District I
P.O. Box 1980, Hobbs, NM 88241-1980
District II
P.O. Drawer DD, Artesia, NM 88211-0719
District 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

Ernest L. Bust
PUTY OIL & GAS INSPECTOR
AUG 25 1997

Approved

PIT REMEDIATION AND CLOSURE REPORT

Operator : Phillips Petroleum Company Telephone: (505) 599-3400

Address: 5525 Hwy. 64, NBU 3004, Farmington, NM 87401

Facility Or: San Juan 29 - 6 Unit # 35 Mesaverde
Well Name

Location: Unit or Qtr/Qtr Sec M SWSW Sec 15 T 29N R 6W County Rio Arriba

Pit Type: Separator X Dehydrator ____ Other Condensate Tank

Land Type: BLM X, State ____, Fee ____, Other ____

Pit Location: (Attach diagram)
Pit dimensions: Length 25 ft, width 25 ft, depth 4 ft

Reference: wellhead X other ____

Footage from reference: 45 ft

Direction from reference: 60 Degrees ___ East North X of X West South ___

Depth to Ground Water: (vertical distance from contaminants to seasonal highwater elevation of ground water)	120 ft	___	Less than 50 feet	(20 points)
		___	50 ft to 99 feet	(10 points)
		X	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)
		X	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)
		X	Greater than 1000 feet	(0 points) 0

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DIST. 3

P:\pits\PrrC@.WK3

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: 11/11/93 Dated Completed: 6/3/97

Excavation X Approx. cubic yards 97

Landfarmed X Insitu Bioremediation _____

Other Risk Assessment

Remediation Method: Onsite X Offsite _____

(Check all appropriate sections)

General Description of Remedial Action- The site was assessed on 11/11/93 and 5/17/94. The pit was excavated on 8/12/94 and tested below NMOCD and BLM guidelines. The landfarm was determined to be within guidelines on 10/20/94. The site was risk assessed on 6/3/97 and based on this information and the physical location of the pit, there is no risk to human health or environment.

Ground Water Encountered: No X Yes _____ Depth _____

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

Sample location Approximately 10 feet southeast (down gradient) of original pit.

Sample depth 18 ' below ground level

Sample date 6/3/97 Sample time 14:15

Sample Results

Benzene(ppm) _____

Total BTEX (PPM) _____

Field Headspace (ppm) 0.0

TPH Non-Detect

Ground Water Sample: Yes No X (if yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETED TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DATE 6-20-97 PRINTED NAME Bob Wirtanen

SIGNATURE Robert A. Wirta and TITLE Sr. Safety & Environmental Specialist

ENVIROTECH Inc.

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

PIT NO: PA084
C.O.C. NO: 3186

FIELD REPORT: SITE ASSESSMENT

JOB No: 93163
PAGE No: 1 of 1

PROJECT: PIT ASSESSMENT
CLIENT: PHILLIPS PETROLEUM
CONTRACTOR: ENVIROTECH, INC.
EQUIPMENT USED: CASE EXTEND-A-DIG

DATE STARTED: 11-11-93
DATE FINISHED: 5-17-94
ENVIRO. SPCLT: REO
OPERATOR: Cimarron
ASSISTANT: K.S.

LOCATION: LEASE: San Juan 29-6 WELL: # 35 MV QD: 890' FSL & 1090' FWL (M)
SEC: 15 TWP: 29N RNG: 6W PM: NM CNTY: R.A. ST: NM PIT: Sep.

LAND USE: Range - Lease #SF-080377
SURFACE CONDITIONS: Earthen Pit - Fenced 25' x 25' - Dry- No surface stain

PIT CENTER IS LOCATED APPROXIMATELY 45 FEET N45°W OF WELLHEAD.

