3R – 054 - 02

PIT CLOSURE

05 / 15 / 1994

3R-054-2

30-045-21112
039

Deputy Oil & Gas Inspector
DEC 29 1997
Approved

Meter Number:89433
Location Name:VALENCIA CANYON UNIT #2
Location:TN-28 RG-04
SC-27 UL-A
2 - Federal
NMOCD Zone:OUTSIDE
Hazard Ranking Score:00

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APR 14 1997
OIL CON. DIV.
DIST. 3

RATIONALE FOR RISK-BASED CLOSURE OF PRODUCTION PITS LOCATED OUTSIDE OF THE VULNERABLE ZONE IN THE SAN JUAN BASIN

This production pit location was ranked according to the criteria in the New Mexico Oil Conservation Division's Unlined Surface Impoundment Closure Guidelines and received a ranking score of zero. The estimated depth to groundwater is greater than 100-feet beneath ground surface (bgs), the pit is not in a well head protection area, and there are no surface water bodies within 1,000 horizontal feet of the pit location.

The primary source, discharge to the pit has been removed. There has been no discharge to the pits for at least 4 years and the pits have been closed for at least one year.

Each pit was backfilled with clean soil and graded in a manner to divert precipitation away from the excavated area. Minimal infiltration of rainfall is expected. Any rainfall that does infiltrate the ground surface must migrate through clean backfill before reaching the residual hydrocarbons.

There is no source material at the ground surface, so direct contact of hydrocarbons with livestock and the populous is not likely.

In general, outside of the vulnerable area and alluvial valleys, bedrock material is generally encountered within 20 feet of the ground surface. Bedrock material in the San Juan Basin consists of interbedded sandstones, shales and clays. According to Freeze and Cherry, 1979, the hydraulic conductivity of the bedrock material are as follows:

Sandstone	10^{-9} to 10^{-13} cm/sec
Shale	10^{-12} to 10^{-16} cm/sec
Clay	10^{-12} to 10^{-15} cm/sec

Based on this information, the residual hydrocarbons should not migrate to groundwater.

Natural process (bioremediation) are degrading the residual hydrocarbon to carbon dioxide and water and will continue until the source is gone, therefore minimizing any impact to the environment.

Based on the above information, it is highly unlikely that any source material will impact groundwater or ever find an exposure pathway to affect human health and therefore El Paso Field Services Company (EPFS) requests closure of this pit location.

3E-0720-SE

FIELD PIT SITE ASSESSMENT FORM

EPFS EL PASO FIELD SERVICES

GENERAL

Meter: 89433 Location: VALENCIA CANYON UNIT #2
Operator #: 0203 Operator Name: AMOCO P/L District: BLOOMFIELD
Coordinates: Letter: A Section 27 Township: 28 Range: 4
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: X Line Drip: ___ Other: _____
Site Assessment Date: 5-15-94 Area: 10 Run: 62

SITE ASSESSMENT

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

Land Type:
~~BLM~~ ☐ (1)
State ☐ (2)
Fee ☐ (3)
Indian _____
FOREST ☒

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 _____
(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: 0 **POINTS**

REMARKS

Remarks : TWO PITS ON LOCATION, ONE PIT TO BE CLOSED

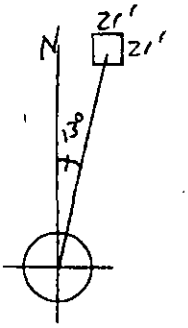
(SP3190) 04/08/94

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 130 Footage from Wellhead 10'

b) Length : 21' Width : 21' Depth : 4'



REMARKS

Remarks :

PHOTOGRAPHS AH-6 (14-17)

Completed By:

Signature

5-15-94

Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 9433 Location: VALENCIA CANYON UNIT # 2

Coordinates: Letter: A Section 27 Township: 28 Range: 24

Or Latitude _____ Longitude _____

Date Started : 7-7-94 Area: 10 Run: 62

FIELD OBSERVATIONS

Sample Number(s): MK102 _____ _____ _____

Sample Depth: 12' Feet

Final PID Reading 310 PID Reading Depth 12' Feet

	Yes	No	
Groundwater Encountered	☐ (1)	☒ (2)	Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation	☐ (1)	Approx. Cubic Yards _____
Onsite Bioremediation	☐ (2)	
Backfill Pit Without Excavation	☒ (3)	

Soil Disposition:

Envirotech	☐ (1)	☐ (3)	Tierra
Other Facility	☐ (2)	Name: _____	

Pit Closure Date: 7-7-94 Pit Closed By: BEI

REMARKS

Remarks : EPNG lines marked soil Brown NO Hydrocarbon odor Pit Had 1"to2" of Acid In bottom

