

District I

P.O. Box 1980, Hobbs, NM

District II

P.O. Drawer 100, Aztec, NM 88211

District III

1000 Rio Brazos Rd, Aztec, NM 87410

DEC 02 1997

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 OFFICEPIT REMEDIATION AND CLOSURE REPORTOperator: Phillips Petroleum CompanyTelephone: (505) 599-3400Address: 5525 Hwy. 64, NBU 3004, Farmington, NM 87401Facility Or: San Juan 29 - 6 Unit # 74 A

Well Name

Location: Unit or Qtr/Qtr Sec NESE Sec 20 T 29N R 6W County Rio ArribaPit Type: Separator X Dehydrator \_\_\_\_\_ Other \_\_\_\_\_Land Type: BLM X State \_\_\_\_\_ Fee \_\_\_\_\_ Other \_\_\_\_\_Pit Location: Pit dimensions: Length 17 ft, width 17 ft, depth 15 ft  
(Attach diagram)Reference: wellhead X other \_\_\_\_\_Footage from reference: 65 ftDirection from reference: 45 Degrees \_\_\_\_\_ East \_\_\_\_\_ North X  
of \_\_\_\_\_ West \_\_\_\_\_ South \_\_\_\_\_Depth to Ground Water: 85 ft  
(vertical distance from  
contaminants to seasonal  
highwater elevation of  
ground water)

_____	Less than 50 feet	(20 points)	
<u>X</u>	50 ft to 99 feet	(10 points)	
_____	Greater than 100 feet	(0 points)	<u>10</u>

Wellhead Protection Area:  
(less than 200 feet from a private  
domestic water source, or: less than  
1000 feet from all other water sources)RECEIVED  
AUG 29 1997OIL CON. DIV.  
DIST. 3

_____	Yes	(20 points)	
<u>X</u>	No	(0 points)	<u>0</u>

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)	
<u>X</u>	Greater than 1000 feet	(0 points)	<u>0</u>

Date Remediation Started: 11/11/93 Dated Completed: 8/13/97

Excavation X Approx. cubic yards 150

Landfarmed X Insitu Bioremediation

Other Risk Assessment

Remediation Method: Onsite X Offsite  
(Check all appropriate sections)

General Description of Remedial Action: Based on the initial assessment, soils were excavated to a depth of 11 feet below the original pit bottom. The soils were landfarmed on location. The excavation tested clean on 5/24/94. The landfarm tested clean on 8/9/94. The landfarm soils were then used to fill the excavation. A risk assessment was performed on 8/13/97, based on this information and the physical location of the pit, there is no risk to human health or the environment.

Ground Water Encountered: No X Yes Depth

Final Pit: Sample location East Wall

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

Sample depth 10 Feet below ground level

Sample date 5/24/94 Sample time 1010

Sample Results

Benzene (ppm) 0.0262

Total BTEX (PPM) 25.686

Field Headspace (ppm) 791

TPH 284

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 8/26/97 PRINTED NAME Bob Wirtanen

SIGNATURE R.A. Wirtanen and TITLE Sr. Safety & Environmental Specialist

# ENVIROTECH Inc.

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

PIT NO: PA088

C.O.C. NO: \_\_\_\_\_

## 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: 11-11-93  
ENMRO. SPCLT. REQ  
OPERATOR: CIMARRON  
ASSISTANT: K.S.

LOCATION: LEASE: San Juan 29-6 WELL: #74A QD: 1830' ESL. & 880' FEL (I)  
SEC: 20 TWP: 29N RNG: 6W PM: NM CNTY: R.A. ST: NM PIT: Sep.

LAND USE: Range Lease #NM 03471

SURFACE CONDITIONS: Earthen pit - Fenced 30' x 60' - Dry - No surface stain

PIT CENTER IS LOCATED APPROXIMATELY 65 FEET N. 45°W. OF WELLHEAD.