CLOSURE STD: 5000 ppm TPH

RANKING SCORE: 0

T1: Moist, brown, silty sand - some odor

-11-93SAMPLE INVENTORY

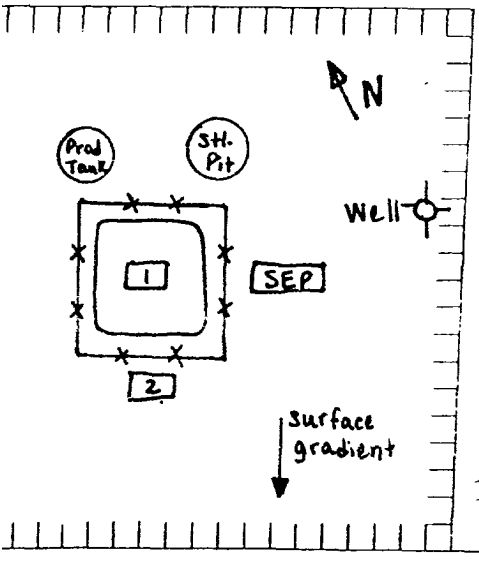
SMPL ID:	SMPL TYPE:	LABORATORY ANALYSIS:	
T1@7'	Soil	1356ppm	678x2=1356 - GAC#0320
T1@7'	DUP	864ppm	432x2= 864 - Different soil sample, same area - GAC#0320-D
T1@7'	Soil	BTEX	Failed
T1@7'	Soil	418.1	Duplicate - Lab

SAMPLE INVENTORY

	SMPL ID:	SMPL TYPE:	LABORATORY ANALYSIS:	
7/94				
506	T1@12'	Soil	7760 ppm	-->1413: Dilute 10:1=388x10x2=7760
507	T1@18'	Soil	7860 ppm	-->1400: Dilute 10:1=393x10x2=7860
507D	T1@18'	Soil	5200 ppm	-->1178: Dilute =260x10x2=5200
icate	T1@18'	Soil	Lab 418.1	-Duplicate
508	T2@18'	Soil	38 ppm	19x2=38

SCALE
0 10 20 FEET

SITE DIAGRAM



TEST HOLE LOGS

TH#: 1

GD	SOIL TYPE:	SMPL TYPE:	OVM/ TPH
4	Pit bottom		
	SM	GRB	1098
7	SM	GRB	1259
	TD = 7'		
12	SM	GRB	1050
18	SM	GRB	932
	TD = 18'		

TH#:

	SOIL TYPE:	SMPL TYPE:	OVM/ TPH
			5/17/94
			5/17/94
			5/17/94

TH#: 2

	SOIL TYPE:	SMPL TYPE:	OVM/ TPH
5			
10	SM	GRB	29
18	SM	GRB	37
	TD = 18'		

TH#:

	SOIL TYPE:	SMPL TYPE:	OVM/ TPH
			5/17/94
			5/17/94

SOIL TYPE: C - Clay, M - Silt, S - Sand, G - Gravel Plasticity: L - None, M - Plastic Grading: P - Poorly, W - Well

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FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	T1 @ 7'	Date Analyzed:	11-11-93
Project Location:	San Juan 29-6, #35 MV	Date Reported:	11-15-93
Laboratory Number:	GAC0320	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	1,400	10

ND = Not Detectable at stated detection limits.

QA/QC:

QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
1,000	890	12

*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: Separator Pit PA084

R. E. O'Neill
Analyst

Review

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EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips	Project #:	93163
Sample ID:	T1 @ 7'	Date Sampled:	11-11-93
Laboratory Number:	6492	Date Received:	11-11-93
Sample Matrix:	Soil	Date Analyzed:	11-12-93
Preservative:	Cool	Date Reported:	11-12-93
Condition:	Cool & Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	2,820	100.0

ND = Parameter not detected at the stated detection limit.
N/A = Not applicable

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

Comments: San Juan 29-6 #35 MV, PA084

Tony Tristan
Analyst

Review

ENVIROTECH LABS

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EPA METHOD 8020
AROMATIC VOLATILE ORGANICS

Client:	Phillips	Project #:	93163
Sample ID:	T 1 @ 7'	Date Reported:	11-15-93
Laboratory Number:	6492	Date Sampled:	11-11-93
Sample Matrix:	Soil	Date Received:	11-11-93
Preservative:	Cool	Date Extracted:	11-12-93
Condition:	Cool & Intact	Date Analyzed:	11-15-93
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	3,310	19.8
Toluene	76,000	39.7
Ethylbenzene	2,850	19.8
p,m-Xylene	49,500	60
o-Xylene	19,000	39.7

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	93 %
	Bromofluorobenzene	100 %

Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

ND - Parameter not detected at the stated detection limit.