Signature of Specialist: Morgan Killion

(SP3191) 04/07/94

El Paso Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	MK 102	945615
MTR CODE | SITE NAME:	89433	N/A
SAMPLE DATE | TIME (Hrs):	7/7/94	1639
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	7-12-94	7/12/94
DATE OF BTEX EXT. | ANAL.:	N/A	N/A
TYPE | DESCRIPTION:	VG	Brown Sand Clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE		MG/KG				
TOLUENE		MG/KG				
ETHYL BENZENE		MG/KG				
TOTAL XYLENES		MG/KG				
TOTAL BTEX		MG/KG				
TPH (418.1)	185	MG/KG			2.03	28
HEADSPACE PID	310	PPM				
PERCENT SOLIDS	89.9	%				

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

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

Narrative:

DF = Dilution Factor Used 1.0

7/12/94

**********. **********

Test Method for
Oil and Grease and Petroleum Hydrocarbons
in Water and Soil

Perkin-Elmer Model 1600 FT-IR
Analysis Report

****

74/07/12 09:17

ILLEGIBLE

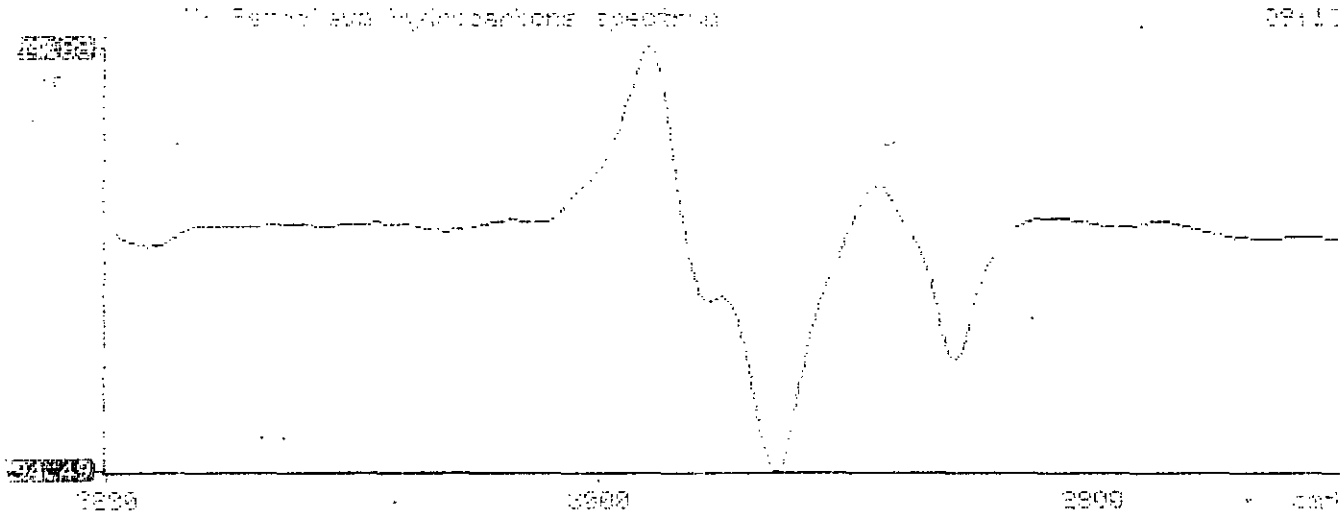
Sample identification
45615

Initial mass of sample, g
.130

Volume of sample after extraction, ml
28.000

Petroleum hydrocarbons, ppm
55.767

Max. absorbance of hydrocarbons (2930 cm-1)
.726



94421 OK

District I
P.O. Box 1980, Hobbs, NM
District II
Drawer DD, Artesia, NM 88211
trict III
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

SUBMIT 1 COPY TO APPROPRIATE DISTRICT OFFICE AND 1 COPY TO SANTA FE OFFICE

RECEIVED
OCT - 4 1999
OIL CON. DIV.
DIST. 3

PIT REMEDIATION AND CLOSURE REPORT

Operator: Amoco Production Company **Telephone:** (505) 326-9200

Address: 200 Amoco Court, Farmington, New Mexico 87401

Facility Or: VCU #2
Well Name

Location: Unit or Qtr/Qtr Sec A Sec 27 T 28N R 4W County RIO ARRIBA

Pit Type: Separator ___ Dehydrator ___ Other Blow

Land Type: BLM ✓, State ___, Fee ___, Other ___

Pit Location: (Attach diagram)
Pit dimensions: length 35', width 35', depth 8'
Reference: wellhead X, other ___
Footage from reference: 150'
Direction from reference: 0 Degrees ___ East ___ North of ✓ West ___ South

