

District I
P.O. Box 100, Hobbs, NM 87401
District II
P.O. Drawer 100, Artesia, NM 87401
District III
1000 G. L. Sizoo Rd., Aztec, NM 87410
DEPUTY OIL & GAS INSPECTOR
FEB 26 1998

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

PIT REMEDIATION AND CLOSURE REPORT

Operator: Phillips Petroleum Company Telephone: (505) 599-3462

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

Facility Or: San Juan 32 - 7 Unit # 75
Well Name

Location: Unit or Qtr/Qtr Sec SWSW Sec 27 T 32N R 7W County San Juan

Pit Type: Separator X Dehydrator _____ Other _____

Land Type: BLM X State _____ Fee _____ Other _____

Pit Location: Pit dimensions: Length 17 ft width 17 ft depth 7 ft
(Attach diagram)

Reference- wellhead X other _____

Footage from reference: 55 ft

Direction from reference: 60 Degrees X East North _____
West South X

Depth to Ground Water: 100 ft
(vertical distance from
contaminants to seasonal
highwater elevation of
ground water)

Less than 50 feet (20 points)
X 50 ft to 99 feet (10 points)
Greater than 100 feet (0 points) 10

Wellhead Protection Area:
(less than 200 feet from a private
domestic water source, or: less than
1000 feet from all other water sources)

RECEIVED
OCT 31 1997
OIL CON. DIV.
DISTRICT

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

Date Remediation Started: 7/8/94

Dated Completed: 10/14/94

Excavation X

Approx. cubic yards 38

Landfarmed X

Insitu Bioremediation _____

Other _____

Remediation Method:

Onsite X

Offsite _____

(Check all appropriate
sections)

General Description of Remedial Action- The pit was assessed on 7/8/94 and determined to be outside NMOCD and BLM Guidelines. The pit was excavated to bedrock (7 feet below ground level). The pit after excavation was determined to be outside NMOCD and BLM Guidelines and a Risk Assessment was performed utilizing the previous pit assessment and is enclosed with subsequent pit closure information. The landfarm was sampled on 10/14/94 and was found to be within NMOCD and BLM guidelines. 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 See pit closure & risk assessment reports

Sample depth 7' below ground level

Sample date 7/29/94

Sample time 10:40

Sample Results

Benzene(ppm) ND

Total BTEX (PPM) 55.68

Field Headspace (ppm) 873

TPH 996 ppm

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 10/27/97

PRINTED NAME Bob Wirtanen

SIGNATURE Bob Wirtanen

and TITLE Sr. Safety & Environmental Specialist

**Risk Assessment
San Juan 32-7 #75**

Depth to Groundwater	100'
Distance to Water Source	>1000'
Distance to Surface Water	>1000'
TPH Limit (ppm)	1000

The subject pit was located in silty sand with clay soil. The initial size of the pit was 15' x 15' x 4' deep. The stained soil was excavated to a final pit size of 17' x 17' x 7' deep, where bedrock was encountered. Excavated soil amounted to 38 total cubic yards, and was landfarmed on location.

The excavation was assessed by Envirotech on 7/8/94. Two test holes were utilized for assessment. The test holes were established in the center of the pit with a total depth of 7 feet and approximately 10 feet west of the pit (down gradient) to a depth of 4 feet. Both test holes encountered hard bedrock at 7 and 4 feet respectfully. Headspace analysis of the test holes revealed a concentrations ranging from 800 parts per million (ppm) to 770 ppm and TPH levels from 5720 ppm to 352 ppm. Test Hole # 2 was evaluated for BTEX concentrations and results provided a Benzene concentration of 0.028 ppm and a Total BTEX concentration of 9.32 ppm, both results within NMOCD and BLM Guidelines. Excavation of the walls and bottom was performed on 7/29/94. The excavation proceeded to a depth of 7 feet (bedrock). Headspace analysis of the walls and bottom showed OVM levels ranging from 873 ppm to 669 ppm, and a TPH level of 996 ppm, utilizing EPA Method 418.1. A sample from the east wall, bedrock, (873 ppm : Headspace) was analyzed for Benzene, Toluene, ethyl Benzene, and Xylene (BTEX) utilizing EPA Method 8020. Results of the analysis provided concentrations outside NMOCD and BLM guidelines (Benzene = non-detect, Total BTEX = 55.68 ppm). The landfarm was tested on 10/14/94 by Envirotech and was found to be within closure guidelines (TPH = 339 ppm , Benzene = non-detect and a Total BTEX concentration of 1.10 ppm).