Comments: San Juan 29-6 #35 MV PA084

Analyst

Review

PAO84

Client/Project Name	Project Location	ANALYSIS/PARAMETERS
PHILLIPS # 93163	SAN JUAN 29-6 #35 MV	

Sampler: (Signature) R. E. O'Neill

Chain of Custody Tape No.

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	BTEX	418.1					Remarks
TI @ 7'	11-11-93	0948	6492	SOIL	1	✓	✓					

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
R. E. O'Neill	11-11-93	1621	Tony Tristano	11/11/93	1621
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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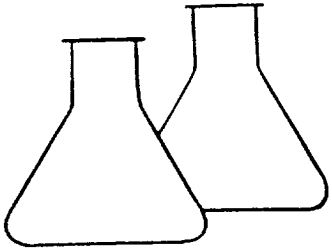

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FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	T1 @ 12'	Date Analyzed:	5-17-94
Project Location:	San Juan 29-6 #35 MV	Date Reported:	5-17-94
Laboratory Number:	GAC0506	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	7800	100

ND = Not Detectable at stated detection limits.

QA/QC:

QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
11,000	12,600	14

*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: Separator Pit PA084

R. E. O'Neill
Analyst

Review

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FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	T1 @ 18'	Date Analyzed:	5-17-94
Project Location:	San Juan 29-6 #35 MV	Date Reported:	5-17-94
Laboratory Number:	GAC0507	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	7900	100

ND = Not Detectable at stated detection limits.

QA/QC:

QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
11,000	12,600	14

*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: Separator Pit PA084

R. E. O'Neal
Analyst

Review

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FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	T1 @ 18'	Date Analyzed:	5-17-94
Project Location:	San Juan 29-6 #35 MV	Date Reported:	5-17-94
Laboratory Number:	GAC0507 Duplicate	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	5200	100

ND = Not Detectable at stated detection limits.

QA/QC:	QA QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	7,860	5,200	41

*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: Separator Pit PA084

R. E. O'Neal
Analyst

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EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips	Project #:	93163
Sample ID:	T1 @ 18'	Date Sampled:	05-17-94
Laboratory Number:	7450	Date Received:	05-17-94
Sample Matrix:	Soil	Date Analyzed:	05-20-94
Preservative:	Cool	Date Reported:	05-20-94
Condition:	Cool and Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	12,700	150

ND = Parameter not detected at the stated detection limit.
N/A = Not applicable

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

Comments: San Juan 29-6 #35 Sep Pit PA084

Tony Trustus
Analyst

Review

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EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	N/A	Project #:	N/A
Sample ID:	Laboratory Blank	Date Sampled:	N/A
Laboratory Number:	TPSB0520	Date Received:	N/A
Sample Matrix:	Soil	Date Analyzed:	05-20-94
Preservative:	N/A	Date Reported:	05-20-94
Condition:	N/A	Analysis Needed:	TPH

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	ND	15.0

ND = Parameter not detected at the stated detection limit.
N/A = Not applicable

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

Comments:

Tony Trujillo
Analyst

Review

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** QUALITY ASSURANCE REPORT
MATRIX SPIKE - TOTAL PETROLEUM HYDROCARBONS

Client:	N/A	Project #:	N/A
Sample ID:	Laboratory Spike	Date Sampled:	N/A
Laboratory Number:	TPSS0520	Date Received:	N/A
Sample Matrix:	Soil	Date Analyzed:	05-20-94
Analysis Requested:	TPH	Date Reported:	05-20-94

Parameter	Sample Result (mg/kg)	Spike Added (mg/kg)	Spiked sample Result (mg/kg)	Percent Recovery
Total Petroleum Hydrocarbons	ND	512	439	86

QA ACCEPTANCE CRITERIA:

Parameter	Acceptance Range %
TPH	80 - 120

ND = Parameter not detected at the stated detection limit.
N/A = Not applicable

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

Comments:

Tony Trujano
Analyst

Review

3638

CHAIN OF CUSTODY RECORD

Client/Project Name	Project Location	ANALYSIS/PARAMETERS							
PHILLIPS # 93163	SAN JUAN 29-6 #35 MV								Remarks
Sampler: (Signature) R. E. O'Neill	Chain of Custody Tape No.	No. of Containers	418.1						
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix					
11 @ 18'	5-17-94	1320	7450	SOIL	1	✓			DUPLICATE

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
R. E. O'Neill	5-17-94	1525	Debra L. Spencer	5-17-94	1525
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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Farmington, New Mexico 87401
(505) 632-0615

CLIENT: PHILLIPS PETROLEUM

ENVIROTECH Inc.