Depth To Ground Water: (Vertical distance from contaminants to seasonal high water elevation of ground water)	Less than 50 feet (20 points) 50 feet to 99 feet (10 points) Greater than 100 feet (0 Points)	0
Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or; less than 1000 feet from all other water sources)	Yes (20 points) No (0 points)	0
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 200 feet (20 points) 200 feet to 1000 feet (10 points) Greater than 1000 feet (0 points)	0
	RANKING SCORE (TOTAL POINTS):	0

94421 BLOW PIT

Date Remediation Started: _____ **Date Completed:** 7/22/92

Remediation Method: (Check all appropriate sections) Excavation ✓ Approx. cubic yards 250

Landfarmed ___ Insitu Bioremediation ___

Other STOCKPILED

Remediation Location: (ie. landfarmed onsite, name and location of offsite facility) Onsite ✓ Offsite _____

General Description Of Remedial Action: _____

Excavation

Ground Water Encountered: No ✓ Yes ___ Depth _____

Final Pit: Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths)

Sample location see Attached Documents

Sample depth 8' (PIT BOTTOM)

Sample date 7/21/92 Sample time 1150

Sample Results

Benzene(ppm) _____

Total BTEX(ppm) _____

Field headspace(ppm) 1.1

TPH 62 ppm

Ground Water Sample: Yes ___ No ✓ (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 7/22/92

SIGNATURE B J Shaw PRINTED NAME AND TITLE Buddy D. Shaw Environmental Coordinator

94421

ENVIROTECH Inc.

5796 US HWY. 64, FARMINGTON, NM 87401
(505) 632-0615

1647

FIELD REPORT: CLOSURE VERIFICATION

JOB No: 92140
PAGE No: 1 of 1

LOCATION: LEASE: Valencia Canyon Unit WELL: No 2 QD: NE¼ NE¼ A
SEC: 27 TWP: 12 N RNG: 4W BM: NM CNTY: R.A ST: NM PIT: Blow
CONTRACTOR:
EQUIPMENT USED:
Fed. Lease No. 14921

DATE STARTED: 7-21-92
DATE FINISHED: 7-21-92
ENVIRONMENTAL SPECIALIST: tw

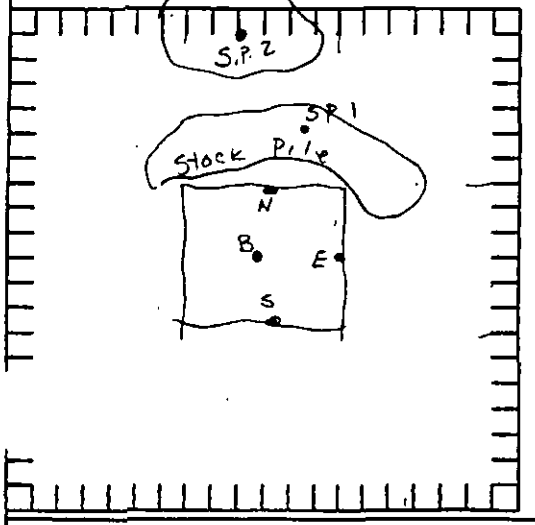
SOIL REMEDIATION: QUANTITY: 250 cy material
DISPOSAL FACILITY: On Site
LAND USE: Forest
SURFACE CONDITIONS: Earthen Pit

FIELD NOTES & REMARKS: Both stockpiles seem relatively clean. Pit is clean and ready for back fill.

Pit is located approx 150' west of well head

T.P.H from bottom of pit

SCALE
0 FEET
PIT PERIMETER



SAMPLE RESULTS

SMPL No:	ANALYTICAL RESULTS
S.P.#1	3.9 ppm
S.P.#2	1.- ppm
B.	1.- ppm
E	0.5 ppm
S	0.5 ppm
N	0.5 ppm

SCALE
0 FEET
PIT PROFILE

TRAVEL NOTES: CALLOUT: ONSITE:

ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	AMOCO	Project #:	92140
Sample ID:	Bottom Pit	Date Reported:	07-22-92
Laboratory Number:	1994	Date Sampled:	07-21-92
Sample Matrix:	Soil	Date Received:	07-21-92
Preservative:	Cool	Date Analyzed:	07-22-92
Condition:	Cool & Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	62	5.0

Method: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

ND - Parameter not detected at the stated detection limit.