CLOSURE STD: 1000ppm TPH

RANKING SCORE: 10

T1 : Moist, brown, silty clayey - soft siltstone  
Heavy odor

1412 : Dilute 10:1=360x2x10=7200 GAC#0326  
1334 : Dilute 10:1=238x2x10=4760 GAC#0327  
1023 : Dilute 10:1=124x2x10=2480 GAC#0328  
8 x 2 = 16 GAC#0329

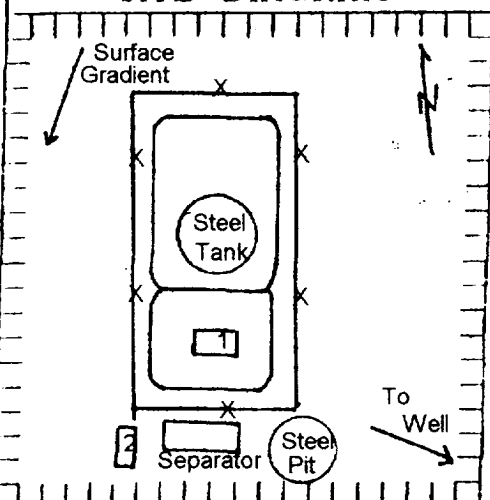
SAMPLE INVENTORY		
SAMPL ID	SAMPL TYPE	LABORATORY ANALYSIS
T1@7'	Soil	7200 ppm
T1@12	Soil	4760 ppm
T1@15	Soil	2480 ppm
T2@13'	Soil	16 ppm

SCALE



0 10 20 FEET

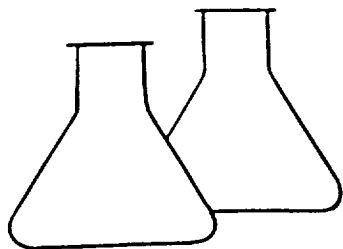
## SITE DIAGRAM



## TEST HOLE LOGS

TH#	1	TH#	2	TH#		TH#	
SOIL TYPE	SAMPL TYPE	SOIL TYPE	SAMPL TYPE	SOIL TYPE	SAMPL TYPE	SOIL TYPE	SAMPL TYPE
GD							
1							
2							
3							
4	Pit bottom						
5			Brown				
6			No odor				
7	CL GRB 669		Silty sandy				
8							
9							
10							
11							
12	CL GRB 926						
13			SM GRB 6				
14			TD = 13'				
15	SP GRB 124		Sandstone				
15	TD = 15'		Sandstone				

Soil Type: C - Clay, M - Silty, S - Sand, G - Gravel, P - Peat, H - Humic, F - Fossil, B - Bitumens, S - Silty, M - Moist, D - Dry, W - Wet



# ENVIROTECH LABS

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

## 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, #74A	Date Reported:	11-15-93
Laboratory Number:	GAC0326	Sample Matrix:	Soil

Parameter -----	Result, mg/kg -----	Detection Limit, mg/kg -----
Total Recoverable Petroleum Hydrocarbons	7,200	100

ND = Not Detectable at stated detection limits.

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

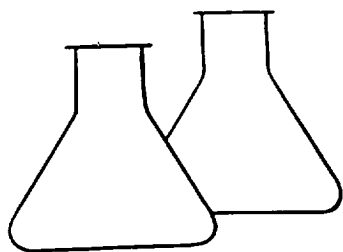
\*Administrative Acceptance limits set at 30%.

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

Comments: Separator Pit PA088

R. E. O'Neil  
Analyst

M. J. Young  
Review



# ELVIROTECH LABS

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

## FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client: Phillips Petroleum  
Sample ID: T1 @ 12'  
Project Location: San Juan 29-6, #74A  
Laboratory Number: GAC0327

Project #: 93163  
Date Analyzed: 11-11-93  
Date Reported: 11-15-93  
Sample Matrix: Soil

Parameter -----	Result, mg/kg -----	Detection Limit, mg/kg -----
Total Recoverable Petroleum Hydrocarbons	4,800	100

ND = Not Detectable at stated detection limits.