No groundwater was encountered, and first water was not recorded on the nearby cathodic well until a depth of 100 feet.

Having established vertical extent, hard bedrock at a depth of 7 feet below ground level, the pit being encased on bedrock, and a test hole (#2 on assessment) 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.

ENVIROTECH Inc.

5796 US HWY 64, FARMINGTON, NM 87401
(505) 832-0615

PIT NO: PA217

C.O.C. NO: 3675

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: _____
DATE FINISHED: 7/8/94
EIMPRO. SFCIT: CLG
OPERATOR: Cimarron
ASSISTANT: KG

LOCATION: LEASE: San Juan 32-7 WELL: 75 QID: 970' FSL, 860' FEL (P)
SEC: 27 TWP: 32N RNG: 7W T.M. NM: CNTYSJ SNM: PIT Sep / Prod

LAND USE: Range - Lease # SF-078543

Elev. 6732'

SURFACE CONDITIONS: Dry earthen pit; not stained

PIT CENTER IS LOCATED APPROXIMATELY 55 FEET S60E OF WELLHEAD.

CLOSURE STD: 1,000 ppm GW = 100'

RANKING SCORE: 10

T1: Dark gray sand with silt and moist clay (moderately plastic in some areas. 7' became rocky and couldn't excavate further. Water is entering excavation (~ 6' BGS) - has yellowish tint.

T2: Light grey compact sand and dry silt; rock @ 4'

TEST HOLE LOGS

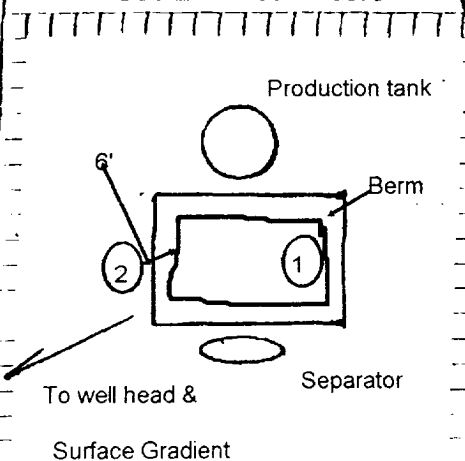
SAMPLE INVENTORY		
SAMPL. ID	SAMPL. TYPE	LABORATORY ANALYSIS
T1@7'	Soil	418.1 1276x2
		dilute 28.6x10=5720ppm
T2@4'	Soil	418.1 176x2=352ppm

SCALE T2@4' Soil BTEX



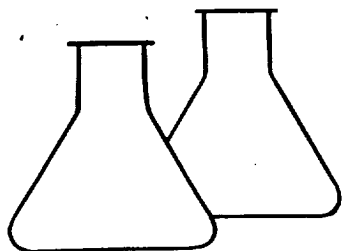
FEET

SITE DIAGRAM



TH# 1				TH# 2				TH# 3				TH# 4			
GD	SOIL TYPE	SAMPL. TYPE	QTY/TPH	SOIL TYPE	SAMPL. TYPE	QTY/TPH		SOIL TYPE	SAMPL. TYPE	QTY/TPH		SOIL TYPE	SAMPL. TYPE	QTY/TPH	
1															
2															
3															
4		Pit bottom			SM GRB 800										
5					Rock TD=4'										
6															
7		SC GRB 770													
8		Rock TD=7'													
9															
10															
11															
12															
13															
14															

GR: GRB - GRB, U - U, S - S, C - C, G - G, P - P, L - L, N - N, P - P, D - D



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: T1 @ 7'
Project Location: San Juan 32-7 #75
Laboratory Number: GAC0601

Project #: 93163
Date Analyzed: 7-8-94
Date Reported: 7-8-94
Sample Matrix: Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
-----	-----	-----
Total Recoverable Petroleum Hydrocarbons	5,720	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

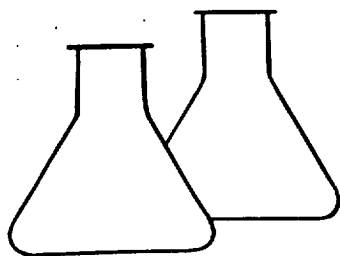
*Administrative Acceptance limits set at 30%.

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

Comments: Separator/Production Pit PA217

Analyst

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	Project #:	93163
Sample ID:	T2 @ 4'	Date Analyzed:	7-8-94
Project Location:	San Juan 32-7 #75	Date Reported:	7-8-94
Laboratory Number:	GAC0602	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
-----	-----	-----
Total Recoverable Petroleum Hydrocarbons	352	10

ND = Not Detectable at stated detection limits.