Comments: Valencia Canyon Unit #2 Blow Pit 94421

Analyst

Review

1047

CHAIN OF CUSTODY RECORD

94421

Client/Project Name	Project Location	ANALYSIS/PARAMETERS
Amoco 92140	Blow Pit Valencia Canyon Unit #2	
Sampler: (Signature) Jim Weakee	Chain of Custody Tape No.	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH						Remarks
Bottom Pit	7-21-92	1150	1994	Soil	1	✓						

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Jim Weakee	7-21-92	1654	Relinquished!	7-21-92	1654
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

ENVIROTECH INC.
5796 U.S. Highway 64-3014
Farmington, New Mexico 87401
(505) 632-0615

san juan repro Form 578-81

CLIENT: AMOCO

BLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199

LOCATION NO: C4421
C.D.C. NO: _____

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: VCU WELL #: 2 PITS: BLOW
QUAD/UNIT: A SEC: 27 TWP: 28N RNG: 4W PM: NM CNTY: RA ST: NM
QTR/FOOTAGE: CONTRACTOR:

DATE STARTED: 11-18-97
DATE FINISHED: _____
ENVIRONMENTAL SPECIALIST: JCT

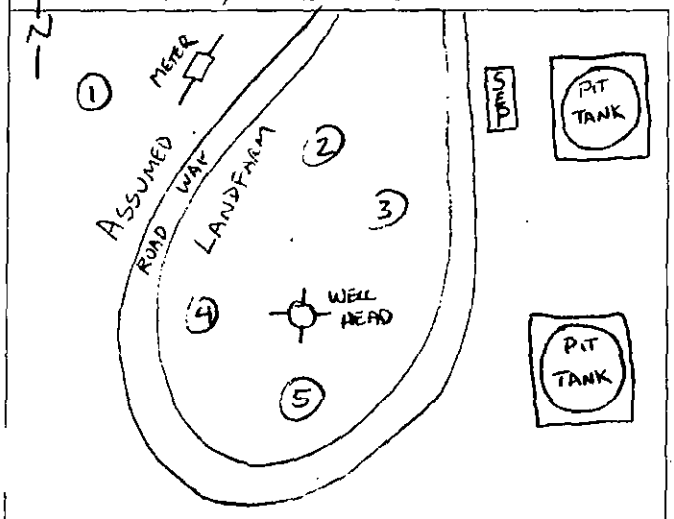
SOIL REMEDIATION:
REMEDIATION SYSTEM: STOCKPILE (LANDFARM?) APPROX. CUBIC YARDAGE: 250
LAND USE: RANGE LIFT DEPTH (ft): _____

FIELD NOTES & REMARKS:
DEPTH TO GROUNDWATER: >100 NEAREST WATER SOURCE: >1000 NEAREST SURFACE WATER: >1000
NMOCD RANKING SCORE: 0 NMOCD TPH CLOSURE STD: 5000 PPM

FIELD 418.1 CALCULATIONS

SAMP. TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1245	LF-1	1934	5.0	20.0	4x	44	176

SKETCH/SAMPLE LOCATIONS



OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
LF-1	0.0

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME	RESULTS

SCALE
0 FT

TRAVEL NOTES: CALLOUT: _____ ONSITE: _____

BLAGG ENGINEERING, INC.
P.O. Box 87, Bloomfield, New Mexico 87413
Phone: (505)632-1199 Fax: (505)632-3903

FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	AMOCO	Project #:	
Sample ID:	Landfarm	Date Analyzed:	11-19-97
Project Location:	VCU # 2	Date Reported:	11-19-97
Laboratory Number:	TPH-1934	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	**180**	**20**

ND = Not Detectable at stated detection limits.

QA/QC:

QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
608	568	6.80

*Administrative Acceptance limits set at 30%.

Method: Modified Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

Comments: Landfarm Composite Sample

J. C. Blagg
Analyst

Review

BLAGG ENGINEERING, INC.
P.O. Box 87, Bloomfield, New Mexico 87413
Phone: (505)632-1199 Fax: (505)632-3903

Field TPH-Worksheet

Max Characters:	**********		
Client:	AMOCO	Project #:	
Sample ID:	Landfarm	Date Analyzed:	11-19-97
Project Location:	VCU # 2	Date Reported:	11-19-97
Laboratory Number:	TPH-1934	Sample Matrix:	Soil

Sample Weight:	5.00	grams
Volume Freon:	20.00	mL
Dilution Factor:	1	(unitless)
TPH Reading:	44	mg/kg

TPH Result:	176.0	mg/kg
Reported TPH Result:	180	mg/kg
Actual Detection Limit:	20.0	mg/kg
Reported Detection Limit:	20	mg/kg

QA/QC:	Original TPH mg/kg	Duplicate TPH mg/kg	% Diff.
	608	568	6.80

Comments: **********Max Characters**********

Comments: Landfarm Composite Sample