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

PIT NO: PA084

C.O.C. NO: 3840

FIELD REPORT: CLOSURE VERIFICATION

JOB No: 93163

PAGE No: 1 of 1

LOCATION: NAME: San Juan 29-6 WELL #: 35 MV PIT: Sep

QUAD/UNIT: M SEC: 15 TWP: 29N RNG: 6W BM: NM CNTY: R.AST: NM

QTR/FOOTAGE: 890' FSL & 1090' FWL CONTRACTOR: Cimarron

DATE STARTED: 12 Aug. 94

DATE FINISHED: 12 Aug. 94

ENVIRONMENTAL SPECIALIST: FM

SOIL REMEDIATION: EXCAVATION APPROX. 20 FT. x 20 FT. x 17 FT. DEEP.

DISPOSAL FACILITY: Land Farm - On site CUBIC YARDAGE: _____

LAND USE: Range LEASE: SF-080377

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 45 FEET N 45° W FROM WELLHEAD.

DEPTH TO GROUNDWATER: 120' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'

NMOCD RANKING SCORE: 0 NMOCD TPH CLOSURE STD: 5000 PPM

SOIL AND EXCAVATION DESCRIPTION: Soil is yellow-brown, slightly moist, silty sand

Odor at bottom and N. and W. Walls

2 x 670 => dilution 850

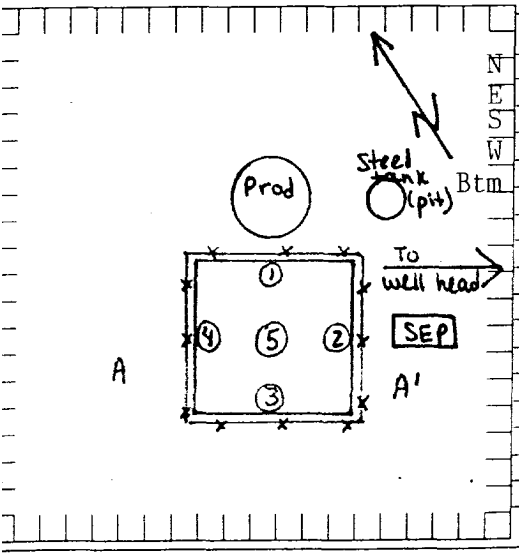
FIELD 418.1 CALCULATIONS

SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
5 @ 17'	GAC655	10	20	10	85	1700

SCALE

0 FEET

PIT PERIMETER



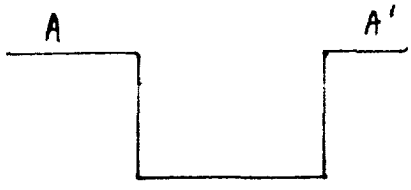
OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1@ 16'	10.3
2@ 16'	22.7
3@ 16'	89.8
4@ 16'	50.7
5 17'	505

LAB SAMPLES

5 @ 17' BTEX (8020)

PIT PROFILE



TRAVEL NOTES: CALLOUT: _____ ONSITE: _____

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FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	5 @ 17'	Date Analyzed:	8-12-94
Project Location:	San Juan 29-6 #35 (MV)	Date Reported:	8-12-94
Laboratory Number:	GAC0655	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	1,700	100

ND = Not Detectable at stated detection limits.