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

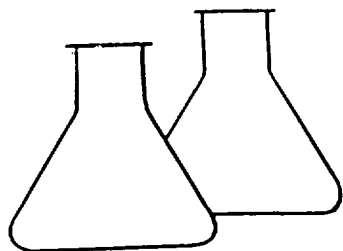
\*Administrative Acceptance limits set at 30%.

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

Comments: Separator Pit PA088

R. E. O'Neill  
Analyst

Maria D. Young  
Review



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

## FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client: Phillips Petroleum  
Sample ID: T1 @ 15'  
Project Location: San Juan 29-6, #74A  
Laboratory Number: GAC0328

Project #: 93163  
Date Analyzed: 11-11-93  
Date Reported: 11-15-93  
Sample Matrix: Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	2,500	100

ND = Not Detectable at stated detection limits.

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

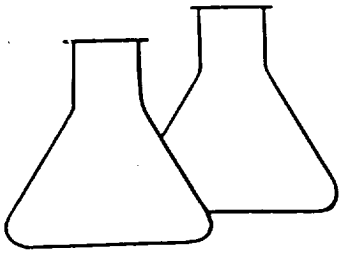
\*Administrative Acceptance limits set at 30%.

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

Comments: Separator Pit PA088

R. E. O'Neill  
Analyst

Mavis D. Young  
Review



# ENVIROTECH LABS

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

## FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client: Phillips Petroleum  
Sample ID: T2 @ 13'  
Project Location: San Juan 29-6, #74A  
Laboratory Number: GAC0329

Project #: 93163  
Date Analyzed: 11-11-93  
Date Reported: 11-15-93  
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. -----
	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 PA088

R. E. O'Neil  
Analyst

Morris D. Young  
Review

CLIENT: PHILLIPS PETROLEUMENVIROTECH Inc.PIT NO: PA0885798 US HWY 84, FARMINGTON, NM 87401  
(505) 632-0815C.O.C. NO: 3689

## FIELD REPORT: CLOSURE VERIFICATION

JOB No: 93163PAGE No: 1 of 1LOCATION: NAME: San Juan 29-6 WELL #: 74A PIT: Sep.DATE STARTED: 5-24-94QUAD/UNIT: I SEC: 20 TWP: 29N RNG: 6W BM: NM CNTY: R.Ast: NMDATE FINISHED: 5-24-94QTR/FOOTAGE: 1830' FSL & 880' FEL CONTRACTOR: CimarronENVIRONMENTAL  
SPECIALIST: REOSOIL REMEDIATION: EXCAVATION APPROX. 17 FT. x 17 FT. x 15 FT. DEEP.DISPOSAL FACILITY: On-site Landfarm CUBIC YARDAGE: approx. 150LAND USE: Range LEASE: NM-03471FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 65 FEET N. 45° W. FROM WELLHEAD.DEPTH TO GROUNDWATER: 85' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'NMOCB RANKING SCORE: 10 NMOCB TPH CLOSURE STD: 1000 PPMSOIL AND EXCAVATION DESCRIPTION: Moist, brown, silty clay--thin stained lenses in  
sidewall. Excavated to sandstone bottom -- slight  
odor in samples.

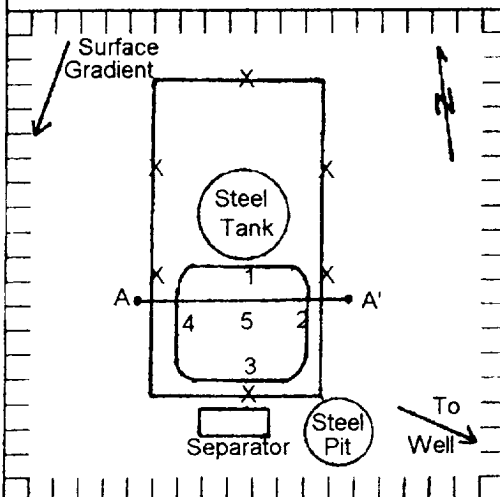
## FIELD 418.1 CALCULATIONS

SAMPLE I.D.	LAB No	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
CB @ 15'	GAC521	10.0	20	---	110	220
ES @ 10'	GAC522	10.0	20	---	142	284