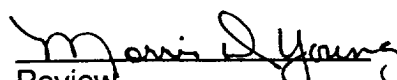
QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	-----	-----	-----
	11,000	12,600	14

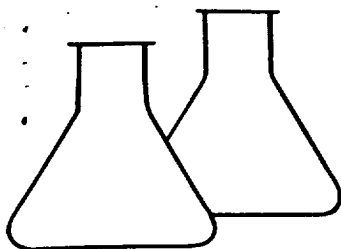
*Administrative Acceptance limits set at 30%.

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

Comments: Separator/Production Pit PA217


Analyst


Review



ENVIROTECH LABS

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:	T2 @ 4'	Date Reported:	07-15-94
Laboratory Number:	7708	Date Sampled:	07-08-94
Sample Matrix:	Soil	Date Received:	07-08-94
Preservative:	Cool	Date Extracted:	07-08-94
Condition:	Cool & Intact	Date Analyzed:	07-14-94
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	28	26.8
Toluene	477	33.5
Ethylbenzene	424	20.1
p,m-Xylene	5670	26.8
o-Xylene	2720	20.1


SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	116 %
	Bromofluorobenzene	112 %

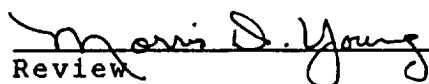
Method: Method 5030, Purge-and-Trap, Test Methods for
Evaluating Solid Waste, SW-846, USEPA, July 1992

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 32-7 #75 Sep/Prod Pit PA217.


Analyst


Review

CHAIN OF CUSTODY RECORD

PA 217

juan juan negro Form 578-01

CLIENT: Phillips Petroleum**ENVIROTECH Inc.**5798 US HWY 64, FARMINGTON, NM 87401
(505) 632-0815PIT NO: PA 217C.O.C. NO: 3693**FIELD REPORT: CLOSURE VERIFICATION**JOB No: 93163PAGE No: 1 of 1LOCATION: NAME: San Juan 32-7 WELL # 75 PI 6ep/prod.QUAD/UNIT: P SEC 27 TWP 32N RNG W BMM CNT SJ NMQTR/FOOTAGE: _____ CONTRACTOR: Cimarron

DATE STARTED: _____

DATE FINISHED: 7/29/94ENVIRONMENTAL
SPECIALIST: CLGSOIL REMEDIATION: EXCAVATION APPROX. 17 FT. x 17 FT. 7x FT. DEEP.DISPOSAL FACILITY: Landfarmed on-site CUBIC YARDAGE: _____LAND USE: Range LEASE: SF-078543FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 55 FEET S60E FROM WELLHEAD.DEPTH TO GROUNDWATER: 100' NEAREST WATER SOURCE: >1000 NEAREST SURFACE WATER: >1000NMDCD RANKING SCORE: 10 NMDCD TPH CLOSURE STD: 1000 PPM**SOIL AND EXCAVATION DESCRIPTION:**

Bottom of excavation is rock. Sides are gray clay and sand, cohesive, slightly moist.