QA/QC:

QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
11,000	12,600	14

*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: Separator Pit PA084

Analyst

Review

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EPA METHOD 8020
AROMATIC VOLATILE ORGANICS

Client:	PHILLIPS	Project #:	93163
Sample ID:	5@17'	Date Reported:	08-19-94
Laboratory Number:	7821	Date Sampled:	08-12-94
Sample Matrix:	Soil	Date Received:	08-12-94
Preservative:	Cool	Date Extracted:	08-18-94
Condition:	Cool & Intact	Date Analyzed:	08-18-94
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	19.8
Toluene	1550	19.8
Ethylbenzene	800	13.2
p,m-Xylene	10800	19.8
o-Xylene	9200	19.8

SURROGATE RECOVERIES:

Parameter	Percent Recovery
Bromofluorobenzene	104 %

Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

ND - Parameter not detected at the stated detection limit.

Comments: SAN JUAN 29-6 # 35 (MV) SEP PIT PA084

Analyst

Review

Client/Project Name: Phillips 93163

Project Location: San Juan 29-6 #35 (MV)

Sampler: (Signature)

Chain of Custody Tape No.

ANALYSIS/PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	BTEX (8020)						Remarks
5 @ 17'	8/12/94	11:15	7824	Soil	1	✓						Sep Pit

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	8/12/94	1555			
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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(505) 632-0615

ENVIROTECH Inc.

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

PIT No: PA084
C.O.C #:

FIELD REPORT: REMEDIATION FACILITY CLOSURE VERIFICATION

JOB No: 93163
PAGE No: 1 of 1

FACILITY LOCATION: San Juan 29-6 # 35 MV
SOURCE LOCATION:
SOURCE LOCATION:
SOURCE LOCATION:
FACILITY CLASSIFICATION: On Site Landfarm PIT TYPE: Sep.

DATE STARTED: 10/20/94
DATE FINISHED: 10/20/94

ENVIRONMENTAL SPECIALIST: CJC

SOIL REMEDIATION: QUANTITY: 97 cy # OF COMP. SAMPLES: 1
DIMENSIONS: 45' x 58' x 1'
VISIBLE OBSERVATIONS:
SAMPLING PLAN: 1 5-point composite

FIELD NOTES & REMARKS: FACILITY CENTER LOCATED APPROX 40 YARDS N FROM WELLHEAD.

DEPTH TO GROUNDWATER: 120'
NEAREST WATER SOURCE/TYPE: >1000'
NEAREST SURFACE WATER: >1000'
MAX TPH PER NMOCD: 5000 ppm

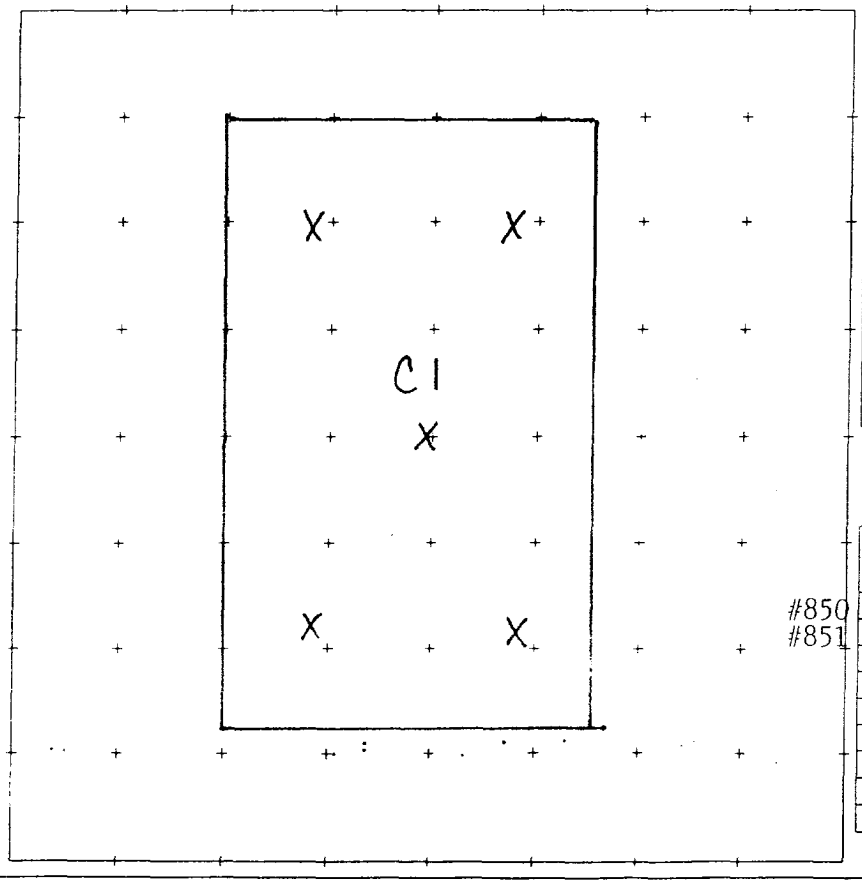
No. OF 5-POINT COMPOSITE SAMPLES: YARDAGE--#
0-200=1
201-400=2
401-1000=3
>1000=5