SCALE

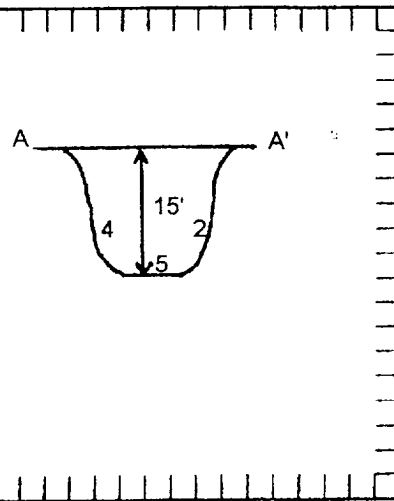
0 10 20 FEET

## PIT PERIMETER

OVM  
RESULTS

SAMPLE ID	FIELD HEADSPACE (ft)
1NS@10'	225
2ES@10'	791
3SS@10'	316
4WS@10'	42
5CB@15'	854
LAB SAMPLES	
2	BTEX

## PIT PROFILE

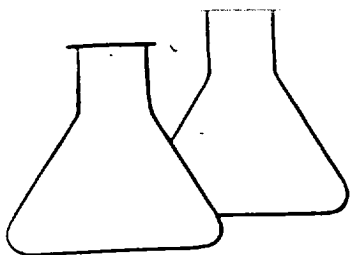


TRAVEL NOTES:

CALLOUT: \_\_\_\_\_

ONSITE: \_\_\_\_\_





# ENVIROTECH LABS

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PHONE: (505) 632-0615 • FAX: (505) 632-1865

## FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client: Phillips Petroleum  
Sample ID: CB @ 15'  
Project Location: San Juan 29-6 #74A  
Laboratory Number: GAC0521

Project #: 93163  
Date Analyzed: 5-24-94  
Date Reported: 5-25-94  
Sample Matrix: Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	220	10

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

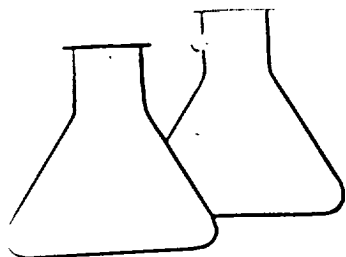
\*Administrative Acceptance limits set at 30%.

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

Comments: Separator Pit PA088

R. E. O'Neil  
Analyst

Maxine Young  
Review



# ENVIROTECH LABS

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

## FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client: Phillips Petroleum  
Sample ID: ES @ 10'  
Project Location: San Juan 29-6 #74A  
Laboratory Number: GAC0522

Project #: 93163  
Date Analyzed: 5-24-94  
Date Reported: 5-25-94  
Sample Matrix: Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	280	10

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

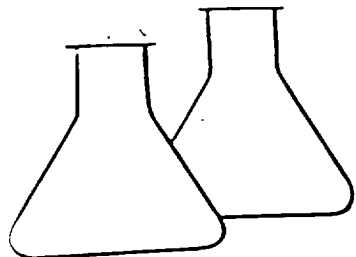
\*Administrative Acceptance limits set at 30%.

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

Comments: Separator Pit PA088

R. E. O'Neil  
Analyst

Marcus Young  
Review



# ENVIROTECH LA S

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

## EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Phillips	Project #:	93163
Sample ID:	ES @ 10'	Date Reported:	05-25-94
Laboratory Number:	7518	Date Sampled:	05-24-94
Sample Matrix:	Soil	Date Received:	05-24-94
Preservative:	Cool	Date Extracted:	05-24-94
Condition:	Cool & Intact	Date Analyzed:	05-25-94
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	26.2	13.3
Toluene	2,730	39.9
Ethylbenzene	230	26.6
p,m-Xylene	16,000	39.9
o-Xylene	6,700	53

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	102 %
	Bromofluorobenzene	99 %