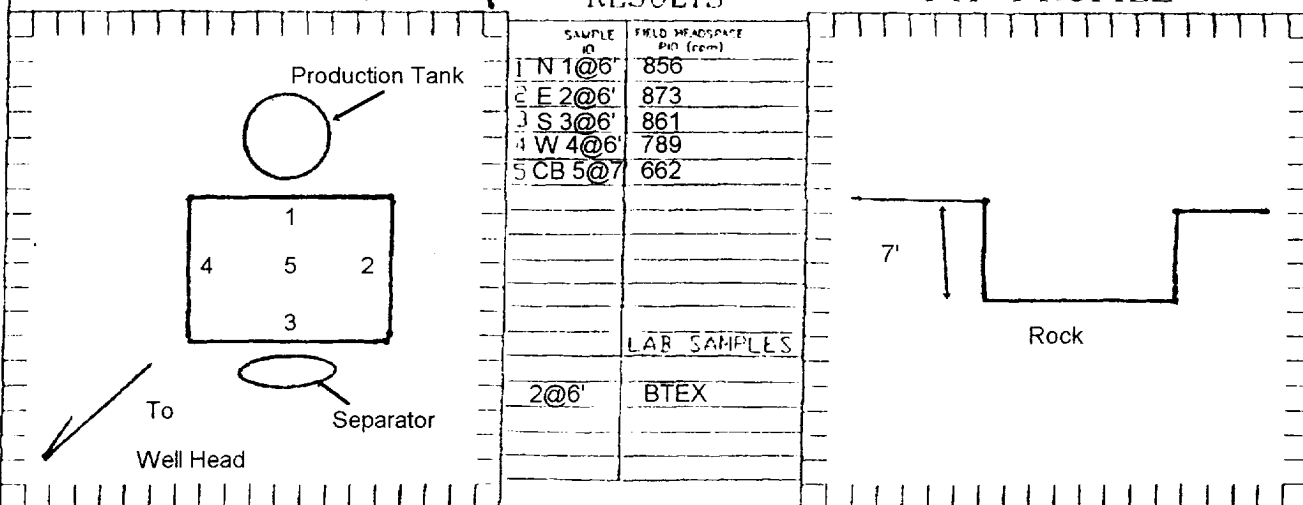
FIELD 4181 CALCULATIONS

SAMPLE I.D.	LAB No.	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC ppm
<u>2@6'</u>	<u>622</u>	<u>10</u>	<u>20</u>	<u>1</u>	<u>498</u>	<u>996</u>

SCALE

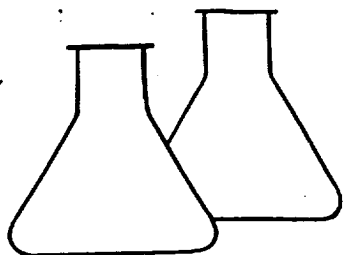


0 FEET

PIT PERIMETER**OVM RESULTS****PIT PROFILE**

TRAVEL NOTES:

CALLOUT: 7/29/94ONSITE: 7/29/94



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: 2 @ 6'
Project Location: San Juan 32-7 #75
Laboratory Number: GAC0622

Project #: 93163
Date Analyzed: 7-29-94
Date Reported: 7-29-94
Sample Matrix: Soil

Parameter -----	Result, mg/kg -----	Detection Limit, mg/kg -----
Total Recoverable Petroleum Hydrocarbons	996	10

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

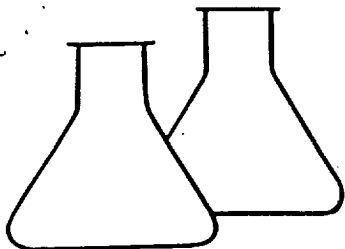
Comments: Separator/Production Pit PA217

CL Genth
Analyst

Morris D Young
Review

PA217

San Juan repro Form 5



ENVIROTECH LABS

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:	206'	Date Reported:	08-10-94
Laboratory Number:	7756	Date Sampled:	07-28-94
Sample Matrix:	Soil	Date Received:	07-28-94
Preservative:	Cool	Date Analyzed:	08-10-94
Condition:	Cool & Intact	Date Extracted:	08-10-94
		Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	ND	13.1
Toluene	3750	13.1
Ethylbenzene	9670	13.1
p,m-Xylene	2760	13.1
o-Xylene	39500	13.1

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	122 %
	Bromfluorobenzene	135 %

Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

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 32-7 # 75 SEP/PROD PIT PA217
EXCESSIVE SURROGATE RECOVERIES DUE TO COELUTION

Rex L. Griffin
Analyst

Mari D. Young
Review

ENVIROTECH Inc

5796 US HWY. 64, FARMINGTON, NM 87401
(505) 632-0815

PIT No: PA217
C.O.C #: 3859

FIELD REPORT: REMEDIATION FACILITY CLOSURE VERIFICATION

JOB No: 93163
PAGE No: 1 of 1

FACILITY LOCATION: San Juan 32-7 #75

DATE STARTED: 10/14/94

SOURCE LOCATION: _____

DATE FINISHED: 10/14/94

SOURCE LOCATION: _____

ENVIRONMENTAL
SPECIALIST: CJG

FACILITY CLASSIFICATION: Outside Landfarm

PIT TYPE: _____

SOIL REMEDIATION: QUANTITY: 30 yds. # OF COMP. SAMPLES: 1

DIMENSIONS: 27' x 30' x 1'

VISIBLE OBSERVATIONS: Clay and sand, gray, dry, no odor

SAMPLING PLAN: _____

FIELD NOTES & REMARKS: FACILITY CENTER LOCATED APPROX 38 YARDS NE FROM WELLHEAD.