#850 C1 : $\frac{20\ ml}{10.24\ g}$ x 1 x 8 = 15.6 ppm TPH

#851 C1 Dup. : $\frac{20\ ml}{10.09\ g}$ x 1 x 7 = 13.9 ppm TPH

FACILITY DIAGRAM

GRID SCALE: 10'



OVM RESULTS

SAMPLE ID:	FIELD HEADSPACE PID (ppm)
C1	1.0

LAB RESULTS

	SAMPLE ID:	ANALYSIS REQUESTED:	RESULTS PPM:
#850	C1	TPH	16
#851	C1Dup	TPH	14

NORTH
WELLHEAD
SURFACE FLOW DIR.
ESTIMATED GROUNDWATER FLOW DIR.

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FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	C1 – LANDFARM	Date Analyzed:	10-20-94
Project Location:	SAN JUAN 29-6, # 35 MV	Date Reported:	10-21-94
Laboratory Number:	GAC0850	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	16	10

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	16 *	14	12

*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: Separator Pit PA084

Analyst

Review

ENVIROTECH LABS
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FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Phillips Petroleum	Project #:	93163
Sample ID:	C1 DUP – LANDFARM	Date Analyzed:	10–20–94
Project Location:	SAN JUAN 29–6, # 35 MV	Date Reported:	10–21–94
Laboratory Number:	GAC0851	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	14	10

ND = Not Detectable at stated detection limits.

QA/QC:

QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
16 *	14	12

*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: Separator Pit PA084

Analyst

Review

Risk Assessment
San Juan 29-6 #35, MV

Depth to Groundwater	120'
Distance to Water Source	>1000'
Distance to Surface Water	>1000'
TPH Limit (ppm)	5000

The subject pit was located in clay silt soil. The initial size of the pit was 20' x 20' x 3' deep. The stained soil was excavated to a final pit size of 20' x 20' x 17' deep. Excavated soil amounted to 97 total cubic yards, and was landfarmed on location.

The excavation was assessed by Envirotech on 11/11/93 and 5/17/94. Two test holes were utilized for assessment. The test holes were established in the deepest part of the pit with a total depth of 18 feet and approximately 10 south of the pit. Headspace analysis of the test holes revealed a concentrations ranging from 1259 parts per million (ppm) to 29 ppm and TPH levels from 7860 ppm to 38 ppm. Excavation of the walls and bottom was performed on 8/12/94. The excavation proceeded to a depth of 17 feet with no further excavation of the pit walls. Headspace analysis of the walls and bottom showed OVM levels ranging from 505 ppm to 10.3 ppm, and a TPH level of 1700 ppm utilizing EPA Method 418.1. A sample from the bottom (505 ppm : Headspace) was analyzed for Benzene, Toluene, ehtyl Benzene, and Xylene (BTEX) utilizing EPA Method 8020. Results of the analysis provided concentrations within NMOCD and BLM guidelines (Benzene = Non-Detect, Total BTEX = 22.35 ppm). The landfarm was tested on 10/20/94 by Envirotech and was found to be within closure guidelines (TPH = 16 ppm and an OVM reading of 1.0 ppm).

On June 3, 1997, Cimarron Oilfield Services, utilizing a Geoprobe, bore a test hole for risk assessment analysis. The bore hole was established approximately 10 feet SouthEast (down gradient) of the previous pit, to a depth of 18 feet and dry clay. A sample was retrieved from 18 feet and headspace analysis was performed. Headspace analysis revealed an OVM level of 0.0 ppm. The sample was delivered to Intermountain Laboratories for TPH analysis utilizing EPA Method 418.1. Results of the analysis determined no-detection of petroleum hydrocarbons present in the soil. No groundwater was encountered, and first water was not recorded on the nearby cathodic well until a depth of 120 feet. The bore hole was backfilled with well cuttings and Bentonite.