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 #74A Separator Pit PA088

*Kevin L. Gieser*  
Analyst

*Maris D. Young*  
Review



Sample #12

**ENVIROTECH Inc.**

5798 US HWY. 64, FARMINGTON, NM 87401  
(505) 832-0815

PIT No: PA088  
C.O.C #: 3868

**FIELD REPORT: REMEDIATION FACILITY  
CLOSURE VERIFICATION**

JOB No: 93163  
PAGE No: 1 of 1

FACILITY LOCATION: San Juan 29-6 #74A Elev. 6415' GL  
SOURCE LOCATION: N.M.-03471 1830' FSL & 880' FEL  
SOURCE LOCATION: Sec. 20 T-29-N R-6-W N.M.P.M.  
SOURCE LOCATION: Rio Arriba County N.M.  
FACILITY CLASSIFICATION: PIT TYPE: Sep.

DATE STARTED: 8-9-94  
DATE FINISHED: 8-9-94

ENVIRONMENTAL  
SPECIALIST: PV

SOIL REMEDIATION: QUANTITY: 71 cy # OF COMP. SAMPLES: 1  
DIMENSIONS: 80' L x 24' W x 1' deep  
VISIBLE OBSERVATIONS:  
SAMPLING PLAN: Sampled from 5 points

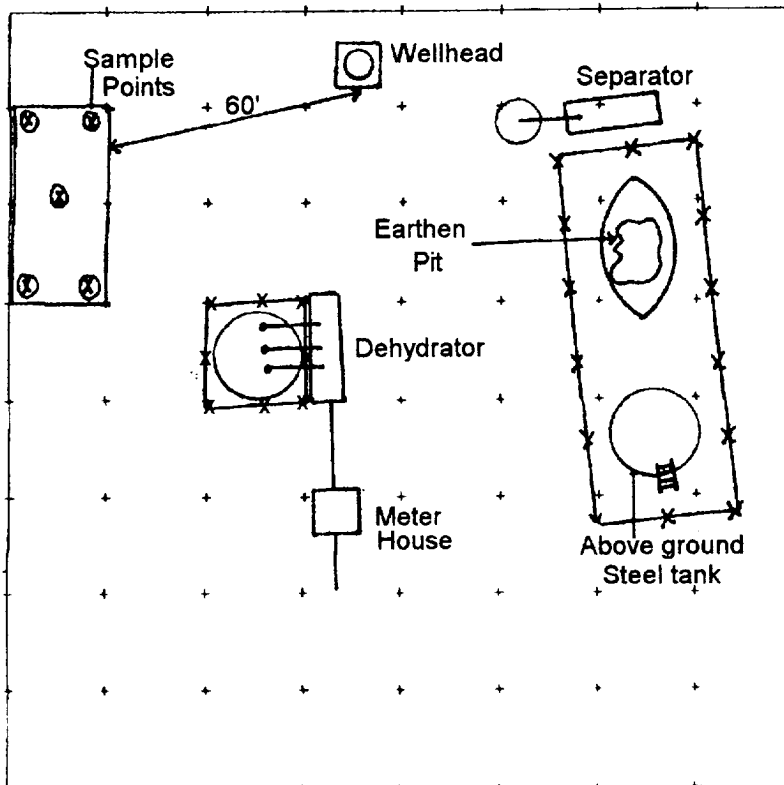
FIELD NOTES & REMARKS: FACILITY CENTER LOCATED APPROX 24 YARDS SE FROM WELLHEAD.

DEPTH TO GROUNDWATER: 85'  
NEAREST WATER SOURCE/TYPE: >1000'  
NEAREST SURFACE WATER: >1000'  
MAX TPH PER NMCD: 1000 ppm

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

**FACILITY DIAGRAM**

GRID SCALE:

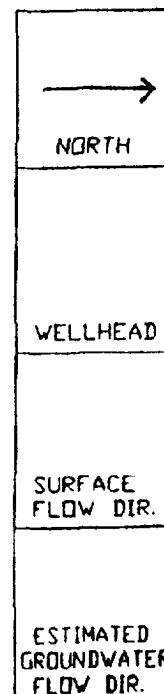


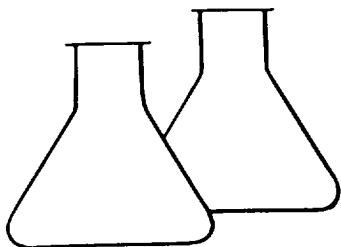
**OVM  
RESULTS**

SAMPLE ID:	FIELD HEADSPACE P10 (ppm)
#12	OVM 4.6
TPH	418.1
Time	1511

**LAB  
RESULTS**

SAMPLE ID:	ANALYSIS REQUESTED	RESULTS PPM





# 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:	PHILLIPS PETRO	Project #:	93163
Sample ID:	SJ 29-6 # 74 A	Date Sampled:	08-10-94
Laboratory Number:	7803	Date Received:	08-10-94
Sample Matrix:	Soil	Date Analyzed:	08-12-94
Preservative:	Cool	Date Reported:	08-12-94
Condition:	Cool and Intact	Analysis Needed:	TPH

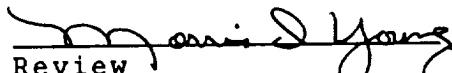
Parameter -----	Concentration (mg/kg) -----	Det. Limit (mg/kg) -----
Total Petroleum Hydrocarbons	ND	30.0

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: RIO ARRIBA COUNTY NM

  
Analyst

  
Review

## CHAIN OF CUSTODY RECORD

Client/Project Name		Project Location		ANALYSIS/PARAMETERS											
7 HILLIP'S PETRO 91163		RIO ARRIBA COUNTY NM													
Sampler: (Signature)		Chain of Custody Tape No.													
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TP H	418.1	87X	8020						Remarks
Phillip Velazquez	8/9/94	1020	7797	Soil	1	✓								Landfarm Sample	
S.J. 29-6 #81	8/9/94	1115	7798	Soil	2	✓								Landfarm Sample	
S.J. 29-6 #58	8/9/94	1204	7799	Soil	1	✓								Landfarm Sample	
S.J. 29-6 #100	8/9/94	1254	7800	Soil	2	✓								Landfarm Sample	
SJ 29-6 #97	8/9/94	1336	7801	Soil	1	✓								Landfarm Sample	
SJ 29-6 #85	8/9/94	1413	7802	Soil	1	✓								Landfarm Sample	
SJ 29-6 #74A	8/9/94	1511	7803	Soil	1	✓								Landfarm Sample	
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time					
Phillip Velazquez		8/10/94		0733		Ray Duff		8/10/94		1400					
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time					
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time					

ENVIROTECH INC.

5796 U.S. Highway 64-3014

Farmington, New Mexico 87401

(505) 632-0615

**Risk Assessment  
San Juan 29-6 # 74A**

Depth to Groundwater	85'
Distance to Water Source	>1000'
Distance to Surface Water	>1000'
TPH Limit (ppm)	10000

The subject pit was located in hard, well cemented sandstone at a depth of 15 feet. The initial size of the pit was 15' X 15' X 4' deep. The stained soil was a brown silty clay and excavated to a final pit size of 17' X 17' X 15' deep. Excavated soil amounted to approximately 150 total cubic yards, and was landfarmed on location.

On November 11, 1993 Envirotech Inc., performed a pit assessment. The assessment included excavation of two test holes. Test hole # 1 was established in the middle of the pit and excavated to a depth of 15 feet below ground level, where bedrock was encountered. A soil sample at 15 feet provided a Total Petroleum Hydrocarbons (TPH) concentration of 2,480 parts per million (ppm), and an Headspace concentration of 1,124 ppm. Test hole # 2 was established down gradient of the established pit to a depth of 13 feet, where bedrock was encountered. A sample was extracted at this depth and provided a TPH concentration of 16 ppm and a Headspace concentration of 6 ppm.