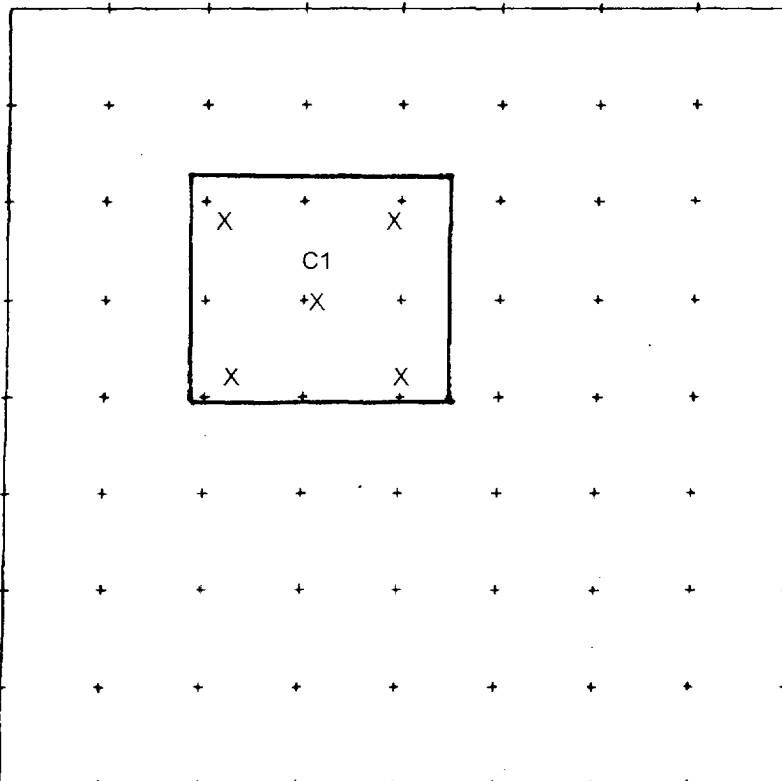
DEPTH TO GROUNDWATER:
NEAREST WATER SOURCE/TYPE:
NEAREST SURFACE WATER:
MAX TPH PER NMOC:

#840 C1: 20ml x 1 x 252 = 508 ppm TPH
9.92g

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

FACILITY DIAGRAM

GRID SCALE: 1" = 20'

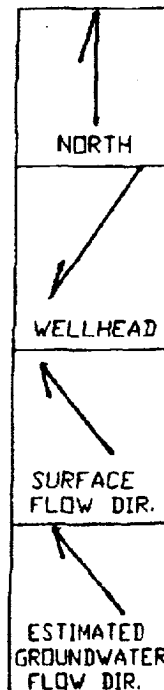


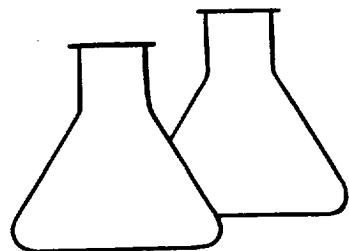
OVM RESULTS

SAMPLE ID:	FIELD HEADSPACE PPM (ppm)
C1	339

LAB RESULTS

SAMPLE ID:	ANALYSIS REQUESTED	RESULTS PPM:
C1	TPH	508
C1	BTEX	





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:	C1-LANDFARM	Date Analyzed:	10-14-94
Project Location:	San Juan 32-7 # 75	Date Reported:	10-17-94
Laboratory Number:	GAC0840	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
-----	-----	-----
Total Recoverable Petroleum Hydrocarbons	508	10

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	-----	-----	-----
	98 *	96	1

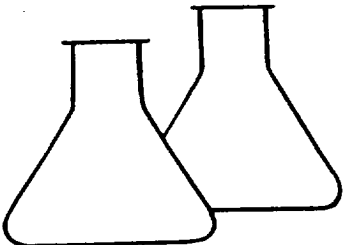
*Administrative Acceptance limits set at 30%.

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

Comments: Separator Pit PA217

Chad Collins
Analyst

Maris D. Young
Review



ENVIROTECH LABS

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

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:		Project #:	93163
Sample ID:	C1 landfarm	Date Reported:	11-03-94
Laboratory Number:	7976BTEX.	Date Sampled:	10-14-94
Chain of Custody	3959	Date Received:	10-14-94
Sample Matrix:	Soil	Date Extracted:	10-21-94
Preservative:	Cool	Date Analyzed:	11-02-94
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
-----	-----	-----
Benzene	ND	13.2
Toluene	88	26.4
Ethylbenzene	48	13.2
p,m-Xylene	520	19.8
o-Xylene	445	19.8

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	-----	-----
	Trifluorotoluene	93 %
	Bromofluorobenzene	95 %

Method: Method 5030, Purge-and-Trap, Test Methods for
Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

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 32-7 # 75

Rex L. Heffner
Analyst

Stacy W. Wendle
Review

111

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