Having achieved action levels below NMOCD and BLM requirements this pit should be considered to have reached "final closure". Phillips Petroleum has removed and remediated all soils to the extent practical. By filling the excavation, the driving force created by additional fluids will be eliminated. Based on this information and the physical location of the pit, there is little to no risk to human health or environment.

Client : **Phillips Petroleum**

Date Started : **3 June 1997** Date Completed: **3 June 1997**

Location : **San Juan 29 - 6 # 35, MV**

Quad : "M" Section : 15

Township: 29N Range: 6W

Pit : Separator

Sample #	Location	OVM(ppm)	TPH
1	@ 5-10 ft	0	ND
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

Reference :
45 feet
N 45 degrees W
From Wellhead

Pit Size :
20' x 20' x 4' deep

Depth to Groundwater : 120'

Ranking Score: 0

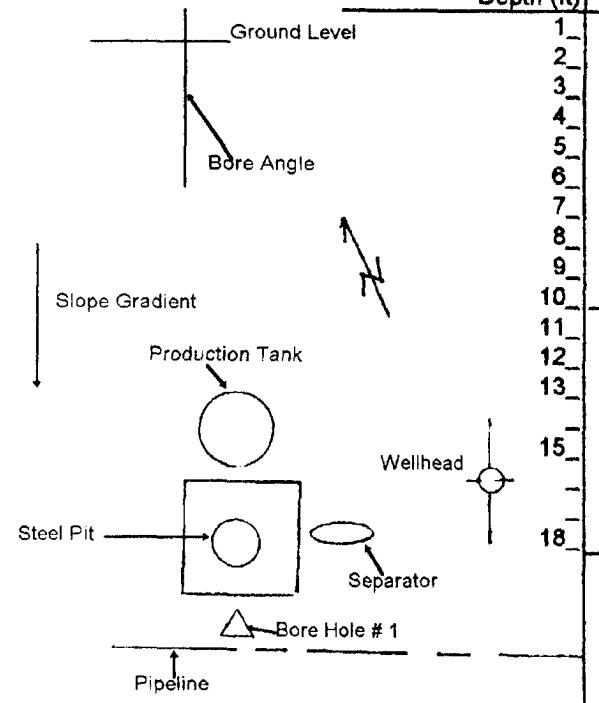
Closure Standard :
5000 ppm

Soil Type :
Brown, Silty Clay

Bedrock Encountered :
NO

Groundwater Encountered :
No

Overview of Pit Location and Sampling :



Depth (ft)	Bore # 1	Bore # 2
1	Brown silty clay NO H-C staining or odor	
2		
3		
4		
5		
6		
7		
8		
9		
10		
11	Dry	
12		
13	Gray Clay NO H-C staining or odor	
15		
18		
	Total Depth	

Comments :

Bore Hole # 1:
0 - 10' : Brown, slightly moist, silty clay
10' - 18' : Gray, dry, clay : NO hydrocarbon staining or odor
Bore hole was backfilled with well cuttings and Bentonite.
Sample # 1 sent to IML Labs for TPH Method 418.1 analysis.

2506 W. Main Street
Farmington, New Mexico 87401

TOTAL PETROLEUM HYDROCARBONS
EPA METHOD 418.1

Phillips Petroleum
SJ 29-6 #35, MV
Soil
Intact/Cool

Date Reported: 06/07/97
Date Sampled: 06/03/97
Date Received: 06/04/97
Date Extracted: 06/05/97
Date Analyzed: 06/05/97

Sample ID	Lab ID	Result mg/kg	Detection Limit mg/kg
BH #1 @ 18'	0397G01002	ND	20

ND - Analyte not detected at stated detection level.

Method 418.1:

Petroleum Hydrocarbons, Total Recoverable, USEPA Chemical Analysis of Water and Waste, 1978.

Method 3550:

Ultrasonic Extraction of Non-Volatile and Semi-Volatile Organic Compounds from Solids, USEPA SW-846, Rev. 1, July 1992.