Excavation and Pit Closure verification was performed by Envirotech, Inc. on May 24, 1994. A sample from the Center Bottom at a depth of 15 feet was analyzed. Results of the sample provided a TPH concentration of 220 ppm and a Headspace level of 854 ppm. A second sample from the East wall, at a depth of 10 feet, was analyzed for TPH and BTEX. Results of the sample provided a TPH concentration of 284 ppm, Benzene concentration of 0.026 ppm, and a Total BTEX concentration of 25.69 ppm. No groundwater was encountered, and first water was not recorded at a nearby cathodic well until a depth of 85 feet. Excavated soils were landfarmed on location.

Landfarm sampling was provided by Envirotech, Inc. on August 9, 1994. A 5-point sample was extracted and analyzed. Results of the sample provided a TPH concentration of Non-Detect and a Headspace concentration of 4.6 ppm.

Using the results from the pit assessment, particularly, test hole # 2, lateral extent was established down gradient of the pit. A risk assessment was performed establishing lateral extent East of the associated pit. The risk assessment was performed August 13, 1997 by Cimarron Oilfield Services. A bore hole was established approximately 10 feet East of the associated pit to a depth of 14 feet, where a hard cemented sandstone was encountered. A sample from this depth provided a TPH concentration of Non-Detect and a Headspace concentration of 4.3ppm.

Having determined lateral and vertical extent as well as achieving 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.

<b>Location : San Juan 29 - 6 # 74 A</b>			
<b>Quad :</b> "1"	<b>Section :</b> 20		
<b>Township:</b> 28N	<b>Range:</b> 6W		

Sample #	Location	OVM(ppm)	TPH
1	BH#1 @ 14'	4.3	
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

**Pit :** Separator

**Reference :**  
65 feet  
N 45 degrees W  
From Wellhead

**Pit Size :**  
17' x 17' x 15' deep

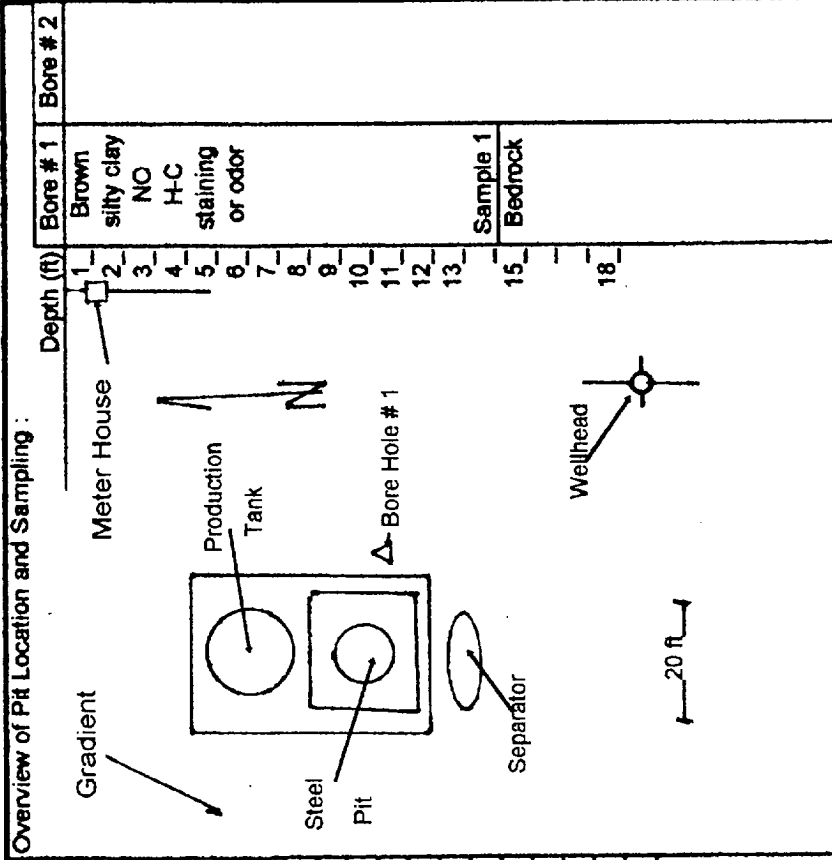
**Depth to Groundwater :** 85'      **Soil Type :** Brown, Silty Clay

**Ranking Score:** 10      **Bedrock Encountered :** Yes

**Closure Standard :** 1000 ppm      **Groundwater Encountered :** No

**Comments :** Bore Hole # 1:  
0 - 14' : Brown, slightly moist, silty clay, No hydrocarbon staining or odor.  
Bedrock encountered @ 14 feet (Total Depth).

