					RESI	RESULTS & INVOICES TO:	FIELD SERVICES LABORATORY
CARRIER CO.	ļ.			Control Linter	1-					· I		EL PASO NATURAL GAS COMPANY P. O. BOX 4990
BILL NO.:				CHARGE CODE						205	505-599-2144	FARMING I ON, NEW MEXICO 87499 FAX: 505-599-2261
	'											



FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

_	Field ID	Lab ID
SAMPLE NUMBER:	HAB1	980560
MTR CODE SITE NAME:	90582	Tonkin #3
SAMPLE DATE TIME (Hrs):	8/6/98	1432
PROJECT:	Phase I	ll Drilling
DATE OF TPH EXT. ANAL.:	8/13/98	8/14/98
DATE OF BTEX EXT. ANAL.:	8/10/98	8/11/98
TYPE DESCRIPTION:	VG	SOIL

Field Remarks: 30-32'

RESULTS

PARAMETER	RESULT	UNITS	DF	OUALIEI O	ars Mig)	Y(m))
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 (MOD.8015)	<20	MG/KG	Stemuelininoprominarinoprominarino	maaaagaanuaattiintamikkissaataacee	H-2000000N-STEWNAMATE	
HEADSPACE PID	0	, PPM				
PERCENT SOLIDS	89.3	%				

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

The Surrogate Recovery was at	87.2	_% for this sample	All QA/QC was acceptable
Narrative:			

OF = Dilution Factor Used	
Approved By: Xoly For La	Date: 8/25/48

RECORD OF SUBSURFACE EXPLORATION

PHILIP SERVICES CORP.

4000 Monroe Road

Date Completed

ington, New Mexico 87401 826-2262 FAX (505) 326-2388

Boren	ole#	BH-	1	
Well#	!		Λ	_
Page	_1_	of	1	_

Project Number	19643	Phase	1001.77	
Project Name	EPFS PITS	>10		
Project Location	TONKIN	#3	9058Z	

Elevation

Borehole Location LTR: M S: 17 T: 24 R: 3

GWL Depth
Drilled By
Well Logged By
Date Started

Elevation

S: 17 T: 24 R: 3

K: PADILLA C. LOYATO

C: CHANGE H. BRASBURY

8/6/98

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)	i	Air Monitoring Units: PPM BZ BH S/HS		Drilling Conditions & Blow Counts
	0 5										BZ=Breathing Zone BH=Borehole S/HS=Sample/Headspace
	_ _ _ _ _ 10				Backfill to 12 feet			0	154	-	
	15	ı	15-17'	18	DK gry CLAY, vstiff, med plastic, dry			3	122	<u>8</u> 1635	13:50 nes
	20	2	20-22'	12	Dr ben sandy SILT, Vfinesand, deuse; moist					= 25	14:00 hR5
	25	3	25-27	18	Dr gry sitty SAND. finesand, med deuse, moist			3	50	0)5	14:13 hes
	30	4	36- <i>3</i> 2	18	it. brown silty SAND, fine, loose, dry, trace interbedded clay			3	18	00	14:32 has hardes
	35 				TOB 32'					•	
	40										

ments:

Sample HAB 1 collected from 30-32' and SENT to lab for TPH and BTEX. GW NOT ENCOUNTERED BH GROVED to SURFACE.

Geologist Signature

Holly Bradling



GAS CHROMOTOGRAPHY RESULTS

TEST

: EPA 8015 MODIFIED (DIRECT INJECT)

CLIENT

: EL PASO FIELD SERVICES

PINNACLE I.D.: 808033

PROJECT #

: (none)

: PHASE II DRILLING

PROJECT	NAME	. PHASE II DINI	LLII1O				
SAMPLE				DATE	DATE	DATE	DIL.
ID.#	CLIENT I.D.		MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
04	980560		NON-AQ	8/6/98	8/13/98	8/14/98	1
05	980561		NON-AQ	8/7/98	8/13/98	8/14/98	1
PARAMET	ER	DET. LIMIT	UN	ITS	04	05	
FUEL HYD	ROCARBONS, C6-C10	10	MG	/KG	· -	< 10	
	ROCARBONS, C10-C22	5.0	MG	/KG	< 5.0	< 5.0	
FUEL HYD	ROCARBONS, C22-C36	5.0	MG	/KG	< 5.0	< 5.0	
CALCULA	TED SUM:		State of State of	•			
SULKOGA	TE:	:.	12. The				
O-TERPHE	ENYL (%)				91	91	