Reported By _____

Reveiwed By _____

2506 W. Main Street
Farmington, New Mexico 87401

TOTAL PETROLEUM HYDROCARBONS
Quality Assurance/Quality Control

Client:	**Phillips Petroleum**	Date Reported:	06/07/97
Project:	SJ 29-6 #35, MV	Date Sampled:	06/03/97
Matrix:	Soil	Date Received:	06/04/97
Condition:	Intact/Cool	Date Extracted:	06/05/97
		Date Analyzed:	06/05/97

Duplicate Analysis

Lab ID	Sample Result	Duplicate Result	Units	%Difference
0397G00984	ND	ND	mg/Kg	N/A

Method Blank Analysis

Lab ID	Result	Units	Detection Limit
Method Blank	ND	mg/Kg	20

Spike Analysis

Lab ID	Found Conc. mg/Kg	Sample Conc. mg/Kg	Spike Amount mg/Kg	Percent Recovery	Acceptance Limits
MB	976	ND	1050	93%	70-130%

Known Analysis

Lab ID	Found Conc. mg/Kg	Known Conc. mg/Kg	Percent Recovery	Acceptance Limits
QC	25.1	25.2	100%	70-130%

Method 418.1: Petroleum Hydrocarbons, Total Recoverable, USEPA Chemical Analysis of water and waste, 1978.

Method 3550: Ultrasonic extraction of Non-Volatile and Semi-Volatile Organic Compounds from Solids, USEPA SW -846 rev.1. July 1992.

Reported By: _____ Reveiwed By: _____

2506 W. Main Street
Farmington, New Mexico 87401

TOTAL PETROLEUM HYDROCARBONS
Quality Assurance/Quality Control

Client:	**Phillips Petroleum**	Date Reported:	06/07/97
Project:	SJ 29-6 #35, MV	Date Sampled:	06/03/97
Matrix:	Soil	Date Received:	06/04/97
Condition:	Intact/Cool	Date Extracted:	06/05/97
		Date Analyzed:	06/05/97

Duplicate Analysis

Lab ID	Sample Result	Duplicate Result	Units	%Difference
0397G00984	ND	ND	mg/Kg	N/A

Method Blank Analysis

Lab ID	Result	Units	Detection Limit
Method Blank	ND	mg/Kg	20

Spike Analysis

Lab ID	Found Conc. mg/Kg	Sample Conc. mg/Kg	Spike Amount mg/Kg	Percent Recovery	Acceptance Limits
MB	976	ND	1050	93%	70-130%

Known Analysis

Lab ID	Found Conc. mg/Kg	Known Conc. mg/Kg	Percent Recovery	Acceptance Limits
QC	25.1	25.2	100%	70-130%

Method 418.1: Petroleum Hydrocarbons, Total Recoverable, USEPA Chemical Analysis of water and waste, 1978.

Method 3550: Ultrasonic extraction of Non-Volatile and Semi-Volatile Organic Compounds from Solids, USEPA SW -846 rev.1. July 1992.

Reported By: _____ Reveiwed By: _____

Client/Project Name: Phillips Petroleum

Project Location: SJ 29-6 #35, MV

Sampler: (Signature)

Chain of Custody Tape No.

ANALYSES / PARAMETERS

Sample No./ Identification	Date	Time	Lab Number	Matrix	No. of Containers	TPH 418.1					Remarks
Bore Hole #1 @ 18'	6/3/97	14:15		Soil	1	X					
		"									Intact

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	6/4/97	15:16	Chris Raynes	6-4-97	1516
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by laboratory: (Signature)	Date	Time

Inter-Mountain Laboratories, Inc.

☐ 1633 Terra Avenue, Sheridan, Wyoming 82801, Telephone (307) 672-8945

☐ 1701 Phillips Circle, Gillette, Wyoming 82718, Telephone (307) 682-8945

☐ 2506 West Main Street, Farmington, NM 87401, Telephone (505) 326-4737

☐ 1160 Research Dr., Bozeman, Montana 59715, Telephone (406) 586-8450

☐ 11183 SH 30, College Station, TX 77845, Telephone (409) 776-8945

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