Sample # 1 sent to IML Labs for TPH Method 418.1 analysis.  
Time : 13:13



**TOTAL PETROLEUM HYDROCARBONS**  
**EPA METHOD 418.1**

Client: **Phillips Petroleum**  
Project: SJ 29-6 # 74A  
Matrix: Soil  
Condition: Intact/Cool

Date Reported: 08/25/97  
Date Sampled: 08/13/97  
Date Received: 08/13/97  
Date Extracted: 08/21/97  
Date Analyzed: 08/21/97

Sample ID	Lab ID	Result mg/kg	Detection Limit mg/kg
Bore Hole #1 @ 14 ft.	0397G01709	ND	19.9

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



Reviewed By





# CHAIN OF CUSTODY RECORD

[illegible]

**Cimarron Oilfield Service Company**  
**ONE-CALL REQUEST**

1-800-321-2537

<b>Person</b>		<b>Company</b>	
<b>Calling :</b>	Monica Rodahl	<b>Code :</b>	C I M O I
<b>Contact</b>		<b>Phone :</b>	
Eli Velasquez / Person : Troy Bishop		( 505 ) 327 - 5049	
<b>County :</b>		<b>Location :</b>	
Rural Rio Arriba County		San Juan 29-6 # 74A	
<b>Range :</b>	<b>Township :</b>	<b>Section :</b>	<b>Quarter :</b>
6W	29N	20	NE/SE
<b>Work</b>		<b>For :</b>	
Done By : Cimarron Oilfield Service Co.		Phillips Petroleum Company	
<b>Type of</b>		<b>Nature</b>	
Excavation : Well Location		of Work : Pit Remediation	
<b>Due</b>		<b>Time :</b>	
Date : Wed. Aug. 13 <sup>th</sup>		For 5 Working Days	
<b>Directions to Location and Remarks :</b>			
From Bloomfield, travel east on U.S. 64 to M.M. 95. Turn left and travel approximately .2 mile, turn left and travel approximately 1 mile, turn right and travel approximately 1 mile to location.			
<b>Notify:</b> Phillips Petroleum Williams Field Services			
<b>Meter # :</b>		<b>Spot Entire Location</b>	
<b>Grid</b>		<b>Request</b>	
Code :		Number : 97081109030188	

<b>Person</b>		<b>Company</b>	
<b>Calling :</b>		<b>Code :</b>	C I M O I
<b>Contact</b>		<b>Phone :</b>	
Eli Velasquez / Person : Troy Bishop		( 505 ) 327 - 5049	
<b>County :</b>		<b>Location :</b>	
Rural Rio Arriba County		San Juan 29-6 # 103	
<b>Range :</b>	<b>Township :</b>	<b>Section :</b>	<b>Quarter :</b>
6W	29N	11	SW/NE
<b>Work</b>		<b>For :</b>	
Done By : Cimarron Oilfield Service Co.		Phillips Petroleum Company	
<b>Type of</b>		<b>Nature</b>	
Excavation : Well Location		of Work : Pit Remediation	
<b>Due</b>		<b>Time :</b>	
Date : Wed. Aug. 13 <sup>th</sup>		For 5 Working Days	
<b>Directions to Location and Remarks :</b>			
From Bloomfield, travel east on U.S. 64 to M.M. 102. Turn left onto N.M. 527 and travel approximately 1 mile, turn left and travel approximately 2 miles, turn right and travel approximately 1 mile to location.			
<b>Notify:</b> Phillips Petroleum Williams Field Services			
<b>Meter # :</b>		<b>Spot Entire Location</b>	
<b>Grid</b>		<b>Request</b>	
Code :		Number : 97081109070194	