SURROGATE LIMITS

(66 - 151)

CHEMIST NOTES:

N/A

DISTRIBUTION: White - AEN, Canary - Origin

Date:

Printed Name:

Сотрапу:

1/5/98 AEN Inc.: American Environmental Network (NM), Inc. • 2709-D Pan American Freeway, NE • Albuquerque, New Mexico 87107 • (505) 344-3777 • Fax (505) 344-4413

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	Pesticides (PCB (608/8081) Herbicides (615/8151) Base/Neutral/Acid Compounds GCMS (625/8270) General Chemistry: Target Analyte List Metals (13) Target Analyte List Metals (23) Target Analyte List Metals (33) ACRA Metals (8) RCRA Metals (8) RCRA Metals (8)								A secular secu	Time: Signature: Time:	lass Date: Date:		Company:	Time: XF WAY STATE OF THE STATE
(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	8260 (TCL) Volatile Organics 8260 (CUST) Volatile Organics 8260 (CUST) Volatile Organics 8260 (Landfill) Volatile Organics				- 1				经验的现在分	Signature 0/	Printed Name: D.	Marlon Hope	Company PFS	Signature:
1. 《《文·文·《《《文·文·》《文·《文·》《文·》《文·《文·》《《文·》《《	Petroleum Hydrocarbons (418.1) TRPH (MOD.8015) Diesel/Direct Inject (M8015) Gas/Purge & Trap 8021 (BTEX)/8015 (Gasoline) 8021 (BTEX)/8015 (Casoline) 8021 (TCL) 8021 (TCL) 8021 (CUST) 8021 (CUST) 8021 (CUST)	X	X	X		X			1 STATES OF THE	☐ 1 WEEK (NORMAL) X	□SDWA □OTHER			
John Lambdin	Paso Field Services Co. W. Navajo mington, NM B7401 S) 599 - 2144 S) 599 - 2144 S) 599 - 2261	8/3/98 1324 Soil	1558	86/8 1150 Soil	86/98 1432 Soil	1/90 1127 Soil			是 · 多 · 多 · 多 · 多 · 多 · 多 · 多 · 多 · 多 ·	(RUSH) [] 24hr 148hr 172hr	CERTIFICATION REQUIRED:	METHANOL PRESERVATION	COMMENTS: FIXED FEE	
POJECT MANAGER: John	COMPANY: ADDRESS: ADDRESS: FARMING TON, NAVAJO FAX: (\$0\$) \$99 - 2144 (\$0\$) \$99 - 2240 BILL TO: COMPANY: ADDRESS: ADDRESS:	980539 8/3	980540 8/3/	980559 9%	980560 B/	980561 87			The Carlo Ca	POJ. NO;:	PROJ. NAME: Phase I Drilling CERTIFICATION REQUIRED.	JO NO:	HIPPED VIA: Fed EX	

BTEX SOIL SAMPLE WORKSHEET

File	. :	980560	Date Printed :	8/12/98
Soil Mass	(g) :	5.11	Multiplier (L/g) :	0.00098
Extraction vol.	(mL):	10	CAL FACTOR (Analytical):	200
Shot Volume	(uL) :	50	CAL FACTOR (Report):	0.19569

		DILUTION	FACTOR:	1	Det. Limit
Benzene	(ug/L) : <0.5	Benzene	(mg/Kg):	#VALUE!	0.489
Toluene	(ug/L) : < 0.5	Toluene	(mg/Kg):	#VALUE!	0.489
Ethylbenzene	(ug/L) : <0.5	Ethylbenzene	(mg/Kg):	#VALUE!	0.489
p & m-xylene	(ug/L) : <1.0	p & m-xylene	(mg/Kg):	#VALUE!	0.978
o-xylene	(ug/L) : <0.5	o-xylene	(mg/Kg):	#VALUE!	0.489
		Total xylenes	(mg/Kg):	#VALUE!	1.468
		Total BTEX	(mg/Kg):	#VALUE!	